Products Guide

Lighting Control and Integrated Home Systems

>>

Contents

Occupancy Sensors

Introduction to Occupancy Sensors

Occupancy sensors help building owners achieve energy savings and energy code compliance with sensors that are easy to select, install and commission. Employing passive infrared (PIR), ultrasonic and dual technology to accurately detect occupancy and control lighting loads, occupancy sensors automatically shut-off lighting in unoccupied areas – eliminating waste, reducing energy costs and meeting code requirements. Schneider Electric innovations help building owners not only comply with energy codes, but they also maximize energy savings.

- Adaptive Technology: Patent pending technology employs advanced algorithms to achieve convenient energy savings and reduced lamp and ballast maintenance.
- Integral light level sensors maximize energy savings in day-lit areas by holding off artificial lighting when adequate natural light is available.
- Walk-through mode detects brief periods of occupancy in private offices, allowing the sensor to shut-off lighting with less time delay.

- Lamp saver mode alternates the A- and B-loads in rooms using 50/50 bi-level lighting control to maximize lamp life and reduce maintenance.
- Isolated relays may be used to communicate with other control systems, such as building automation and energy management systems that control other building systems, like HVAC and lighting, to further maximize energy savings.

Schneider Electric makes lighting control easy with a full line of versatile occupancy sensors. For most applications, the sensors may be installed right out of the box with no adjustment. When needed, adjustments are simple to understand and easy to access, making commissioning a breeze.

Schneider Electric occupancy sensors were designed to interface with other systems, including Powerlink® and C-Bus™ lighting control systems, using normally open and normally closed contacts. As lighting control needs change and more sophisticated lighting control is desired, Schnieder Electric occupancy sensors interface with other systems to maximize energy savings and enhance occupant satisfaction.

Wall Switch
Occupancy Sensor

Schneider Electric Wall Switch Occupancy Sensors employ the latest passive infrared (PIR) technology to automatically control lighting in offices, private restrooms and employee break rooms.

Each Sensor employs a special 180° multi-segmented lens and PIR motion detector circuit to detect motion. This unit will automatically switch the lights off after a preset delay if no motion is detected.

Schneider Electric Wall Switch Occupancy Sensor fits in place of existing wall switches, connecting to existing active line and ground wiring similar to a typical wall switch. No neutral or minimum load is required.

To assure long relay life, Schneider Electric has developed a low energy switch circuit to assure maximum contact life. These sensors are compatible with electronic and magnetic ballast loads, and require no minimum load.

Wall Switch
Occupancy Sensor

Technical Information

Input	120 or 277Vac 60 Hz	
Output	120Vac 1000 W max. incandescent load 1000 VA max. ballast load ¼ hp max. motor load	277Vac 1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	90% max. relative humidity non-condensing	
Standard	UL and cUL Listed FCC Part 15 Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 19

Product Features

- Available in white and ivory with matching decorator wall plate cover
- Auto On / Auto Off
- Manual bypass
- 120 or 277Vac input (no neutral required)
- No power pack required
- No minimum load
- 180° field of view (Up to 1000 sq. ft.)
- User adjustable time delay from 15 sec - 30 minutes
- Red LED motion indicator blinks to indicate motion detection
- Suitable for use on all electronic and magnetic ballasts
- Furnished with (3) x 6 inch external wires (pig tails)
- UL and cUL Listed
- Five-year warranty

Catalog Number   Description

Catalog Number	Description
SLSPWS1277AI	Wall Switch Occupancy Sensor (ivory)
SLSPWS1277AW	Wall Switch Occupancy Sensor (white)

Wall Switch
Occupancy Sensor w/Manual On

Schneider Electric Wall Switch Occupancy Sensor with Manual-On employs the latest passive infrared (PIR) technology to automatically control lighting in offices, employee break rooms and utility rooms.

For maximum energy savings, the Schneider Electric Wall Switch Occupancy Sensor with Manual-On requires the user to switch on lighting manually by pressing the button on the front. Employing a special 180° multi-segmented lens and PIR motion sensor, the sensor reliably detects occupancy to keep lights on while the room is occupied. This unit will automatically switch the lights off after a pre-set delay if no motion is detected.

Schneider Electric Wall Switch Occupancy Sensor is easy to install. Connecting to existing active line and ground wiring similar to a typical wall switch, the Wall Switch Occupancy Sensor is the simplest way to achieve energy-saving lighting control with minimal installation time.

To assure long relay life, Schneider Electric has developed a low energy switch circuit to assure maximum contact life. These sensors are compatible with electronic and magnetic ballast loads, and require no minimum load.

Wall Switch
Occupancy Sensor W/ Manual On

Technical Information

Input	120 or 277Vac 60 Hz	
Output	120Vac 1000 W max. incandescent load 1000 VA max. ballast load ¼ hp max. motor load	277Vac 1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	90% max. relative humidity non-condensing	
Standard	UL and cUL Listed FCC Part 15 Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 19

Product Features
• Available in white and ivory with matching decorator wall plate cover
• Auto On / Auto Off
• Manual bypass
• 120 or 277Vac input (no neutral required)
• No power pack required
• No minimum load
• 180° field of view (Up to 1000 sq.ft.)
• User adjustable time delay from 15 sec - 30 minutes
• Red LED motion indicator blinks to indicate motion detection
• Suitable for use on all electronic and magnetic ballasts
• Furnished with (3) x 6 inch external wires (pig tails)
• UL and cUL Listed
• Five-year warranty

Catalog Number   Description

Catalog Number	Description
SLSPWS1277MW	Wall Switch Occupancy Sensor With Manual On (white)
SLSPWS1277MI	Wall Switch Occupancy Sensor With Manual On (ivory)

Commercial Grade Occupancy Sensor
PIR Single Circuit Wall Switch

Schneider Electric Single Circuit PIR Wall Switch Occupancy Sensor with Light Level features passive infrared (PIR) technology to conveniently control lighting in offices, private bathrooms, utility rooms and employee break rooms. Low profile sensor available in white, ivory, gray, light almond and black with color-matched segmented lens to meet any décor need.

Adaptive Technology: New patent pending technology employs advanced algorithms to achieve convenient energy savings and reduced lamp and ballast maintenance
Walk-Through Mode: To maximize energy savings, the sensor detects when areas are briefly occupied as a result of a person walking through and turns off lighting based on a shorter time delay.
Light Level Sensor Mode: Each sensor includes an adjustable light level sensor to hold off artificial lighting when adequate natural light is present. When natural light levels drop below the threshold, the sensor will turn on artificial lighting in occupied spaces.

The sensor does not require a neutral connection or minimum load, making it great for retrofits. Easily replaces an existing wall switch using existing wiring – no wiring modifications required. Matching wall switch cover plate makes retrofits clean and simple.

Single Circuit Wall Switch
Occupancy Sensor

Technical Information

Input	120-277Vac +/-10% 50/60 Hz	
Output	120Vac	277Vac
	1000 W max. tungsten incandescent load ¼ hp max. motor load 277Vac 1000 VA max. ballast load	1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	0 - 90% RH Non-condensing	
Time Delay Adjustment Normal Walk Through Mode Test Mode	0.5 - 30 minutes 2 minutes if no activity is detected after 30 seconds 15 seconds	
Light Level adjustment	0.5 - 250 FC	
Detection	180° passive infrared (PIR)	
Audible Alert	Selectable	
Service Switch	OFF / Auto / ON	
Manual Operation	Push-button ON/OFF	
Lens	Impact Resistant	
Relay Switching	0° +/- 500uS	
Standards	UL and cUL Listed FCC Part 15, Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 19

Product Features
- Available in white, ivory, gray, light almond and black with matching wall switch cover plate
- Color matching multi-segmented lens
- Selectable auto-on and manual-on modes
- 120-277Vac 50/60Hz input
- 180° field of view
- 1000 sq. ft. major motion and 300 sq. ft. minor motion coverage area
- Light level sensor
- Walk-through mode
- Adjustable light level, time delay and sensitivity
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- No neutral connection, minimum load or power pack required
- UL and cUL Listed for United States and Canada
- Test mode (15 second time delay)
- Five-year warranty

Catalog Number | Description

Catalog Number	Description
SLSPWS1277UW	White
SLSPWS1277UI	Ivory
SLSPWS1277UG	Gray
SLSPWS1277UL	Light Almond
SLSPWS1277UB	Black

Commercial Grade Occupancy Sensor
PIR Dual Circuit Wall Switch

Dual Circuit Wall Switch Occupancy Sensors independently control two lighting circuits with bi-level switching to reduce lighting by 50% which may be required by energy codes. The dual circuit wall switch occupancy sensor employs passive infrared (PIR) technology and a 180 degree segmented lens to achieve minor motion coverage up to 300 square feet (27.87 sq. meters) to reliably control lighting in offices, conference rooms and employee break rooms.

Adaptive Technology: New patent pending technology employs advanced algorithms to achieve convenient energy savings and reduced lamp and ballast maintenance.
Lamp Saver Mode: When the lamp saver feature is enabled, the sensor automatically alternates which circuit responds to motion. The result is more predictable lamp life and reduced maintenance.
Walk-Through Mode: To maximize energy savings, the sensor detects when areas are briefly occupied as a result of a person walking through and turns off lighting based on a shorter time delay.
Light Level Sensor Mode: Each sensor includes an adjustable light level sensor to hold off artificial lighting when adequate natural light is present. When natural light levels drop below the threshold, the sensor will turn on artificial lighting in occupied spaces.

The sensor easily replaces two wall switches using existing wiring with no wiring modifications required. Optional 2-gang wall switch cover plates available in matching colors.

Dual Circuit Wall Switch
Occupancy Sensor

Technical Information

Input	120-277Vac +/-10% 50/60 Hz	
Output	120Vac	277Vac
	1000 W max. tungsten incandescent load ¼ hp max. motor load 277Vac 1000 VA max. ballast load	1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	0 - 90% RH Non-condensing	
Time Delay Adjustment Normal Walk Through Mode Test Mode	0.5 - 30 minutes 2 minutes if no activity is detected after 30 seconds 15 seconds	
Light Level adjustment	0.5 - 250 FC	
Detection	180° passive infrared (PIR)	
Audible Alert	Selectable	
Service Switch	OFF / Auto / ON	
Manual Operation	Push-button ON/OFF	
Lens	Impact Resistant	
Relay Switching	0° +/- 500uS	
Standards	UL and cUL Listed FCC Part 15, Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 19

Product Features
- Available in white, ivory, gray, light almond and black with matching wall switch cover plate
- Color matching multi-segmented lens
- Selectable auto-on and manual-on modes
- 120-277Vac 50/60Hz input
- 180° field of view
- 1000 sq. ft. major motion and 300 sq. ft. minor motion coverage area
- Light level sensor
- Walk-through mode
- Adjustable light level, time delay and sensitivity
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- No neutral connection, minimum load or power pack required
- UL and cUL Listed for United States and Canada
- Test mode (15 second time delay)
- Five-year warranty

Catalog Number	Description	Blank Catalog Number	Toggle Catalog Number	Description
SLSPWD1277UW	White	SLSPWP2DBW	SLSPWP2DTW	White
SLSPWD1277UI	Ivory	SLSPWP2DBI	SLSPWP2DTI	Ivory
SLSPWD1277UG	Gray	SLSPWP2DBG	SLSPWP2DTG	Gray
SLSPWD1277UL	Light Almond	SLSPWP2DBL	SLSPWP2DTL	Light Almond
SLSPWD1277UB	Black	SLSPWP2DBB	SLSPWP2DTB	Black

Commercial Grade Occupancy Sensor
Ultrasonic Single Circuit Wall Switch

Schneider Electric Single Circuit PIR Wall Switch Occupancy Sensor with Light Level features passive infrared (PIR) technology to conveniently control lighting in offices, private bathrooms, utility rooms and employee break rooms. Low profile sensor available in white, ivory, gray, light almond and black with color-matched segmented lens to meet any décor need.

Adaptive Technology: New patent pending technology employs advanced algorithms to achieve convenient energy savings and reduced lamp and ballast maintenance

Walk-Through Mode: To maximize energy savings and reduce waste, the sensor detects when areas are briefly occupied as a result of an occupant walking through and turns off lighting based on a shorter time delay.

Light Level Sensor Mode: Each sensor includes an adjustable light level sensor to hold off artificial lighting when adequate natural light is present. When natural light levels drop below the threshold, the sensor will turn on artificial lighting in occupied spaces.

The sensor does not require a neutral connection or minimum load, making it great for retrofits. Easily replaces an existing wall switch using existing wiring – no wiring modifications required. Matching wall switch cover plate makes retrofits clean and simple.

Single Circuit Wall Switch
Occupancy Sensor

Technical Information

Input	120-277Vac +/-10% 50/60 Hz	
Output	120Vac	277Vac
	1000 W max. tungsten incandescent load ¼ hp max. motor load 277Vac 1000 VA max. ballast load	1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	0 - 90% RH Non-condensing	
Time Delay Adjustment Normal Walk Through Mode Test Mode	0.5 - 30 minutes 2 minutes if no activity is detected after 30 seconds 15 seconds	
Light Level adjustment	0.5 - 250 FC	
Detection	180° passive infrared (PIR)	
Audible Alert	Selectable	
Service Switch	OFF / Auto / ON	
Manual Operation	Push-button ON/OFF	
Lens	Impact Resistant	
Relay Switching	0° +/- 500uS	
Standards	UL and cUL Listed FCC Part 15, Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 19

Product Features
- Available in white, ivory, gray, light almond and black with matching wall switch cover plate
- Color matching multi-segmented lens
- Selectable auto-on and manual-on modes
- 120-277Vac 50/60Hz input
- 180° field of view
- 1000 sq. ft. major motion and 300 sq. ft. minor motion coverage area
- Light level sensor
- Walk-through mode
- Adjustable light level, time delay and sensitivity
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- No neutral connection, minimum load or power pack required
- UL and cUL Listed for United States and Canada
- Test mode (15 second time delay)
- Five-year warranty

Catalog Number / Description

Catalog Number	Description
SLSUWS1277UW	White
SLSUWS1277UI	Ivory
SLSUWS1277UG	Gray
SLSUWS1277UL	Light Almond
SLSUWS1277UB	Black

Commercial Grade Occupancy Sensor
Ultrasonic Dual Circuit Wall Switch

Dual Circuit Wall Switch Occupancy Sensors independently control two lighting circuits with bi-level switching to reduce lighting by 50% which may be required by energy codes. The dual circuit wall switch occupancy sensor employs passive infrared (PIR) technology and a 180 degree segmented lens to achieve minor motion coverage up to 300 square feet (27.87 sq. meters) to reliably control lighting in offices, conference rooms and employee break rooms.

Adaptive Technology: New patent pending technology employs advanced algorithms to achieve convenient energy savings and reduced lamp and ballast maintenance.
Lamp Saver Mode: When the lamp saver feature is enabled, the sensor automatically alternates which circuit responds to motion. The result is more predictable lamp life and reduced maintenance.
Walk-Through Mode: To maximize energy savings, the sensor detects when areas are briefly occupied as a result of a person walking through and turns off lighting based on a shorter time delay.
Light Level Sensor Mode: Each sensor includes an adjustable light level sensor to hold off artificial lighting when adequate natural light is present. When natural light levels drop below the threshold, the sensor will turn on artificial lighting in occupied spaces.

The sensor easily replaces two wall switches using existing wiring with no wiring modifications required. Optional 2-gang wall switch cover plates available in matching colors.

Dual Circuit Wall Switch
Occupancy Sensor

Technical Information

Input	120-277Vac +/-10% 50/60 Hz	
Output	120Vac 1000 W max. tungsten incandescent load ¼ hp max. motor load 277Vac 1000 VA max. ballast load	277Vac 1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	0 - 90% RH Non-condensing	
Time Delay Adjustment Normal Walk Through Mode Test Mode	0.5 - 30 minutes 2 minutes if no activity is detected after 30 seconds 15 seconds	
Light Level adjustment	0.5 - 250 FC	
Detection	180° passive infrared (PIR)	
Audible Alert	Selectable	
Service Switch	OFF / Auto / ON	
Manual Operation	Push-button ON/OFF	
Lens	Impact Resistant	
Relay Switching	0° +/- 500uS	
Standards	UL and cUL Listed FCC Part 15, Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 19

Product Features
- Available in white, ivory, gray, light almond and black with matching wall switch cover plate
- Color matching multi-segmented lens
- Selectable auto-on and manual-on modes
- 120-277Vac 50/60Hz input
- 180° field of view
- 1000 sq. ft. major motion and 300 sq. ft. minor motion coverage area
- Light level sensor
- Walk-through mode
- Adjustable light level, time delay and sensitivity
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- No neutral connection, minimum load or power pack required
- UL and cUL Listed for United States and Canada
- Test mode (15 second time delay)
- Five-year warranty

Catalog Number	Description	Blank Catalog Number	Toggle Catalog Number	Description
SLSUWD1277UW	White	SLSPWP2DBW	SLSPWP2DTW	White
SLSUWD1277UI	Ivory	SLSPWP2DBI	SLSPWP2DTI	Ivory
SLSUWD1277UG	Gray	SLSPWP2DBG	SLSPWP2DTG	Gray
SLSUWD1277UL	Light Almond	SLSPWP2DBL	SLSPWP2DTL	Light Almond
SLSUWD1277UB	Black	SLSPWP2DBB	SLSPWP2DTB	Black

Commercial Grade Occupancy Sensor
Dual Technology Single Circuit Wall Switch

Schneider Electric Single Circuit PIR Wall Switch Occupancy Sensor with Light Level features passive infrared (PIR) technology to conveniently control lighting in offices, private bathrooms, utility rooms and employee break rooms. Low profile sensor available in white, ivory, gray, light almond and black with color-matched segmented lens to meet any décor need.

Adaptive Technology: New patent pending technology employs advanced algorithms to achieve convenient energy savings and reduced lamp and ballast maintenance

Walk-Through Mode: To maximize energy savings, the sensor detects when areas are briefly occupied as a result of a person walking through and turns off lighting based on a shorter time delay.

Light Level Sensor Mode: Each sensor includes an adjustable light level sensor to hold off artificial lighting when adequate natural light is present. When natural light levels drop below the threshold, the sensor will turn on artificial lighting in occupied spaces.

The sensor does not require a neutral connection or minimum load, making it great for retrofits. Easily replaces an existing wall switch using existing wiring – no wiring modifications required. Matching wall switch cover plate makes retrofits clean and simple.

Single Circuit Wall Switch
Occupancy Sensor

Technical Information

Input	120-277Vac +/-10% 50/60 Hz	
Output	120Vac 1000 W max. tungsten incandescent load ¼ hp max. motor load 277Vac 1000 VA max. ballast load	277Vac 1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	0 - 90% RH Non-condensing	

Time Delay Adjustment
    Normal
    Walk Through Mode
    Test Mode
	0.5 - 30 minutes
	2 minutes if no activity is detected after 30 seconds
	15 seconds	

Light Level adjustment	0.5 - 250 FC	
Detection	180° passive infrared (PIR)	
Audible Alert	Selectable	
Service Switch	OFF / Auto / ON	
Manual Operation	Push-button ON/OFF	
Lens	Impact Resistant	
Relay Switching	0° +/- 500uS	
Standards	UL and cUL Listed FCC Part 15, Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 20

Product Features

- Available in white, ivory, gray, light almond and black with matching wall switch cover plate
- Color matching multi-segmented lens
- Selectable auto-on and manual-on modes
- 120-277Vac 50/60Hz input
- 180° field of view
- 1000 sq. ft. major motion and 300 sq. ft. minor motion coverage area
- Light level sensor
- Walk-through mode
- Adjustable light level, time delay and sensitivity
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- No neutral connection, minimum load or power pack required
- UL and cUL Listed for United States and Canada
- Test mode (15 second time delay)
- Five-year warranty

Catalog Number   Description

Catalog Number	Description
SLSDWS1277UW	White
SLSDWS1277UI	Ivory
SLSDWS1277UG	Gray
SLSDWS1277UL	Light Almond
SLSDWS1277UB	Black

Commercial Grade Occupancy Sensor
Dual Technology Dual Circuit Wall Switch

Dual Circuit Wall Switch Occupancy Sensors independently control two lighting circuits with bi-level switching to reduce lighting by 50% which may be required by energy codes. The dual circuit wall switch occupancy sensor employs passive infrared (PIR) technology and a 180 degree segmented lens to achieve minor motion coverage up to 300 square feet (27.87 sq. meters) to reliably control lighting in offices, conference rooms and employee break rooms.

Adaptive Technology: New patent pending technology employs advanced algorithms to achieve convenient energy savings and reduced lamp and ballast maintenance.
Lamp Saver Mode: When the lamp saver feature is enabled, the sensor automatically alternates which circuit responds to motion. The result is more predictable lamp life and reduced maintenance.
Walk-Through Mode: To maximize energy savings, the sensor detects when areas are briefly occupied as a result of a person walking through and turns off lighting based on a shorter time delay.
Light Level Sensor Mode: Each sensor includes an adjustable light level sensor to hold off artificial lighting when adequate natural light is present. When natural light levels drop below the threshold, the sensor will turn on artificial lighting in occupied spaces.

The sensor easily replaces two wall switches using existing wiring with no wiring modifications required. Optional 2-gang wall switch cover plates available in matching colors.

Dual Circuit Wall Switch
Occupancy Sensor

Technical Information

Input	120-277Vac +/-10% 50/60 Hz	
Output	120Vac 1000 W max. tungsten incandescent load ¼ hp max. motor load 277Vac 1000 VA max. ballast load	277Vac 1800 VA max. ballast load
Operating Temperature	32 - 122° F (0 - 50°C)	
Humidity	0 - 90% RH Non-condensing	
Time Delay Adjustment Normal Walk Through Mode Test Mode	0.5 - 30 minutes 2 minutes if no activity is detected after 30 seconds 15 seconds	
Light Level adjustment	0.5 - 250 FC	
Detection	180° passive infrared (PIR)	
Audible Alert	Selectable	
Service Switch	OFF / Auto / ON	
Manual Operation	Push-button ON/OFF	
Lens	Impact Resistant	
Relay Switching	0° +/- 500uS	
Standards	UL and cUL Listed FCC Part 15, Home and Office Use (Class B) Title 24 Certified	

For Diagram see technical section page 20

Product Features
- Available in white, ivory, gray, light almond and black with matching wall switch cover plate
- Color matching multi-segmented lens
- Selectable auto-on and manual-on modes
- 120-277Vac 50/60Hz input
- 180° field of view
- 1000 sq. ft. major motion and 300 sq. ft. minor motion coverage area
- Light level sensor
- Walk-through mode
- Adjustable light level, time delay and sensitivity
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- No neutral connection, minimum load or power pack required
- UL and cUL Listed for United States and Canada
- Test mode (15 second time delay)
- Five-year warranty

Catalog Number	Description	Blank Catalog Number	Toggle Catalog Number	Description
SLSDWD1277UW	White	SLSPWP2DBW	SLSPWP2DTW	White
SLSDWD1277UI	Ivory	SLSPWP2DBI	SLSPWP2DTI	Ivory
SLSDWD1277UG	Gray	SLSPWP2DBG	SLSPWP2DTG	Gray
SLSDWD1277UL	Light Almond	SLSPWP2DBL	SLSPWP2DTL	Light Almond
SLSDWD1277UB	Black	SLSPWP2DBB	SLSPWP2DTB	Black

Ceiling Mounted Occupancy Sensor
PIR

Ceiling Mounted Passive Infrared (PIR) Occupancy Sensor accurately detects occupancy and automatically switches lighting on and off as needed. This low profile sensor is ceiling mounted for superior motion detection.

With a 360 degree field of view and up to 1000 square feet (92.90 sq. meters) of coverage area, the Schneider Electric Ceiling Mounted PIR Occupancy Sensor is ideal for offices, break rooms and copier rooms.

Ceiling mount sensors also incorporate an integral light level sensor to prevent lighting from switching On when sufficient ambient light is present, such as is commonly found in windowed areas.

Installation and configuration is simple. The sensor readily mounts to drop ceilings and features front located adjustments for setting sensitivity and time delay. Features an isolated relay for use with building automation, security and HVAC systems.

Ceiling Mounted Occupancy Sensor PIR

Technical Information

Current Consumption @ 24Vdc	21mA Nominal
Supply Voltage	24Vdc
Isolated Relay 1A @ 24Vdc	Resistive
Operating Temperature	32 - 122° F (0 - 50°C)
Max. Humidity	90% RH Non-condensing
Standards	UL and cUL Listed FCC Part 15, Home and Office Use (Class B) Title 24 Certified

For Diagram see technical section page 20

Product Features
- 1000 sq. ft. (92.90 sq. meters) coverage area
- 24Vac for use with BAS systems
- 360 degree field of view
- Light Level Sensing (from 0.5 to 250 foot-candles)
- Adjustable Time Delay (pre-set time delays from 15 seconds (test) to 30 minutes)
- Adjustable Sensitivity (from 60 to 100%)
- Isolated Relay (1A at 24Vdc NO and NC Form C Relay)
- Red LED Motion Indicator
- Adjustment compartment cover equipped with retention clip
- UL/cUL Listed
- Manual Bypass
- Five-year warranty

Catalog Number	Description
SLSCPS1000	Ceiling Mounted PIR Occupancy Sensor
SLSPP1277	Power Pack (required)
SLSSP24	Auxiliary Relay

Ceiling Mounted Occupancy Sensor
Ultrasonic

The Ceiling Mounted Ultrasonic Occupancy Sensor accurately detects occupancy and automatically switches lighting On and Off as needed. This low profile sensor is ceiling mounted for superior motion detection over partitions and other common obstructions.

With a 360 degree field of view and up to 2000 square feet (185.8 sq. meters) of coverage area, the Schneider Electric Ceiling Mounted Ultrasonic Occupancy Sensor is ideal for storage rooms, multi-stalled bathrooms and open office areas.

Ceiling mount sensors also incorporate an integral light level sensor to prevent lighting from switching On when sufficient ambient light is present, such as is commonly found in windowed areas.

Installation and configuration is simple. The sensor readily mounts to drop ceilings and features front located adjustments for setting sensitivity and time delay. Features an isolated relay for use with building automation, security and HVAC systems.

Ceiling Mounted Occupancy
Sensor Ultrasonic

Technical Information

Current Consumption @ 24Vdc[1]	34mA Nominal (125mA maximum)
Supply Voltage	24Vdc
Isolated Relay 1A @ 24Vdc	Resistive
Operating Temperature	32 - 122° F (0 - 50°C)
Max. Humidity	90% RH Non-condensing
Standards	UL and cUL Listed FCC Part 15 Home and Office Use (Class B) Title 24 Certified

For Diagram see technical section page 20

Product Features
- 2000 sq. ft. (185.8 sq. meters) coverage area
- 360 degree field of view
- 24Vac input for use with building automation systems
- Light Level Sensing (from 0.5 to 250 foot-candles)
- Adjustable Time Delay (pre-set time delays from 15 seconds (test) to 30 minutes)
- Adjustable Sensitivity (from 60 to 100%)
- Isolated Relay (1A at 24Vdc NO and NC Form C Relay)
- Red LED Motion Indicator
- Adjustment compartment cover equipped with retention clip
- UL/cUL Listed
- Manual Bypass
- Five-year warranty

Catalog Number Description

Catalog Number	Description
SLSCUS2000	Ceiling Mounted Ultrasonic Occupancy Sensor
SLSPP1277	Power Pack (required)
SLSSP24	Auxiliary Relay

Ceiling Mounted Occupancy Sensor
Dual Technology

The Mounted Dual Technology Occupancy Sensor employs both passive infrared (PIR) and ultrasonic technology to accurately detect occupancy and automatically turn on lighting.

To reduce the occurrence of false-on events, this sensor employs PIR technology to detect major motion. Once lighting has been turned on, it employs highly sensitive PIR and ultrasonic technology to detect minor motion and keep lighting on while the area remains occupied. When the room or area is no longer occupied, the sensor turns off lighting after a pre-set time delay.

The low profile sensor is ceiling mounted for greatest sensitivity to detect motion in large areas with obstructions. With a 360 degree field of view and up to 2000 square feet (185.8 sq. meters) of coverage area, the Ceiling Mounted Dual Technology Occupancy Sensor is ideal for conference rooms, classrooms and large meeting rooms.

These ceiling mount sensors also incorporate an integral light level sensor to prevent lighting from switching On when sufficient ambient light is present, such as is commonly found in windowed areas.

Installation and configuration is simple. The sensor readily mounts to drop ceilings and features front-located adjustments for setting sensitivity and time delay. The sensor also features an isolated relay for use with building automation and HVAC systems.

Dual Circuit Wall Switch
Occupancy Sensor

Technical Information

Current Consumption	37mA Nominal
Supply Voltage	24Vdc
Isolated Relay	1A @ 24Vdc Resistive
Operating Temperature	32 - 122° F (0 - 50°C)
Max. Humidity	90% RH Non-condensing
Standards	UL and cUL Listed FCC Part 15 Home and Office Use (Class B) Title 24 Certified

For Diagram see technical section page 21

Product Features
- Available in white, ivory, gray, light almond and black with matching wall switch cover plate
- Color matching multi-segmented lens
- Selectable auto-on and manual-on modes
- 120-277Vac 50/60Hz input
- 180° field of view
- 1000 sq. ft. major motion and 300 sq. ft. minor motion coverage area
- Light level sensor
- Walk-through mode
- Adjustable light level, time delay and sensitivity
- Red LED motion indicator
- For use with electronic and magnetic ballasts
- No neutral connection, minimum load or power pack required
- UL and cUL Listed for United States and Canada
- Test mode (15 second time delay)
- Five-year warranty

Catalog Number	Description
SLSCDS2000	Ceiling Mounted Dual Technology Occupancy Sensor
SLSPP1277	Power Pack (required)
SLSSP24	Auxiliary Relay

Wall Mounted Occupancy Sensor
PIR

Schneider Electric Wall Mounted Passive Infrared (PIR) Occupancy Sensor accurately detects occupancy and automatically switches lighting on and off as needed. This sensor is wall or ceiling mounted for superior motion detection.

The PIR Occupancy Sensor includes 3 interchangeable lenses for custom coverage patterns. The Wide Angle lens has a 2500 square foot coverage area when the sensor is mounted 8 feet high, the Long Range lens has a 102 linear foot coverage area @ 10 ft. high and the High Bay lens has a 54 linear foot coverage area @ 30 ft. high. With a 110 degree field of view the Schneider Electric Wall Mounted PIR Occupancy Sensor is ideal for warehouse, business and office settings.

Wall mount sensors also incorporate an integral light level sensor to prevent lighting from switching On when sufficient ambient light is present, such as is commonly found in windowed areas.

Installation and configuration is simple. The sensor readily mounts to walls as well as drop ceilings and features front located adjustments for setting sensitivity and time delay. Features an isolated relay for use with building automation, security and HVAC systems.

Wall Mounted Occupancy Sensor PIR

Technical Information

Current Consumption @ 24Vdc[1]	34mA Nominal (125mA maximum)
Supply Voltage	24Vdc
Isolated Relay 1A @ 24Vdc	Resistive
Operating Temperature	32 - 122° F (0 - 50°C)
Max. Humidity	90% RH Non-condensing
Standards	UL and cUL Listed FCC Part 15 Home and Office Use (Class B) Title 24 Certified

For Diagram see technical section page 21

Wiring Color Table

Wire Color	Functions
Black	0Vdc
Red	+24Vdc
Green	Isolated Contact (N.C.)
Yellow	Isolated Contact Common
Orange	Isolated Contact (N.O.)
Blue	Control Output

For Diagram see technical section page 21

Control power must be provided by Schneider Electric Power Pack SLSPP1277 or approved equivalent. Confirm the sensor is connected to the Class 2 side of the Power Pack. Refer to the Schneider Electric Power Pack SLSPP1277 Instruction Bulletin for additional information

Product Features

- Interchangeable lenses for custom coverage pattern
- Wide Angle - 2500 sq. ft. @ 8 ft. mounting height
- Long Range - 102 linear ft. @ 10 ft. mounting height
- High Bay - 54 linear ft. @ 30 ft. mounting height
- 110 degree field of view
- Light Level Sensing (from 0.5 to 250 foot-candles)
- Adjustable Time Delay (pre-set time delays from 15 seconds to 30 minutes)
- Adjustable Sensitivity (from 60 to 100%)
- Isolated Relay
- Red LED Motion Indicator
- Front located adjustment access cover
- UL®/cUL Listed

Catalog Number	Description
SLSWPS1500	Wall Mounted Occupancy Sensor PIR
SLSPP1277	Power Pack (required)
SLSSP24	Auxiliary Relay

Wall Mounted Occupancy Sensor
Ultrasonic

Schneider Electric® Wall Mounted Ultrasonic Occupancy Sensor accurately detects occupancy and automatically switches lighting on and off as needed. This low profile sensor is wall or ceiling mounted for superior motion detection over partitions and other common obstructions.

With 1000 square feet of coverage area, the Schneider Electric® Wall Mounted Ultrasonic Occupancy Sensor is ideal for storage rooms, hallways, bathrooms, conference rooms, classrooms and open office areas.

Wall mount sensors also incorporate an integral light level sensor to prevent lighting from switching on when sufficient ambient light is present, such as is commonly found in windowed areas.

Installation and configuration is simple. The sensor readily mounts to walls or drop ceilings and features front located adjustments for setting sensitivity and time delay. Features an isolated relay for use with building automation, security and HVAC systems.

Wall Mounted Occupancy Sensor Ultrasonic

Technical Information

Current Consumption	37mA Nominal
Supply Voltage	24Vdc
Isolated Relay	1A @ 24Vdc Resistive
Operating Temperature	32 - 122° F (0 - 50°C)
Max. Humidity	90% RH Non-condensing
Standards	UL and cUL Listed FCC Part 15
FCC Part 15, Home and Office Use (Class B)
Title 24 Certified

For Diagram see technical section page 21

Wiring Color Table

Wire Color	Functions
Black	0Vdc
Red	+24Vdc
Green	Isolated Contact (N.C.)
Yellow	Isolated Contact Common
Orange	Isolated Contact (N.O.)
Blue	Control Output

For Diagram see technical section page 21

Control power must be provided by Schneider Electric Power Pack SLSPP1277 or approved equivalent. Confirm the sensor is connected to the Class 2 side of the Power Pack. Refer to the Schneider Electric Power Pack SLSPP1277 Instruction Bulletin for additional information

Product Features
• 1000 sq. ft. coverage area
• Light Level Sensing (from 0.5 to 250 foot-candles)
• Adjustable Time Delay (pre-set time delays from 15 seconds to 30 minutes)
• Adjustable Sensitivity (from 60 to 100%)
• Isolated Relay
• Red LED Motion Indicator
• Manual Bypass
• Front located adjustment access cover
• UL®/cUL Listed

Catalog Number	Description
SLSWUS1500	Wall Mounted Occupancy Sensor Ultrasonic
SLSPP1277	Power Pack (required)
SLSSP24	Auxiliary Relay

Wall Mounted Occupancy Sensor
Dual Technology

Schneider Electric® Wall Mounted Dual Technology Occupancy Sensor employs both passive infrared (PIR) and ultrasonic technology to accurately detect occupancy and automatically turn on lighting.

To reduce the occurrence of false on events, this sensor employs PIR technology to detect major motion. Once lighting has been turned on, it employs highly sensitive PIR and ultrasonic technology to detect minor motion and keep lighting on while areas remain occupied. When the room or area is no longer occupied, the sensor turns off lighting after a pre-set time delay.

The low profile sensor is wall mounted for greatest sensitivity to motion in large areas with obstructions. With a 110 degree field of view and up to 2500 square feet of coverage area when mounted at 8 ft. off the ground, the Wall Mounted Dual Technology Occupancy Sensor is ideal for conference rooms, classrooms, bathrooms, and large office areas.

These wall mount sensors also incorporate an integral light level sensor to prevent lighting from switching On when sufficient ambient light is present, such as is commonly found in windowed areas.

Installation and configuration is simple. The sensor readily mounts to walls and drop ceilings and features front located adjustments for setting sensitivity and time delay. The sensor also features an isolated relay for use with building automation and HVAC systems.

Wall Mounted Occupancy Sensor Dual Technology

Technical Information

Current Consumption	37mA Nominal
Supply Voltage	24Vdc
Isolated Relay	1A @ 24Vdc Resistive
Operating Temperature	32 - 122° F (0 - 50°C)
Max. Humidity	90% RH Non-condensing
Standards	UL and cUL Listed FCC Part 15 FCC Part 15, Home and Office Use (Class B) Title 24 Certified

For Diagram see technical section page 22

Wiring Color Table

Wire Color	Functions
Black	0Vdc
Red	+24Vdc
Green	Isolated Contact (N.C.)
Yellow	Isolated Contact Common
Orange	Isolated Contact Common
Blue	Control Output

For Diagram see technical section page 22

Control power must be provided by Schneider Electric Power Pack SLSPP1277 or approved equivalent. Confirm the sensor is connected to the Class 2 side of the Power Pack. Refer to the Schneider Electric Power Pack SLSPP1277 Instruction Bulletin for additional information

Product Features

- 2500 sq. ft. coverage area @ 8 ft.
- 110 degree field of view
- Light Level Sensing (from 0.5 to 250 foot-candles)
- Adjustable Time Delay (pre-set time delays from 15 seconds to 30 minutes)
- Adjustable Sensitivity (from 60 to 100%)
- Isolated Relay
- Red and green LED motion indicators
- Manual Bypass
- Front located adjustment access cover
- UL®/cUL Listed

Catalog Number	Description
SLSWDS1500	Wall Mounted Occupancy Sensor Dual Technology
SLSPP1277	Power Pack (required)
SLSSP24	Auxiliary Relay

Power Pack and Auxiliary Relay

The Power Pack supplies low voltage power to Schneider Electric ceiling and wall mounted occupancy sensors, and employs a heavy duty 20A relay to switch lighting and HVAC loads based on a control signal received from the occupancy sensor. The power pack accepts both 120V and 277V input and supplies up to 100 mA at 24Vdc

The power pack employs a micro-controller that switches loads at minimum voltage, protecting relay contacts from high in-rush current common when switching electronic ballasts. This switching method reduces the stress across the relay contacts, preventing arc-over and assuring long reliable contact life.

Similar to the power pack, the auxiliary relay does not supply power, but switches lighting and HVAC loads based on a control signal from the occupancy sensor.

Both the power pack and auxiliary relay are housed in a rugged plenum rated enclosure. Flexible mounting scheme allows for installation inside or outside a standard 4 x 4 inch junction box.

Power Jack

Technical Information

Item	Power Pack		Auxiliary Relay	
Storage Temp	-20°F to 150°F (-29C to 65C)		-20°F to 150°F (-29C to 65C)	
Operating Temperature	32°F to 104°F (0C to 40C)		32°F to 104°F (0C to 40C)	
Max. Humidity	90% RH Non-condensing		90% RH Non-condensing	
Input	120 or 277Vac / 60Hz		24Vdc / 36 mA	
Output	24Vdc/100 mA Nominal		No Power Supply	
Max Load Ratings	120Vac/60Hz	277Vac/60Hz	120Vac/60Hz	277Vac/60Hz
Tungsten	15A/1800W	15A/1800W	15A/1800W	15A/1800W
Ballast	20A	20A	20A	20A
AC Motor	1HP at 120Vac/ No HP rating at 277Vac			
Dimensions	3 in. (76mm) tall x 2.25 in. (57mm) wide x 1.75 in. (44mm) deep			

For Diagram see technical section page 22

Product Features

- 120V & 277V Input
- Plenum Rated
- Flexible Mounting Options
- UL and cUL Listed
- FCC Part 15, Class B
- Heavy duty relay rated to switch electronic ballast loads
- External color coded leads for quick installation
- Mounts to a standard 4 in. (101 mm) x 4 in. (101 mm) junction box using a ½ in. (12.7 mm) threaded EMT nipple

Catalog Number	Description
SLSPP1277	Ceiling Mounted Occupancy Sensor Power Pack
SLSSP24	Ceiling Mounted Occupancy Sensor Auxiliary Relay

High Bay Occupancy Sensor
HID

Schneider Electric High Bay HID Basic, Single and Dual Output Occupancy Sensors work with a single HID (high intensity discharge) luminaire to reduce the lamp wattage by approximately 50% and then return the lamp wattage to 100% when occupancy is detected in an aisle or room. Motion is detected using passive infrared (PIR) technology.

Basic HID Sensors are used in sensor-per-fixture configuration, while single output sensors include a connector to send and receive fiber optic signals. Single output sensors are commonly used in daisy chain configurations. Dual output sensors have two connectors that send fiber optic signals, and are commonly used in configurations that interleave switch packs and sensors. All Sensors are compatible with single magnetic HID luminaires.

High Bay Occupancy Sensor

Sensor and optional counterweight mounted on luminaire

Technical Information

Fixture Compatibility	HID with constant wattage auto-transformer ballast
Dimming Method	Relay-switched dual-section capacitor*
Switching Configurations	Parallel (preferred) or series capacitors
Relay Current Rating	4 amperes RMS maximum
Maximum Fixture Wattage	1000 watts parallel mode/250 watts series mode
AC Line Voltage	208/240/277/347/480VAC
Power Consumption	3 watts maximum
Maximum Fiber Spacing Between Nodes	200 ft.
Ambient Temperature Range	32O to 122O F (0O to 50O C) non-condensing
Observed Motion ON Time	0 to 15 minutes (user-adjustable)
Lamp Warm Up Interval	15 minutes
Wire Harness	4 conductor 18 AWG stranded copper wire
Wire Harness Length	36 inches (91.44 cm)
Dimensions (including mounting nipple)	3.25 in. (L) x 3.25 in. (W) x 3.25 in.(H) [82.56 mm (L) x 82.56 mm (W) x 82.56 mm (H)]
Standards	UL®: Listed 916 Energy Management Equipment cUL: Listed

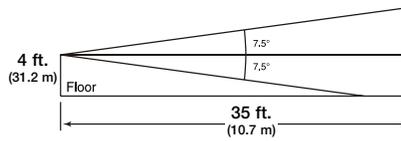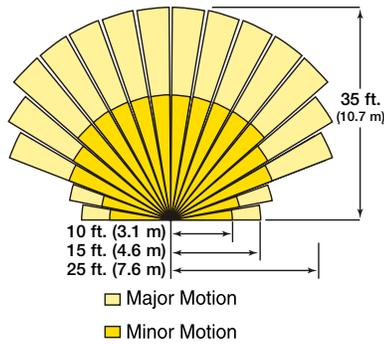*For Diagram see technical section page 22*

Product Features

• Compatible with HID luminaires rated between 208 and 480VAC/60Hz, without adding taps or jumpers
• Up to 40' mounting height
• User-adjustable 1 to 15 minute activity timer
• User-adjustable range dial to customize PIR sensitivity
• Available with interchangeable aisle and area lenses
• Lamp always starts on high to provide full rated HID lamp life, even after AC power bumps or loss of fiber optic signals
• Includes a manual test switch for self diagnostics that assist with installation and debugging networks
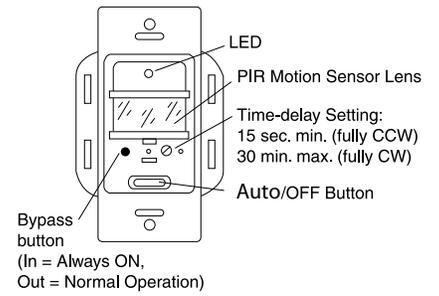
Catalog Number   Description

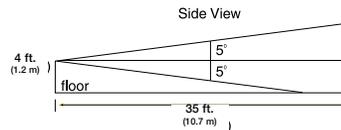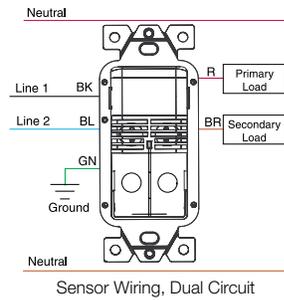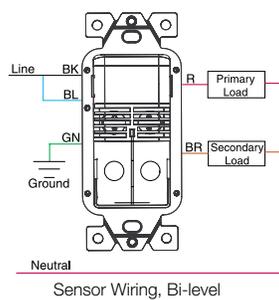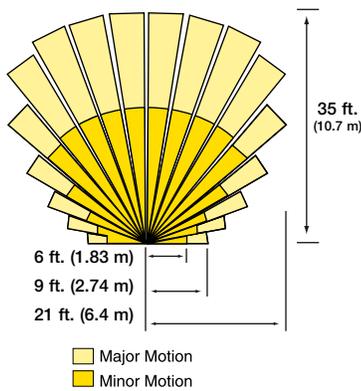|	
SLSPIP210	Basic Occupancy Sensor
SLSPIP211	Single Output Occupancy Sensor
SLSPIP212	Dual Output Occupancy Sensor
SLSPCW001	Optional Counterweight

Wall Switch Occupancy Sensor

35 ft.
(10.7 m)

10 ft. (3.1 m)
15 ft. (4.6 m)
25 ft. (7.6 m)

☐ Major Motion
☐ Minor Motion

4 ft.
(31.2 m)
Floor
7.5°
7.5°
35 ft.
(10.7 m)

Sensor field of view

LED
PIR Motion Sensor Lens
Time-delay Setting:
15 sec. min. (fully CCW)
30 min. max. (fully CW)
Auto/OFF Button
Bypass button
(In = Always ON,
Out = Normal Operation)

Sensor features

Commercial Grade Occupancy Sensors
PIR Wall Switch

35 ft.
(10.7 m)

6 ft. (1.83 m)
9 ft. (2.74 m)
21 ft. (6.4 m)

☐ Major Motion
☐ Minor Motion

Line BK
BL
GN
Ground
Neutral
R Primary Load
BR Secondary Load

Sensor Wiring, Bi-level

Neutral
Line 1 BK
Line 2 BL
GN
Ground
Neutral
R Primary Load
BR Secondary Load

Sensor Wiring, Dual Circuit

Side View
4 ft.
(1.2 m)
floor
5°
5°
35 ft.
(10.7 m)

Side view of sensor field of view

Commercial Grade Occupancy Sensors
Ultrasonic Wall Switch

20ft. (6.1m)
27ft. (8.23m)
20ft. (6.1m)
27ft. (8.23m)

☐ Major Motion
☐ Minor Motion
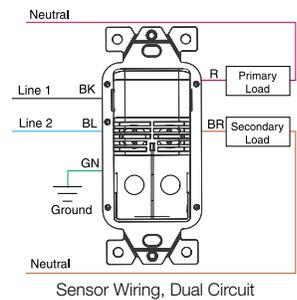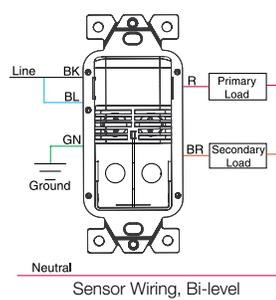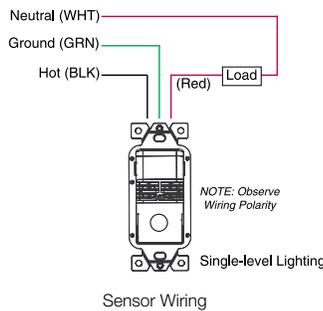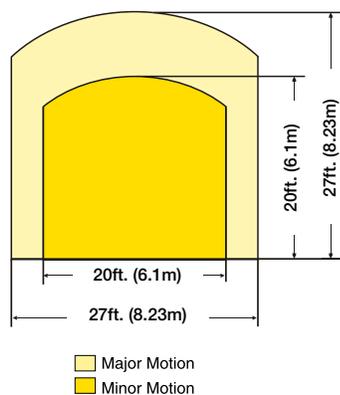
Ultrasonic Sensor Field of View, Top

Neutral (WHT)
Ground (GRN)
Hot (BLK)
(Red) Load
NOTE: Observe Wiring Polarity
Single-level Lighting

Sensor Wiring

Line BK
BL
GN
Ground
Neutral
R Primary Load
BR Secondary Load

Sensor Wiring, Bi-level

Neutral
Line 1 BK
Line 2 BL
GN
Ground
Neutral
R Primary Load
BR Secondary Load

Sensor Wiring, Dual Circuit

Commercial Grade Occupancy Sensors
Dual Technology Wall Switch

35 ft. (10.67m)
27 ft. (8.23 m)
20 ft. (6.1 m)
10 ft. (3.05 m)
6 ft. (1.83 m)
13.5 ft. (4.11 m)
9 ft. (2.74 m)
21 ft. (6.4 m)
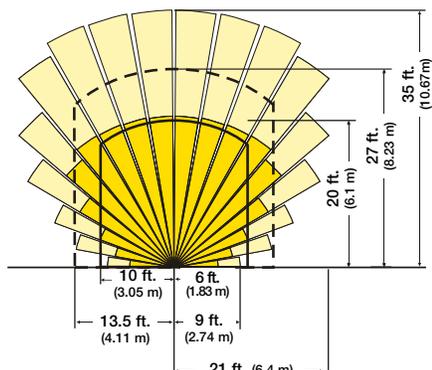
☐ Major Motion PIR ⌐˩ Major Motion Ultrasonic
☐ Minor Motion PIR ☐ Minor Motion Ultrasonic

Single and Dual Technology Sensor Field of View, Top
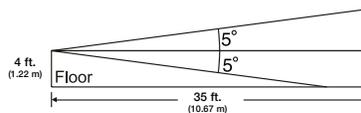
5°
5°
4 ft. (1.22 m)
Floor
35 ft. (10.67 m)

Dual Technology Sensor Field of View, Side

Line BK
BL
GN
Ground
Neutral
R Primary Load
BR Secondary Load

Sensor Wiring, Bi-level

Neutral
Line 1 BK
Line 2 BL
GN
Ground
Neutral
R Primary Load
BR Secondary Load
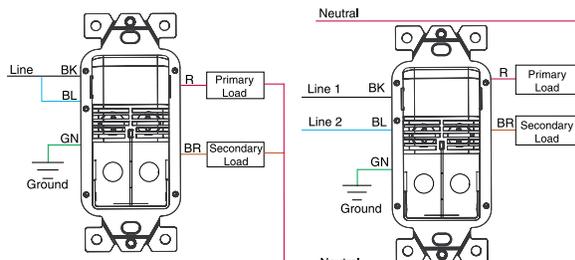
Sensor Wiring, Dual Circuit

Ceiling Mounted Occupancy Sensor
PIR
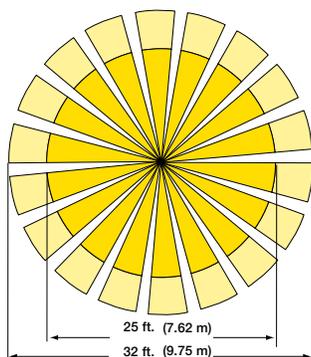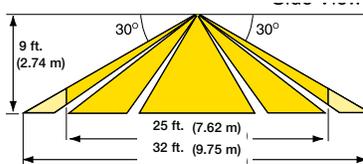
25 ft. (7.62 m)
32 ft. (9.75 m)

☐ Major Motion
☐ Minor Motion

9 ft. (2.74 m)
30° 30°
25 ft. (7.62 m)
32 ft. (9.75 m)

Side view of sensor field of view

4.5 in. (115 mm)
1.75 in. (44 mm)

Ceiling Mounted Occupancy Sensor
Ultrasonic

48 ft.
30 ft.
24 ft. 42 ft.

☐ Major Motion
☐ Minor Motion

Area of Detection

4.5 in. (115 mm)
1.25 in. (31 mm)
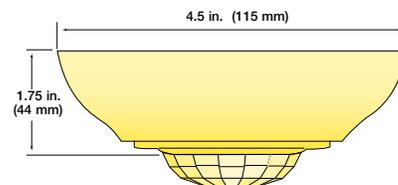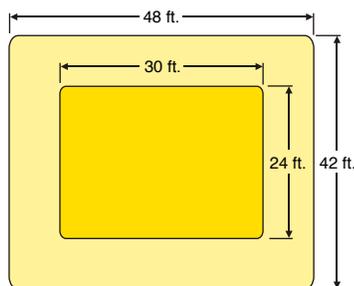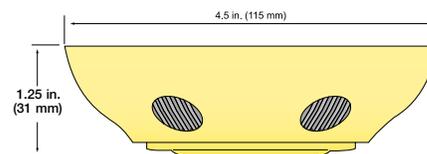
Side view of ceiling mounted sensor

Ceiling Mounted Occupancy Sensor
Dual Technology

48 ft.
30 ft.
24 ft. 42 ft.
25 ft.
32 ft.

- ▢ Ultrasonic Major Motion
- ■ Ultrasonic Major Motion
- ▢ PIR Major Motion
- ▢ PIR Major Motion

4.5 in. (115 mm)
1.75 in. (44 mm)

Wall Mounted Occupancy Sensor
PIR

48
25
16
11
0
11
16
25
48
ft.

8
0
03 15 30 48 72
ft.

- ▢ Major Motion
- ▢ Minor Motion

18ft (5.49m)
30ft (9.14m)

10ft (3.1m)
0
0 3ft (0.9m) 42ft (12.8m) 102ft (31.1m)

Wall Mounted Occupancy Sensor
Ultrasonic

16
11.5
0
11.5
16
ft.
0 23 32 ft.

- ▢ Major Motion
- ▢ Minor Motion

Class 1
Line — Black
Neutral — White
Red
Power Pack SLSPP1277
Black
Blue
Red
Load

Class 2
Black Blue Red
Black Blue Red

Orange (N.O.)
Yellow (Common)
Green (N.C.)

Additional Sensor(s) (optional)

Wall Mounted Occupancy Sensor
Dual Technology

48 ft.
25
16
11
0
11
16
25
48

■ Major Motion
■ Minor Motion
□ Major Motion Ultrasonic
⁝ Minor Motion Ultrasonic

8
0
ft.
0 3 15 23 32   48   72

Class 2

Black
Blue
Red

Black Blue Red   Black Blue Red

Class 1

Line   Black
Neutral White   Power Pack
Red   SLSPP1277

Load

Orange (N.O.)
Yellow (Common)
Green (N.C.)

Additional
Sensor(s)
(optional)

Power Pack and Auxiliary Relay

Line Voltage

To Sensor

Inside

Line Voltage

To Sensor

Outside

Flexible Mounting

3 in. (76 mm)

3 in.
(76 mm)

2.25 in. (57 mm)

Front View Dimensions

Voltage selector

Hot   Black
Line Voltage
120/277 VAC   White
Neutral   Red

Override OFF

Load

+ 24Vdc
Common
Control Input

Blue   Blk   Red

Sensor

System Diagram

High Bay Occupancy Sensors
HID

Side View   Sensor Height

20'
30'
40'

40 ft. 30   20   10   0   10   20   30   40

Coverage pattern for area / aisle lenses (side view)

Top View at 40 ft.

40 ft. 30   20   10   0   10   20   30   40

Coverage pattern for aisle lens (top view)

Top View at 40 ft.

30
20
10

40 ft. 30   20   10

Coverage pattern for area lens (top view)

22
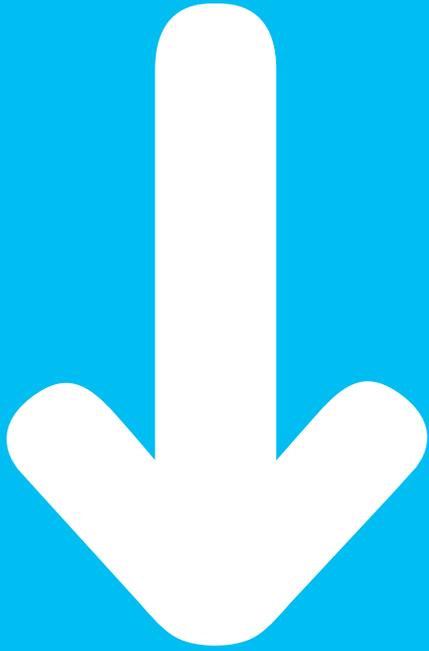
Track-Limiting Panels

Introduction to Track-Limiting Panels

Energy codes typically require lighting power density calculations for track lighting to be based on the linear feet of installed track. Some codes stipulate multipliers as low as 30W per foot of track, while others use a multiplier as high as 70W per foot of track. When energy efficient lighting is used, the connected load is typically much less than the per-foot multipliers given in the energy codes. This penalizes lighting designs that employ track lighting and may threaten retail environments where higher light levels are needed.

Many codes also provide provisions to compute the luminaire wattage based off the maximum wattage that the circuit can provide. For example, 2005 CA Title 24, 130(c)3 states:

"Luminaire wattage incorporated into the installed lighting power shall be determined in accordance with the following criteria... The wattage of line-voltage lighting track and plug-in busway which allows the addition or relocation of luminaires without altering the wiring of the system shall be the volt-ampere rating of the branch circuits feeding the luminaires..."

Track-Limiting Panels

Track-Limiting Panels eases the burden of meeting today's stringent energy codes like California Title 24. Typically used for track lighting applications, these panels limit the power available to a lighting branch circuit by incorporating a special circuit breaker into the branch circuit.

Because the Track-Limiting panel limits the available power to a specified level, designers can better reflect the actual power requirements into their load density calculations. Power level will be substantially lower than by using the standard multipliers given for track lighting.

Panels are readily accessible providing easy access for inspection and maintenance. These panels also incorporate circuit breakers rated for the higher available fault currents found on many 120V systems. In addition, the use of supplementary protectors provides a convenient means for isolating individual track circuits.

Track-Limiting Panel

Technical Information

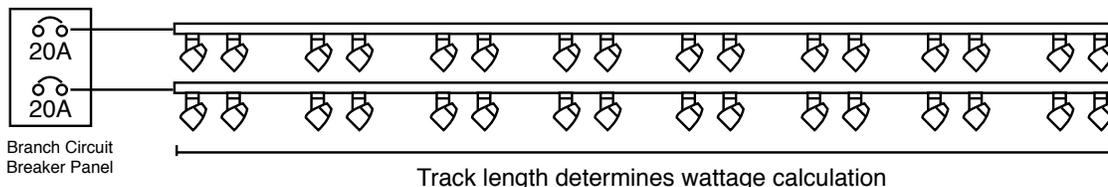| Item	Track-Limiting Panel
Type	NEMA 1 Indoor
Box	Galvanized steel
Finish	ANSI 49 Gray
Voltage Rating	120Vac
Short Circuit Current Rating	10,000A
Branch Circuit Ampere Ratings	0.5A, 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 10A, 15A, 16A
Branch Circuit Terminals	Box lugs: #18-4 AWG (1-25mm^2)
Operating Environment	77°F (25°C)
Standards	UL1077, UL508A
Listings/Certifications/Compliance	California Title 24, ASHRAE 90.1 compliant

Product Features
• Readily accessible panel mounted enclosures
• Flush or surface mounting
• Hinged door with key-locking latch
• Up to 42 circuit breakers per enclosure
• Circuit breakers rated 0.5A – 16A
• Factory assembled, tested, and labeled
• CA Title 24 compliant

Enclosures are available for mounting up to 21 or 42 circuits. Both enclosures are available for flush or surface mounting.

Enclosure	Enclosure Cabinet Dimensions (H x W x D)
12M	14.25 x 9 x 3.75 (362 x 229 x 95)
21M	14.25 x 3.75 x 17.92 in. (362 x 95 x 455mm)
42M	14.25 x 3.75 x 33.78 in. (362 x 95 x 858mm)

Energy codes typically calculate track lighting loads based on linear feet of installed track. Some codes use a multiplier as low as 30 watts/foot while others use a multiplier as high as 70 watts/foot. When using the energy efficient lighting technologies available today, the connected load is typically much less than the per-foot multipliers used by most energy codes. This penalizes lighting designs that employ track lighting and wastes available lighting watts that could be used more effectively.

Below is a typical track lighting example. The Standard Layout consists of two 50' runs of single circuit track, each with sixteen 39W track heads for a total connected load of 1376W. The Revised Layout Using Short Track Segments has the same 1376W connected load but uses sixteen short 4' track segments (64'), each fed separately, to help minimize the impact of the watts per foot multiplier. The scenario with the Track-Limiting Panel uses the original two 50' runs of single circuit track, with each monitored by a 6 Amp current limiting circuit breaker that is closely matched to the actual connected load of 1376W. This results in the minimum calculated watts per the energy codes.
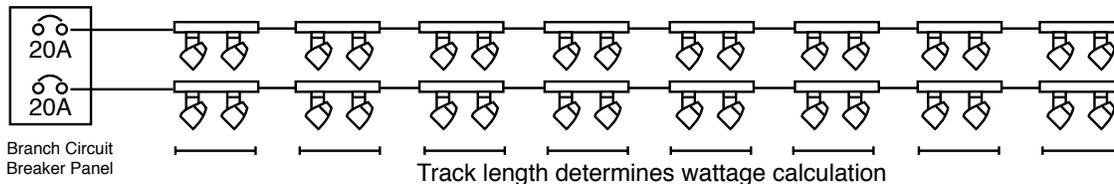
Without the Track-Limiting Panel

Standard Layout

Branch Circuit Breaker Panel

Track length determines wattage calculation

100 ft of track = 4500W*

*Based on 45W/ft multiplier of California Title 24

Revised Layout Using Short Track Segments

Branch Circuit Breaker Panel

Track length determines wattage calculation

64 ft of track = 2880W* (plus **significantly** higher installed costs and reduced layout flexibility)

With the Track-Limiting Panel

The Track-Limiting Panel installs between the branch circuit breaker and the track lighting, solving the energy code calculation discrepancy, making the wattage calculation independent of track length.

With the Track-Limiting Panel

Branch Circuit Breaker Panel Track-Limiting Panel
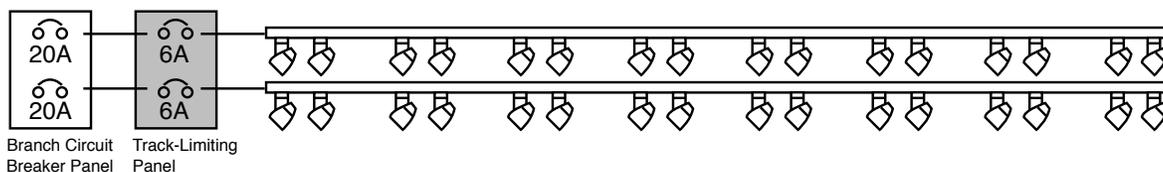
Same 100 ft. of track: 6A @ 120V = 720W
6A @ 120V - 720W
1440W total

Powerlink®
Lighting Control

Introduction to Powerlink® Lighting Control

For many designers, the engineering of a suitable lighting control system has become a daunting task. The designer must balance space constraints, equipment/installation costs, maintenance and operational concerns, while ensuring a code-compliant installation. Fortunately, the Powerlink® G3 lighting control system addresses concerns by:

> ## Using standard lighting panelboards

All Powerlink G3 components mount in the panel just like a standard circuit breaker. Documenting your control system layout is as simple as indicating which branch circuits are to be controlled.

> ## Saving space

Since the lighting control system is located inside the lighting panelboard, valuable wall and floor space is available for more productive uses. Schneider Electric also offers space-saving, column-width panelboards and flexible modular panelboard systems.

> ## Complying with codes

With today's high available fault currents, it's extremely important that your system meets code requirements. The Powerlink G3 system is fully UL listed and meets NEC® 110.10 requirements.

> ## Building Integration & Control

Today more than ever, building owners and facility managers want to get the most out of every dollar invested in their building infrastructure. Powerlink lighting control systems integrate easily with other building systems as part of an energy management system or building automation system, supporting common open protocols such as BACnet and Modbus®. Compared to standard lighting panelboards, Powerlink lighting control systems typically achieve enough energy savings to pay for the panelboard many times over.

Powerlink®
G3 Panel Mounted Components
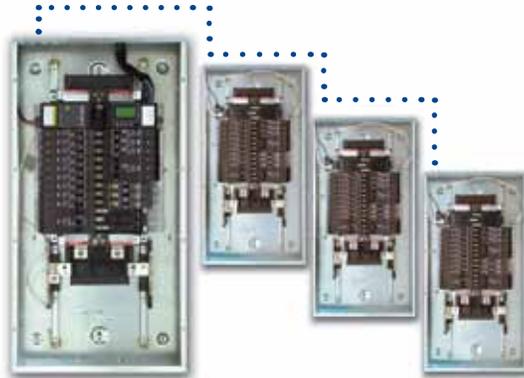
Up to eight panels can be operated from a single controller.

A self-contained power supply furnishes the power for remotely operated circuit breaker switching and for the system's electronics.

The intelligence of the Powerlink G3 system comes from its microprocessor- based controller. It processes many signals that originate externally from control devices, such as switches or sensors, or from its powerful internal time scheduler that switches breakers according to predefined daily schedules.
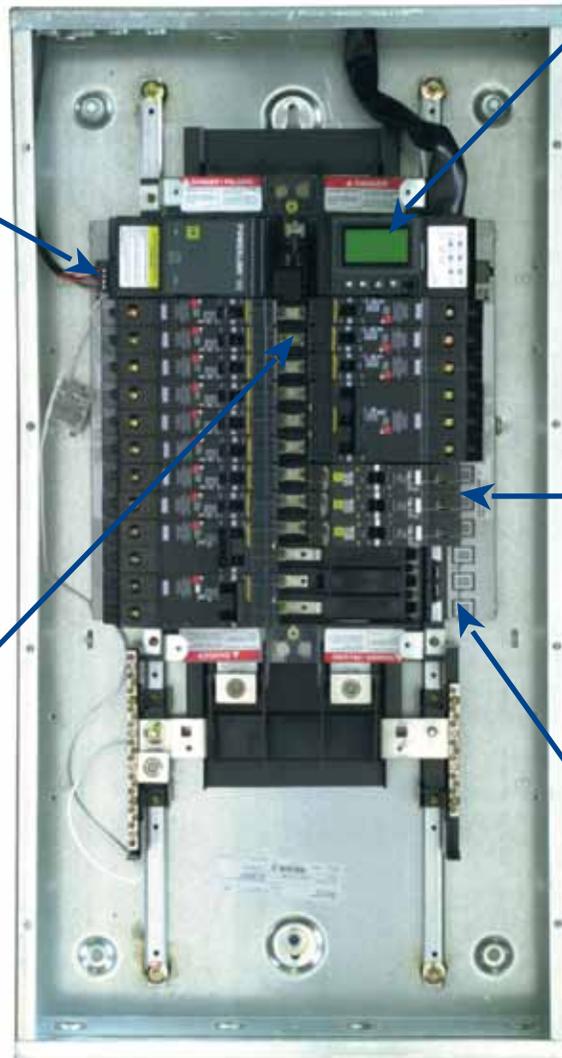
Innovative Schneider Electric remote-operated circuit breakers combine the protective features of conventional circuit breakers with the switching functions of a contactor.

Conventional EDB circuit breakers can be readily incorporated into a G3 panel.

Plug-on control bus strips act as the bridge between the circuit breakers and the electronic control components of a Powerlink G3 system.

NF Panelboards, Column Width & Custom Panel Boards

The NF Panelboard offers superior performance and application flexibility for commercial and industrial electrical systems up to 480Y/277V. Schneider Electric is the only lighting control supplier that offers a full range of enclosure options including NEMA Type 3R, 5 and 12. The following designs are available to suit your needs:

- Standard – The NF Panelboard offers superior performance and application flexibility for commercial and industrial electrical systems up to 480Y/277V. This versatile lighting and power distribution panelboard features a wide selection of circuit breakers, accessories, and ready-to-install kits, as well as 200% rated neutrals for non-linear loads.

- Column-width – These innovative panels are designed to fit into a standard size W, H, or I-beam support columns commonly found in distribution and industrial facilities. Column-width panelboards can also be wall mounted, saving valuable floor and wall space where tight equipment space is a concern.

- Modular Panelboard Systems (MPS) – This panel system bundles electrical distribution equipment into a single, factory assembled and wired integrated system. This approach replaces the traditional method of independently mounting each panelboard and lighting control system, which saves space and reduces installation time. Modular panelboard systems are tailored to specifications and are available with a mix of Schneider Electric NQOD, NF, NF Column-width and Schneider Electric Powerlink interiors, as well as optional power and control wiring, dry type transformers, lighting contactors, transient voltage surge suppression (TVSS) units, and enclosure space for field installed equipment. All MPS panelboards are Underwriters Laboratories (UL) Listed under File E33139 (Panelboard UL67).

- Integrated Power Center (IPC) – This integrated system offers the wide range of factory assembled and wired panelboards interiors, dry type transformers, and lighting control as offered with the MPS line. In addition, the IPC offers factory installed and programmed building management systems, automatic transfer switches, and motor starters. Regardless of your system complexity, Schneider Electric has the expertise to integrate your requirements into one optimized, cost effective, space saving solution. IPCs are Underwriters Laboratories (UL) Listed under file E83877 (Dead-Front Switchboard UL891).

NF Column Width Panelboard

Powerlink®
Remotely Operated ECB-G3 Circuit Breakers

Powerlink® G3 remotely operated circuit breakers are designed for installation in Schneider Electric NF Lighting Panelboards as part of the Schneider Electric Powerlink G3 Lighting Control System. These circuit breakers provide the same overcurrent protection as found in standard circuit breakers.

The Best in Remote Operation
- Robust 24Vdc motor and highly effective trip mechanism provide unequaled remote operation capability in terms of compact size, electrical ratings, and mechanical life.
- Motor and drive train can open and close the contacts when the circuit breaker handle is in the ON position.
- Contacts cannot be closed remotely when the handle is in the OFF position or the circuit breaker is tripped.
- Manual override selector located on the front of the breaker provides by-pass of automated control command .
- In manual mode, the motor drive train is disconnected from the contact, allowing the circuit breaker handle to operate the contacts like a conventional circuit breaker.
- Remote contact status indication – determines the presence or absence of voltage on the load side terminal of the circuit breaker.

Tripping System with True RMS Sensing
- Schneider Electric Powerlink ECB-G3 circuit breakers have a permanent trip unit that contains a factory preset thermal (overload) trip element and a magnetic (short circuit) trip element in each pole.
- The thermal trip element – true RMS sensing and is calibrated to carry the continuous current rating of the circuit breaker at 140°F (40°C) free air ambient temperature.

ECB-G3 Series Remotely Operated Circuit Breakers

Technical Information

Voltage	120Vac	240Vac	480/277Vac
Interrupting capacity	65 kAIR	65 kAIR	14 kAIR
Terminals	(1) #14 - 8 AL or (1) #14 - 8 CU		
Standards	UL Listed 489, NEMA Standard AB-1-1986, CSA Standard 22.5		

For series connector ratings, see page 44

Product Features
- 200,000 cycles (ON/OFF) load endurance
- Remote and local status
- Manual override
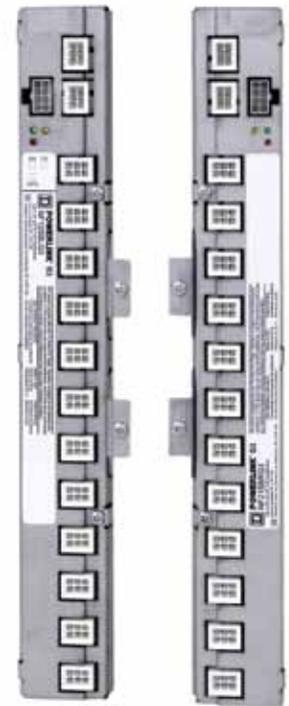- Extra large load terminal

Catalog Number	One-Pole	Catalog Number	Two-Pole	Catalog Number	Three-Pole
ECB14015G3**	15 Amp	ECB24015G3**	15 Amp	ECB34015G3**	15 Amp
ECB14020G3**	20 Amp	ECB24020G3**	20 Amp	ECB34020G3**	20 Amp
ECB14030G3	30 Amp	ECB24030G3	30 Amp	ECB32030G3	30 Amp*

*Not available in 480V
**Switch Duty Rated

ECB-G3EL Remotely Operated Circuit Breakers
for Emergency Lighting Circuits

Powerlink® ECB-G3EL circuit breakers provide a means to comply with the requirements of the NEC, 700.12(E). The circuit breaker contains both a remotely operated switched circuit for controlling the luminaires, and a manually operated unswitched circuit, which provides power to the unit emergency equipment's charging and detection circuit. Both circuits are electrically tied to the same source via a single common bolt-on connection that receives its supply from the panelboard bus.

Both circuits of the ECB-G3EL breaker contain a thermal-magnetic trip mechanism that protects their associated conductors from overcurrent. The circuit breaker provides a common trip function ensuring that both circuits will open whenever a fault occurs on either of the circuits. It also provides a common handle tie to ensure that both circuits are manually switched together.

ECB-G3EL Remotely Operated Circuit Breakers for Emergency Lighting Circuits

Technical Information

Voltage	120Vac	240Vac	480/277Vac
Interrupting capacity	65 kAIR	65 kAIR	14 kAIR
Terminals	(1) #14 - 8 AL or (1) #14 - 8 CU		
Standards	UL Listed 489, NEMA Standard AB-1-1986, CSA Standard 22.5		

Product Features
• 200,000 cycles load endurance
• Remote and local status
• Manual override
• Extra large load terminal

Catalog Number	Ampere Rating
ECB142020G3EL	20 Amp

Powerlink®
G3 Control Bus

Powerlink® G3 Control Buses provide the interface between the system controller and remotely operated circuit breakers. Specifically, they distribute 24Vdc switching power and control signals to switch remotely operated circuit breakers and report circuit breaker status back to the system controller.

One to four control bus strips can be mounted in a single panelboard. If only one control bus is required, it is always mounted on the left-hand side of a standard panelboard or at the top of a column-width panelboard.

Ceiling Mounted Occupancy Sensor Ultrasonic

Technical Information

Operating Temperature (external panelboard ambient)	23°F to 104°F (-5°C to 40 °C)
Storage Temperature	-4°F to 185°F (–20°C to 85°C)
Operating Humidity	5% to 95% (non-condensing)
ESD Immunity	IEC 1000, Level 4
RF Susceptibility	IEC 1000, Level 3
Electrical Fast Transient Susceptibility	IEC 1000, Level 3
Electrical Surge Susceptibility, power line	IEC 1000, Level 4
Electrical Surge Susceptibility, interconnection lines	IEC 1000, Level 3
Standards	FCC Part 15, Class A; UL Listed 916 Energy Management Equipment

Product Features
- Attaches to NF Panelboard interior mounting rail
- Modular connectors provide secure plug-in connections for remotely operated circuit breakers and control electronics.
- No open electronics

Catalog Number	Max. Control Circuits	Orientation
NF12SBLG3	12	Left
NF12SBRG3	12	Right
NF18SBLG3	18	Left
NF18SBRG3	18	Right
NF21SBLG3	21	Left
NF21SBRG3	21	Right

Powerlink®
Power Supply

Powerlink® G3 Power Supply provides power to operate the controller, control buses and remotely operated circuit breakers. The power supply attaches to an NF Panelboard interior in the same manner as a standard 3-pole circuit breaker.

The power supply derives its power from the panelboard interior bus and converts the line voltage into two separate supplies: one supply furnishes the controller with a 24Vdc, Class 2 source; the other supply furnishes the control bus and subnet with a 24Vdc, Class 1 source.

An optional type of power supply, furnished with primary leads, is available for use with a separately derived primary power source. This option is often used in applications where the system must remain operational during power outages. In such applications, the external leads are connected to an uninterruptible power supply (UPS) or alternate power source.

In 20-inch (508 mm) wide panels, the power supply is always located in the upper left-hand corner of the interior. The controller is mounted adjacent to the power supply on the right-hand side.

Power Supply

Technical Information

Operating Temperature (external panelboard ambient)	23°F to 104°F (-5°C to 40 °C)
Storage Temperature	-4°F to 185°F (–20°C to 85°C)
Operating Humidity	5% to 95% (non-condensing)
ESD Immunity	IEC 1000, Level 4
RF Susceptibility	IEC 1000, Level 3
Electrical Fast Transient Susceptibility	IEC 1000, Level 3
Electrical Surge Susceptibility, power line	IEC 1000, Level 4
Electrical Surge Susceptibility, interconnection lines	IEC 1000, Level 3
Standards	FCC Part 15, Class A; UL Listed 916 Energy Management Equipment

Product Features
- Attaches to panelboard interior, occupies three adjacent pole spaces.
- External lead for connection to panel neutral.
- Modular connectors provide secure plug-in connections for connection to left-hand side control bus and controller.
- LED indication of Class 1 and Class 2 voltage sources operational status.
- Removable communication terminal block for making subnet connections.
- Internally self-protected against short circuits and electrical surges.
- Low continuous power draw, less than 20VA.
- Optional external leads for connection to remote power source.
- No open electronics

Catalog Number	Voltage	Primary Source
NF120PSG3	120V	Panel Bus
NF240PSG3	240V	Panel Bus
NF277PSG3	277V	Panel Bus
NF120PSG3L	120V	External Leads
NF240PSG3L	240V	External Leads
NF277PSG3L	277V	External Leads

Powerlink®
Controllers

Powerlink® G3 product line offers a simple, cost-effective means for controlling branch lighting circuits. Five distinct systems provide a variety of capabilities to meet virtually any need.

Controller

500 Level System
- Designed to be used in conjunction with other control devices such as:
  External time clocks, access readers, occupancy sensors, or other building systems.
- Control devices provide either dry-contact closures or digital serial communications.
- Incorporates internal programmable timers.
- Controller responds to commands from control devices by automatically switching a programmed group of lighting circuits.

1000 Level System
- Includes all the features of the 500 level system, Plus:
- Incorporates a flexible time scheduler that eliminates the need for external time clocks. Includes many control features not found in traditional, mechanical time clocks or energy management systems.
- Ideally suited for stand-alone systems in retail, office, institutional, and industrial facilities.

2000 Level System
- Includes all the features of the 1000 level system, Plus:
- Combines the control, input, and scheduling features of the NF1000 with the added benefit of embedded Ethernet connectivity.
- Peer-to-peer (P2P) control network connectivity allows different controllers to share input signals, schedules, and lighting zone states.
- Ethernet connectivity reduces network installation costs by eliminating the need for a dedicated lighting control network.

3000 Level System
- Combines control, input, and scheduling features of the 2000 level controller, Plus:
- Embedded web server for remote access without dedicated software
- Automated alarms notify users via email when pre-defined events occur (eg: trip breakers)

3000C Level System
- 3000C controller adds all the features of the 3000 level controller, plus the ability to integrate with C-Bus™ devices on the C-Bus network

BacNet Capability
- The Building Automation and Control network (BACnet) communication protocol is being incorporated into the existing Powerlink G3 controller design. The BACnet protocol allows Powerlink panels to be easily integrated into a Building Automation System (BAS) employing this open communication standard without the need for communication bridges or gateways.

Controller Models
The following Powerlink G3 controller models support 'native' BACnet communications, BACnet IP, and BACnet MS/TP on RS-485:
- NF2000G3 - Ethernet communications, shared remote inputs, network time synchronization
- NF3000G3 - Email upon alarm, onboard web pages for status/control/configuration
- NF3000G3C - C-Bus communications (ability to interface with a C-Bus lighting control network)

Catalog Number	Controller Type
NF500G3	500 Level Powerlink G3 Controller
NF1000G3	1000 Level Powerlink G3 Controller
NF1000G3N2	1000 Level Powerlink G3 Controller w/N2 Protocol
NF2000G3	2000 Level Powerlink G3 Controller
NF3000G3	3000 Level Powerlink G3 Controller
NF3000G3C	3000 Level Powerlink G3 Controller w/C-Bus Capabilities

Controller Feature Comparison

Feature	System Level			
	500	1000	2000	3000
Input Terminals ▲				
2-wire	8	16	16	16
2-wire with status feedback ▼	8	8	8	8
3-wire	8	8	8	8
Input Types				
2-wire normally open (NO) or normally closed (NC)	X	X	X	X
2-wire NO or NC, with automatic blink notification	X ◆	X	X	X
2-wire maintained toggle	X ◆	X	X	X
2-wire momentary toggle	X ◆	X	X	X
2-wire momentary ON or momentary OFF	X ◆	X	X	X
3-wire momentary	X ◆	X	X	X
Input timers (1 sec. up to 18 hours)	X ◆	X	X	X
Input synchronization	-	X	X	X
Sentry® Switch support	X ◆	X	X	X
ON delay/OFF delay	X ◆	X	X	X
Time Scheduler				
Independent schedules	-	16	16	16
ON-OFF periods/schedule	-	24	24	24
7-day 24-hour repeating schedule	-	X	X	X
32 special event/holiday periods	-	X	X	X
Automatic daylight savings	-	X	X	X
Sunrise/sunset with offsets	-	X	X	X
Network time synchronization (requires TCP connection)	-	-	X	X
Network Variables				
Communications inputs (network accessible)	64	64	64	64
Remote sources (per controller)	-	-	32	32
Maximum subscriptions	-	-	256	256
Zones				
Maximum number	64	64	64	64
Maximum sources per zone	1	2	4	4
Configurable source logic (OR, AND, XOR, XNOR, NOR, NAND, LAST EVENT)	-	^	X	X
Maximum remotely operated circuit breakers (per subnet)	168	168	168	168
Blink notice (single, double, delay no blink)	X ◆	X	X	X
ON-time	X ◆	X	X	X
Networking				
RS-232 port/RS-485 port	X	X	X	X
Ethernet (10BaseT port)	-	-	X	X
Protocols				
BACnet	-	-	X	X
C-Bus	-	-	-	X †
Modbus® ASCI/RTU	X	X	X	X
Modbus TCP	-	-	X	X
Johnson Controls N2	-	X ★	-	-
DMX512	-	X	X	X
Front Panel				
LED display with cover	X	-	-	-
Backlit LCD display	-	X	X	X
Password or front panel disable	X ◆	X	X	X
Memory				
Non-volatile memory for programs and configuration	X	X	X	X
On-board capacitor to power clock chip during power outage	-	X	X	X
Flash memory for firmware upgrade	X	X	X	X
Viewing Options				
Event Log	-	+	X	X
Strike Counter	X ◆	X	X	X
Alarm viewing via Event Log	-	+	X	X
Alarm viewing via e-mail	-	-	-	X
Web-based setup, control and status monitoring	-	-	-	X

▲ Terminals accept 24-18 AWG conductors
▼ 7.5mA maximum load per input terminal.
◆ Requires configuration software for setup.
^ And/or last event

★ Order NF1000G3N2 controller for use with Johnson Controls.
+ Not available with NF1000G3N2 controllers.
† 3000G3C controller

Powerlink®
Remote Source Controller

The Powerlink® Remote Source Controller (RSC) provides additional scheduling and dry-contact inputs via high speed Ethernet connectivity that links a wide variety of input devices to a 2000 or 3000 level Square D Powerlink system.

Remote Source Controller

Product Features
• High Speed Connectivity
• Ethernet communication eliminates bottlenecks typically associated with serial devices.
• Uses existing LAN infrastructure to reduce input wiring cost.
• Uses convenient radial feeds to independent input devices; this avoids pitfalls that are typically associated with daisy-chained network digital switches.

Powerful Control Capability
• Supports (16) 2-wire inputs, (8) 2-wire inputs with status output, or (8) 3-wire inputs.
• Fully configurable from LCD display/keypad or via LCS/PCS software.
• Specifically designed to operate in conjunction with 2000 and 3000 level controllers.
• Any RSC input can be set up to control any remotely operated circuit breaker connected to the system.
• Assignable input timers, input synchronization, and programmable behavior according to specified time period.
• Provides an additional (16) independent time schedules that can be configured to operate any circuit breaker or zone configured on the system.

Technical Information

Dimensions	12" x 12" x 6" (304.8 mm x 304.8 mm x 152.4 mm)
Mounting	Wall mount
Ethernet Port	(1) 10BaseT port
Inputs	(16) dedicated 2-wire inputs or (8) 3-wire inputs
Outputs	(8) outputs (max of 60mA total for all outputs combined)
Auxiliary Power	24Vdc (100 mA max)
Terminal Wire Range	#24-18AWG
Input Voltage	120/240/277Vac
Input Power Requirements	20VA max
Standards	UL Listed 916 Energy Management Equipment

For Diagram see technical section page 44

Product Features
• NEMA Type 1 enclosure w/knockouts
• UL Listed

Catalog Number   Description

Catalog Number	Description
RSC16G3120	120V
RSC16G3240	240V
RSC16G3277	277V

Accessories

Slave Address Selector

The Slave Address Selector is required for each slave panel connected to a subnet. The slave address selector establishes a unique system address for the panel that is both essential for system operation and useful when the system is accessed from a remote location. The slave address selector plugs directly onto control buses.
• Rotary operated switch labeled 0–7 for addressing panels
• Removable terminal block for connecting subnet cable
• Modular plug for connecting the Slave Address Selector to smart bus using the Slave Bus Connect Harness

Slave Bus Connect Harness Assembly

The Slave Bus Connect Harness assemblies are required in slave panels furnished with two control buses.
The harness contains modular plugs on each end.

Column-width Controller Cable

A Column-width Controller Cable is required to connect the power supply to the controller when used in an NF Column-width Panelboard.

Remote Mounting Adapter

The Remote Mounting Adapter provides a means for mounting a Powerlink controller and power supply in a separate enclosure. This bracket is ideal for retrofit applications where all 42 circuit spaces in the panelboard are required for branch circuit breakers.

Controller Front Panel Serial Cable

The Controller Front Panel Serial Cable is used to make direct RS-232 connections from the controller to a PC or laptop computer.

Custom Barrier Kit

The custom barrier kit provides a heavy-duty barrier for separating class II control circuits from power wiring.

Modem Kit

This kit, which is designed specifically for Schneider Electric Powerlink G3 controllers, contains all the necessary components for use with the controller.

RS-485/RS-232 Converter Kit

The RS-485/RS-232 converter kit allows connection from the RS-485 port of the controller to the serial port of a personal computer.

Subnet Cable

Four wire cable for connecting panels together in a subnet configuration

Catalog Number	Description
NFSELG3	Slave address selector
NF2HG3	Slave bus connect harness
NFCW3G	Column width controller cable
NFADAPTERG3	Remote mounting adaptor
NFFPC3G	Controller front panel serial cable
NFASBKG3	Custom barrier kit
6382G3MODEM	Modem kit
6382RS485G3KIT	RS-485 converter kit
	Subnet Cable
NFSN06	6' (1.83 m) sub-net cable
NFSN10	10' (3.05 m) sub-net cable
NFSN25	25' (7.62 m) sub-net cable
NFSN50	50' (15.24 m) sub-net cable

Powerlink®
Device Power Supply

The Powerlink® Device Power Supply is used to distribute power on a C-Bus™ network. Placed on the network, device power supplies will provide the current necessary for operating a variety of passive Schneider Electric C-Bus devices.

A Device Power Supply consists of a 8M enclosure containing one or two Power Supplies (120 or 277Vac).

Powerlink Device Power Supply

Technical Information

Nominal Line Voltage	Operates at 120 or 277Vac, ± 10%, with a frequency range from 50–60 Hz
Maximum Line Current	9.9 mA for 120V power supply 4.3 mA for 277V power supply
Electrical Isolation	3.75 kV RMS from C-Bus to the line
Current Output	350 mA (single power supply unit) 700 mA (dual power supply unit)
Dimensions	12.57 in. (L) x 8.88 in. (W) x 3.8 in. (D) [319 mm (L) x 226 mm (W) x 97 mm (D)]
Weight	One power supply: 8.84 lb (4.01 kg) Two power supplies: 9.28 lb (4.21 kg)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 508A Industrial Control Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 41

Product Features
• Surface-mount NEMA Type 1 enclosure with cover
• Unit and C-Bus LEDs indicate the status of the line voltage and the network
• Sources up to 700 mA (dual power supplies) to the C-Bus network
• 120 or 277Vac models available

Catalog Number	Description
NFDP1120G3C	120V Powerlink Single Power Supply
NFDP2120G3C	120V Powerlink Dual Power Supply
NFDP1277G3C	277V Powerlink Single Power Supply
NFDP2277G3C	277V Powerlink Dual Power Supply

Powerlink®
Device Router

The Powerlink® Device Router allows the exchange of data between a Powerlink NF3000G3C controller and Schneider Electric C-Bus™ devices.

The bidirectional device router can receive data from the C-Bus input devices and send the data to the Powerlink panel/network. It can also receive data such as a contact closure from the Powerlink input and send that data to a C-Bus output/network.

The device router consists of a C-Bus 8M enclosure containing a PC Interface and a Power Supply (120Vac or 277Vac). Communication between the device router and the NF3000G3C controller is made with the included 50-foot serial cable.

Powerlink Device Router

Technical Information

Nominal Line Voltage	Operates at 120 or 277Vac, ± 10%, with a frequency range from 50–60 Hz
Maximum Line Current	9.9 mA for 120V device router 4.3 mA for 277V device router
Electrical Isolation	3.75 kV RMS from C-Bus to the line
Current Output	350 mA to the C-Bus network
Status Indicators	Unit and Unit/Comms: Line voltage, unit power, and data transmission
	C-Bus: Power levels and presence of C-Bus clock
Serial Connection	(1) 9-pin RS-232 D-type serial connector; (2) RS-232 RJ-45 connectors
C-Bus Connection	(2) RJ-45 sockets for connection to the C-Bus network
Data Cable	50 ft serial
Dimensions	12.57 in. (L) x 8.88 in. (W) x 3.8 in. (D) [319 mm (L) x 226 mm (W) x 97 mm (D)]
Weight	9.1 lbs (4.13 kg)
Operating Environment	Temp.: 32° to 113°F (0° to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 508A Industrial Control Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 41

Product Features
- Surface-mount NEMA 1 enclosure, with cover
- Unit, Unit/Comms, and C-Bus LEDs indicate the status of data transmission and power to the unit and the network
- System network clock for synchronizing communications data
- Network power source, supplying up to 350 mA
- 120 or 277Vac models available

Catalog Number   Description

Catalog Number	Description
NFDR120G3C	120V Powerlink Device Router
NFDR277G3C	277V Powerlink Device Router

Dimensional Drawings
NF Panelboard (indoor enclosure)

Flush Mounting W + 1.50 (38mm)
Surface Mounting W + 0.12 (3mm)

H

5.75 in.
(146 mm)

Flush Mounting W + 1.50 (38mm)
Surface Mounting W + 0.12 (3mm)
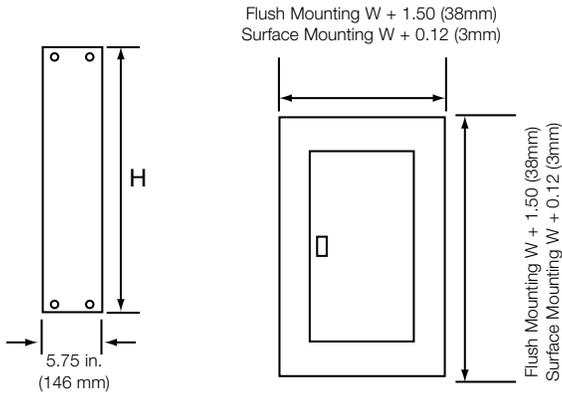
Typical Enclosure Side View   Typical Enclosure Front View

These dimensions are standard. Please consult factory for special requirements.

Max. Main Lug Ampere Rating	Max. Number of Circuits	(H) Enclosure Height In.	mm	Max. Main Lug Ampere Rating	Max. Number of Circuits	(H) Enclosure Height In.	mm
125A	12	26	660	125A (EDB, EGB, EJB)	18	32	813
	18	26	660		30	38	965
	30†	32	813		42	44	1118
250A	30	38	965	100A (HDL, HGL, HJL, HLL)	12	38	965
	42	44	1118		18	38	965
	54	50	1270		30†	44	1118
100A (FIL)	12	38	965	400A	30	50	1270
	18	38	965		42	56	1422
	30†	44	1118		54	62	1575
250A (JDL, JGL, JJL, JLL)	30	50	1270	600A	30	50	1270
	42	56	1422		42	56	1422
	54	62	1575		54	62	1575
800A*	30	50	1270	400/600A (LCL, LIL)	30	68	1727
	42	56	1422		42	74	1880
	54	62	1575		54	80	2032
400A (LAL, LHL)	30	62	1575				
	42	68	1727				
	54	74	1880				

*†34W only *800A Panelboards are 8¾ in. deep*

Column Width Panelboard

H

9.69 in.
(246 mm)

Typical Enclosure Front View

5.60 in.
(142 mm)
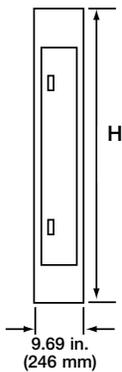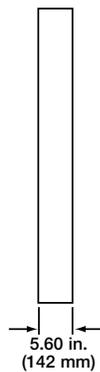
Typical Enclosure Side View

Ready-to-Assemble (Also Available Factory Assembled)
Column Width - Main Lugs Only

Max. Number of Circuits	Max. Main Lug Ampere Rating	(H) Enclosure Height In.	mm
30	125A	59	1499
42	225A	71	1803

Column Width - Main Circuit Breaker

Max. Number of Circuits	Max. Main Lug Ampere Rating	(H) Enclosure Height In.	mm
30	125A	59	1499
42	225A	71	1803

Powerlink® Device Power Supply/Device Router

8.9 in.
(226 mm)

12.57 in.
(319 mm)

3.8 in.
(97 mm)

A,B   A   B,C,D,E
B,C,D,E   B,C,D,E
A
B,C,D,E   B,C,D,E
B,C,D,E
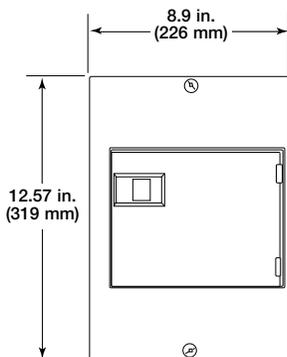
Front view showing height and width   Side view showing depth   Conduit knockouts for the 8M enclosure
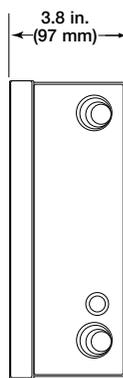
C-Bus™ 8M Enclosure Knockouts

Symbol	A	B	C	D	E
Conduit Size	½	¾	1	1¼	1½

Short Circuit Current Rating Table

This table lists the UL short-circuit current ratings for NF panelboards including ECB-G3 circuit breakers. The ratings apply to an integral main located in the same enclosure or a remote main located in a separate enclosure.

NF Panelboard SCCR Table			
Max. System Voltage	Max. Short Circuit Current Rating	Integral or Remote Main Circuit Breaker	Schneider Electric Branch Circuit Breaker Catalog Designation
120 120/240 240	65,000	EG, FH, FG, KH, LH, MH, MX, HG, JG	EDB, EDB-EPD
		EG	ECB-G3
	100,000	EJ, FC, FJ, KC, LC, LX, HJ, JJ	EDB, EDB-EPD, EGB
		EJ, FC, KC, HJ, JJ	ECB-G3
	125,000	HL, JL	EDB, EDB-EPD, EGB, ECB-G3
		FI, KI, LI, LXI	EDB, EDB-EPD, EGB, EJB
	200,000	FI, KI	ECB-G3
		Class J or T (600 V) 200 A max. fuses	EDB, EDB-EPD
277 480Y/277	35,000	EG, FG, HG, JG, KH, LH	ECB-G3
		EG, HG, JG	EDB, EDB-EPD, EGB
	65,000	EJ, FC, FJ, KC, LC, LX, HJ, JJ	ECB-G3
		EJ, FC, KC, HJ, JJ	EDB, EDB-EPD, EGB, EJB
	100,000	HL, JL	EDB, EDB-EPD, EGB, EJB
		400 A max. fuses	ECB-G3
	200,000	FI, KI, LI, LXI	EDB, EDB-EPD, EGB, EJB, ECB-G3
		FI, KI	
		200 A max. fuses	

RMS Symmetrical Amperes

Wiring Diagrams

This section contains wiring diagrams for the Schneider Electric Powerlink® G3 systems

Typical Low Voltage Input Connections
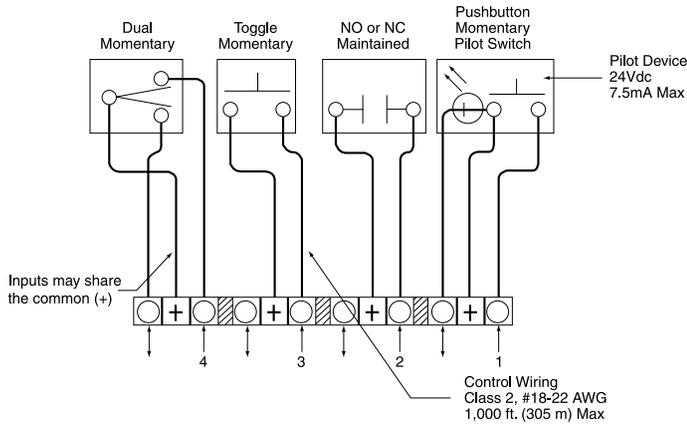
Various Low Voltage Switch Types
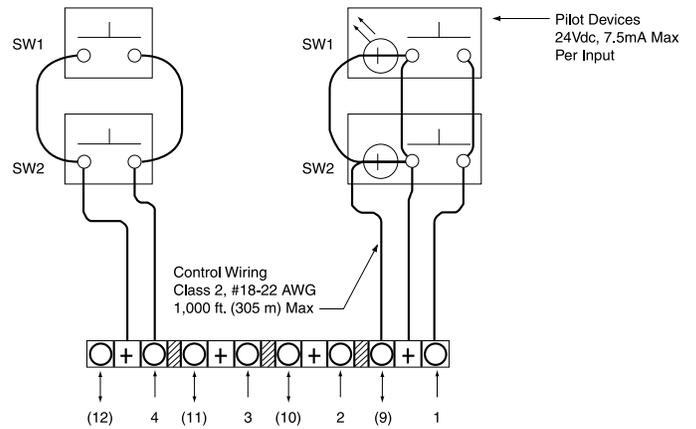
Typical Switch Types Wired in Parallel

Typical Photo Controller Wiring Diagram
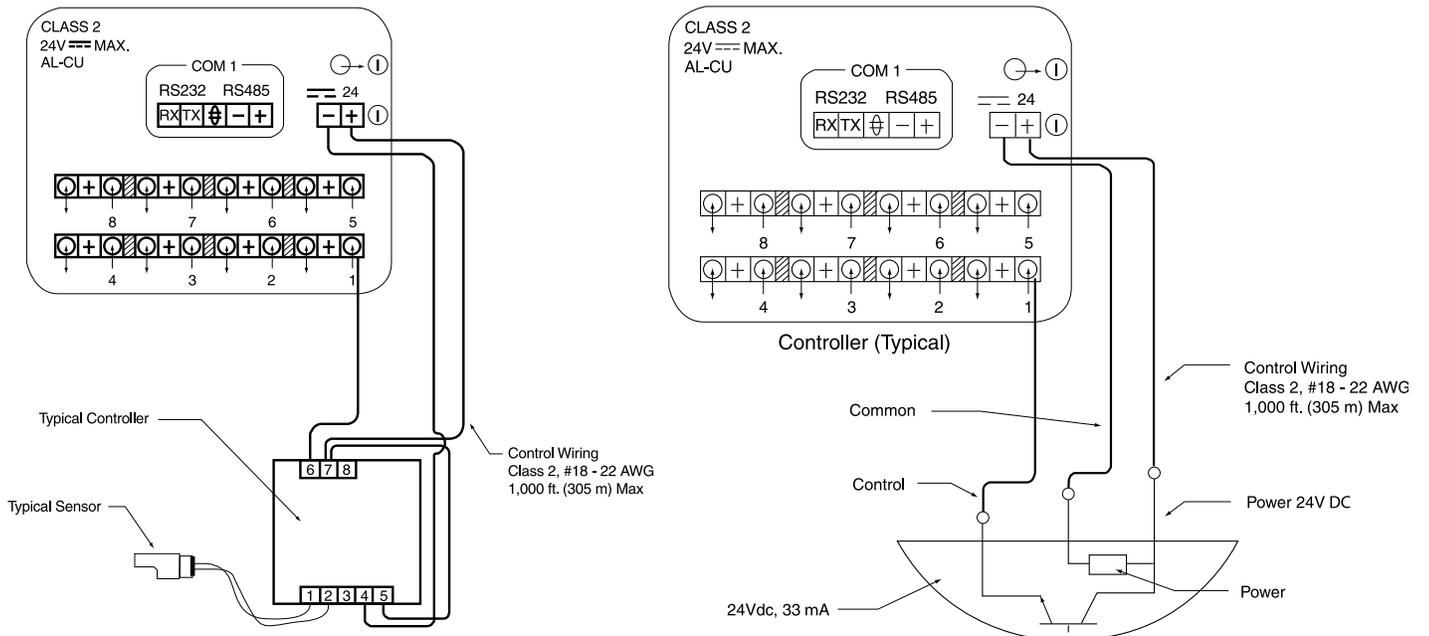
System Architecture

Three levels of communications are provided that can be easily tailored to individual application requirements.

Subnet Communications
• Each Schneider Electric Powerlink® G3 Controller can directly operate up to eight control buses.
• Controller signals the control buses to switch the associated branch circuits and polls each Schneider Electric Powerlink G3 Circuit Breaker to determine its actual status.
• Communications between the controller and the control buses are made with a 4-wire, Class 1 communications cable (Belden 27326 or equivalent).
• Slave panels (those containing control buses and remotely operated circuit breakers, but no controller) may be mounted up to 400 feet away from the master panel that contains the controller.
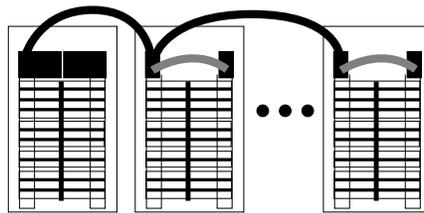
Subnet communications allow one controller to operate up to 168 remotely operated branch circuits.

Automation Network
• Each controller provides both RS-485 and RS-232 serial ports. Provides access up to 247 controllers using an RS-485 multi-drop configuration.
• An automation level network can also be used to communicate with other building systems such as energy management systems and card access controllers. The automation network uses widely accepted and supported industrial-proven protocols used by many building automation manufacturers and systems integrators
- Modbus® ASCII/RTU open protocol in all Schneider Electric Powerlink G3 Controllers
- DMX512 protocol in automation level network for theatrical lighting applications in 1000, 2000, and 3000 level controllers
- Optional JCI-N2 protocol for 1000 level controllers
- Optional C-Bus™ Network capability with NF3000G3C controller and device router
- BACnet MS/TP open protocol in 2000 and 3000 level controllers
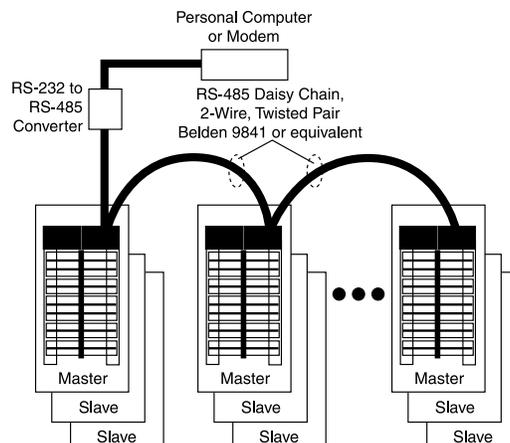
Automation networks provide remote access to the lighting control system over an RS-485 network. An RS-485 network consists of low cost, 2-wire, Class 2communications cable, Belden 9841 or equivalent.

44

Ethernet Connectivity

Schneider Electric Powerlink® G3 2000 and 3000 level controllers have integrated onboard Ethernet capability. In addition to providing high-speed Ethernet access, these controllers allow fast peer-to-peer (P2P) connectivity between panels. With 2000 and 3000 level systems, master panels can share inputs, schedules, and zone status.

• BACnet IP open protocol in 2000 and 3000 level controllers
• Modbus TCP/IP open protocol in 2000 and 3000 level controllers

10 Base-T
Network Hub or Router

Ethernet Cable

Ethernet Cables

Controllers Ethernet Port

Master Panel A

Master Panel B

Power Supply

Master

Slave

Slave

Master

Slave

Slave

Powerlink® Remote Source Controller

4-wire, 18 AWG, Class 1 cable, subnet cable (general cable 236100, Belden Cable 27326 or equivalent) Controller

Remote Source Controller

Slave bus interconnect cable

Slave Panel

Slave Panel
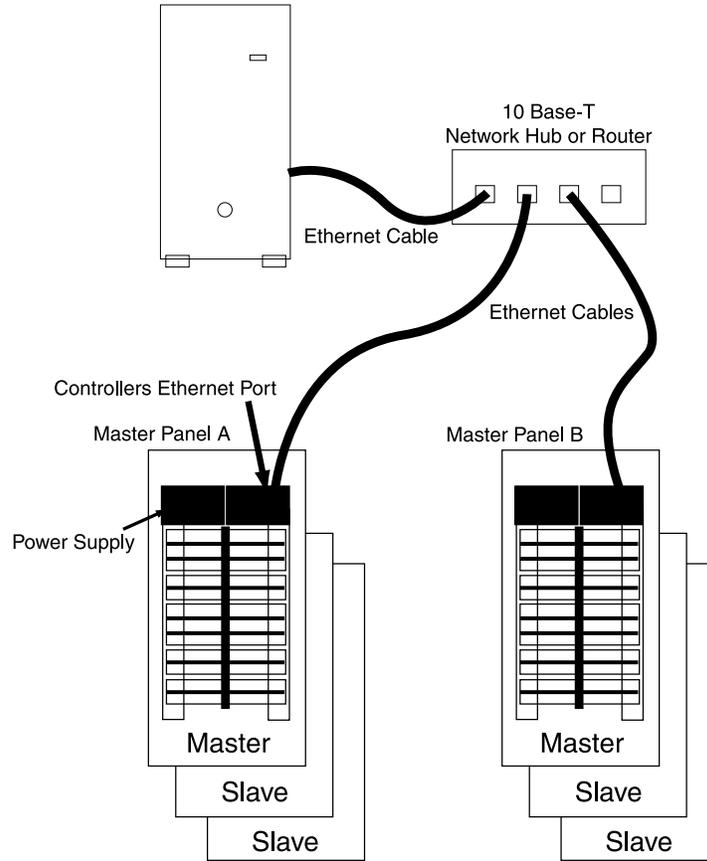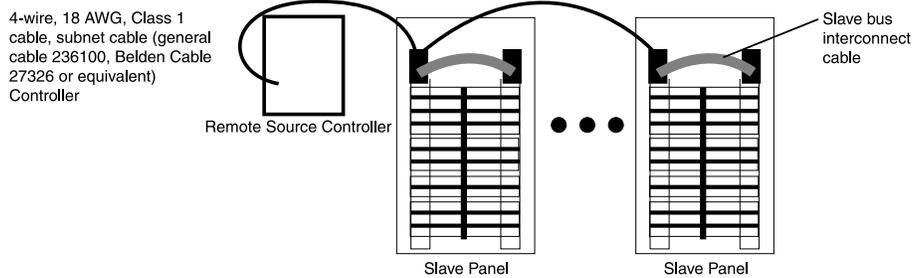
C-Bus™ Network

Below is a typical one-line diagram for creating a local area network using the C-Bus™ Network capability of level 3000G3C controllers. All cables shown below are CAT-5.

Ethernet

Powerlink Device Router

PC Interface **Power Supply**

C-Bus Device Network

Powerlink G3

Hardware Burden

Keypads
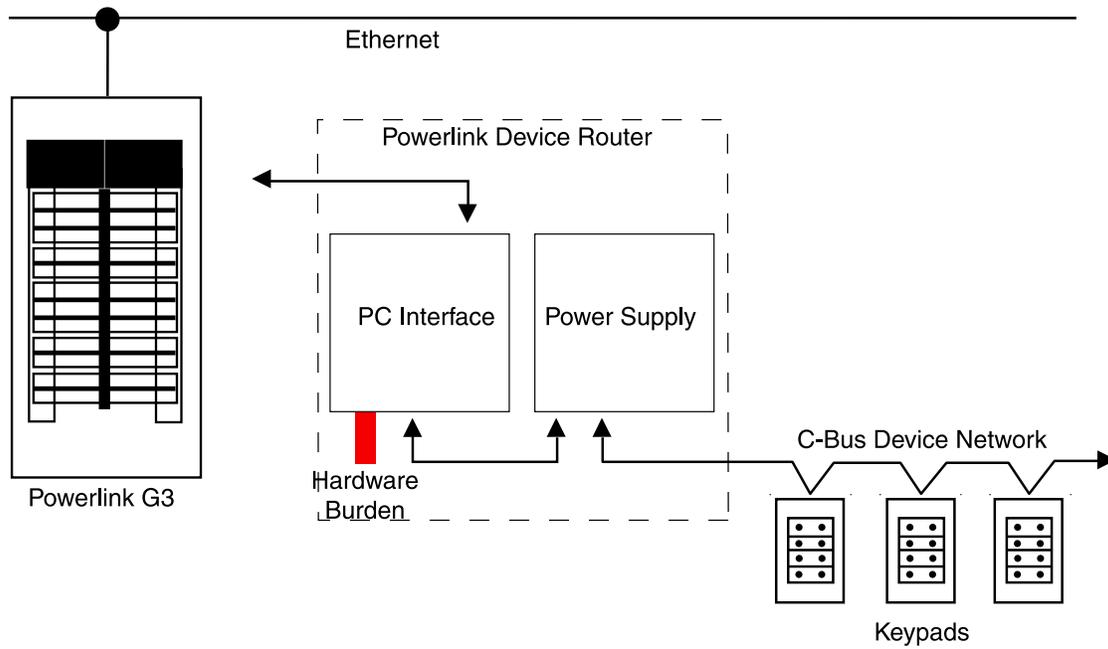
C-Bus™ Lighting Control

Introduction to
C-Bus™ Lighting Control

The availability of low-cost, powerful microprocessors for building and home control and management systems has created unprecedented customer expectations for increased control, connectivity and integration of electrical and low-voltage systems.

> ## Sophisticated styling

C-Bus™ brings a distinctly sophisticated look to lighting applications. Clean lines. Sleek glass. Every detail and surface of these keypads and touch screens are designed to complement contemporary commercial and residential environments.

> ## System simplicity

With its unique distributed control system installation couldn't be easier. You can place relays and dimmers in various locations and connect them directly to the network – eliminating the need to run cable back to a separate enclosure near centrally located processors. Keeping the design simple also adds up to greater system reliability.

> ## C-Bus keypads

These aesthetically pleasing faceplates lend a sophisticated look to virtually any space. They're as elegant as they are well-engineered.

> ## Simple cabling/any topology

Since the C-Bus system uses standard Cat-5 cabling, using any topology, there's no special cable to order or keep in supply. So it's much easier to address last-minute change orders or to complete a job without wondering if you have the right materials on hand.

> ## Fully-scalable solution

Whether you're creating a lighting control system for a single room or a whole facility, Schnieder Electric lighting control offers scalable systems to fit your exact needs. Our C-Bus solutions are designed around the size and requirements of your application. All this with a common platform and easy installation practices. Talk about flexibility.

> ## C-Bus touch screens
Our unified wall-mounted panels allow you to control lighting systems and accessories with the touch of a finger. Designed with versatility in mind, these sleek touch screens are easy to install, customize and use. They're compact yet powerful. Simple to operate yet highly flexible. A desktop model is available when wall space is limited or for added convenience.

Neo™ Keypads

The C-Bus™ Neo™ Keypads offer localized finger-tip control of lighting and other electrical devices. With over 1,000 custom color combinations available, these elegant keypads are suitable for virtually any decor.

One compact Neo keypad can take the place of many single switches, ON/OFF toggles, dimmers, and timers. Available in your choice of a two-, four-, or eight-button keypad,

Neo's modern style is complemented by orange and blue LEDs that instantly show the status of controlled devices.

Neo Style 8 Button Keypad

Technical Information

Voltage Requirements	15–36Vdc @ 22 mA required for normal operation, drawn from the C-Bus network
Number of Units on a Network	Calculated with the C-Bus Calculator, a software utility used to evaluate the total network current load
Electrical Isolation	3.75 kV RMS from C-Bus to power (provided externally)
Control Functions	Load switching, dimming, timing, scene control
Status Indicators	Two-color (orange and blue) user-configurable LEDs
Locator Option	User-configurable, adjustable blue LED illumination for locating the unit in darkness, with "ignore first button press" option
Scene Control	Up to four scenes per keypad, ten addresses per scene
Timers	1 sec–18 hr, 1 sec intervals
Response Time	200 m sec or less
C-Bus Connection	One terminal block to accommodate 24–16 AWG (0.2–15 mm2), CAT 5 UTP cable required
Dimensions	4.57 in. (L) x 2.95 in. (W) x 0.87 in. (D) [116 mm (L) x 75 mm (W) x 22 mm (D)]
Mounting:	Centers 3.31 in. (84 mm)
	Enclosure (Not Provided) Plaster mud ring (Raco 8771 or equal) w/ minimum internal width 2.05 in. (52 mm) (not provided)
	Single gang box (Carlon A58381D-CAR or equal) w/minimum internal width 2.05 in. (52 mm) (not provided)
Weight	2.7 oz (77 g)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) • RH: 95%, noncondensing
Storage Environment	Temp.: 14°F to 140°F (–10°C to 60°C) • RH: 95%, noncondensing
Standards:	UL: Listed 916 Energy Management
	CSA 22.2 Spec 205 Signal Equipment
	FCC: Part 15.101, Class B Digital Device
	EN61000-4-2 Immunity to ESD
Color Options	Slate, white, cream, gold, black, brown, soft gray, desert sand and brushed aluminum

*** For additional ordering information see technical section page 95*

Order numbers for the Neo Keypad assemblies indicate the number of buttons desired on the keypad and the color of each customizable component (inner surround, outer surround, and button cover). Color numbers are taken from the "Neo Colors" table (page 78) and must be given in the following order: outer surround, inner surround, and button covers.

Product Features

- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Scene control includes ten group addresses per scene, four scenes per keypad
- Independent timers available for each button
- Standard built-in infrared receiver permits keypad control at a distance with an optional infrared handheld remote (Sold Separately)
- Dual-color LED windows on each button can glow in cool blue, orange, or combinations of both, indicating when a controlled device is ON or OFF
- Auto "fallback" can dim button LEDs at a set time after the last key press
- Locator LEDs can illuminate the top and bottom of the button area in cool blue, helping a user find the keypad in dim light

Functional Aesthetics

- Clean-lined low-profile keypads are wall mounted without external fittings
- Optional button covers have ID windows, enabling quick identification of lighting scenes or controlled devices (Sold Separately)
- Distinctively designed multi-layer cover plate consists of button covers, an outer surround, and an inner surround
- Color schemes are easily customized and modified to suit personal taste or the decor

Distributed Intelligence

- Compatible with all C-Bus devices and Powerlink NF3000G3C controllers
- Configured by using Learn Mode or a personal computer connected to the network

Catalog Number	Description	Acessories	
SLC5052NL( ) Number of Buttons (2)	Neo Keypad Assembly	Button Covers SLC5052NRP( ) - 2 button keypads (5 pack)	Button Covers SLC5052NRI( ) with ID Windows
SLC5054NL( ) Number of Buttons (4)	(2, 4, or 8 buttons)	Button Covers SLC5054NRP( ) - 4 button keypads (5 pack)	Inner Surround SLC5050IS( ) (pack of 5)
SLC5058NL( ) Number of Buttons (8)		Button Covers SLC5058NRP( ) - 8 button keypads (5 pack)	Outer Surround SLC5050OS( ) (pack of 5)

Saturn™ Keypads

The C-Bus™ Saturn™ Keypads offer localized finger-tip control of lighting and electrical services. These elegant keypads incorporate a unique glass cover plate that is easy to install, customize, and use.

By virtue of the variety of button configurations available, one compact Saturn keypad can take the place of many single operation switches, ON/OFF toggles, dimmers, and timers.

Available in a two-, four-, or six-button keypad, Saturn's modern style is complemented by orange and blue LEDs that can instantly show the status of controlled devices.

Saturn Style 6 Button Keypad

Technical Information

Voltage Requirements	15–36Vdc @ 22 mA required for normal operation, drawn from the C-Bus network
Number of Units on a Network	Determined with the C-Bus Calculator, a software utility used to evaluate the total network current load
Electrical Isolation	3.75 kV RMS from C-Bus to power (provided externally)
Control Functions	Load switching, dimming, timing, scene control
Status Indicators	Two-color (orange and blue) user-configurable LEDs
Locator Option	User-configurable, adjustable LED to help locate the unit in darkness, has "ignore first button press" option
Scene Control	Up to four scenes per keypad, ten addresses per scene
Timers	1 sec–18 hr, 1 sec intervals
Response Time	200 m sec or less
C-Bus Connection	One terminal block to accommodate 24-16 AWG (0.2–1.31 mm2), CAT 5 UTP cable required
Dimensions	4.57 in. (L) x 2.95 in. (W) x 1.1 in. (D) [116 mm (L) x 75 mm (W) x 28 mm (D)]
Mounting	Plaster mud ring (Raco 8771 or equal) w/ minimum internal width 2.05 in. (52 mm) (not provided) Single gang box (Carlon A58381DCAR or equal) w/minimum internal width 2.05 in. (52 mm) (not provided)
Weight	4.66 oz (132 g)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management, CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device, EN61000-4-2 Immunity to ESD
Color Options	White, cream, black, and mocha

For Diagram see technical section page 95

Product Features
- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Scene control includes up to ten group addresses per scene and four scenes per keypad
- Independent timers available for each button
- Dual-color LED windows on each button can glow in cool blue, orange, or combinations of both, indicating when a controlled device is ON or OFF
- Auto "fallback" can dim button LEDs at a set time after the last button press
- Locator LED can illuminate the keypad, helping a user find it in dim light

Functional Aesthetics
- Distinctively designed transparent impact-resistant glass cover plate with silver buttons that can glow blue or orange
- Clean-lined keypads are wall mounted without external fittings
- Low-profile keypad extends only 0.5 in. out from the wall
- Colors are easily modified to suit personal taste or the décor
- Optional button covers with labels, enabling quick identification of lighting scenes or controlled devices

Distributed Intelligence
- Compatible with all C-Bus devices and Powerlink NF3000G3C controllers
- Configured by using Learn Mode or a personal computer connected to the network

Order numbers for the Saturn keypad assemblies indicate the number of buttons desired on the keypad and the color of the cover plate. White (WE), Black (BK), Mocha (BR), Cream (CM)

For example, SLC5086NLBK represents an order for a Saturn keypad with six buttons and a black cover plate. The order number for a two-button keypad in mocha would be SLC5082NLBR

Catalog Number	Description	Accessories
SLC5082NL( )Number of Buttons (2)	Saturn Keypad Assembly	SLC5080LC8: Pre-labeled button caps (1 ea. of 66 frequently used labels such as Lounge, Meeting, Scene 1, etc.)
SLC5084NL( )Number of Buttons (4)	(2, 4, or 6 buttons)	
SLC5086NL( )Number of Buttons (6)		

Neo™ Keypads
with Dynamic Labeling Technology™

The C-Bus™ Neo™ Keypads with Dynamic Labeling Technology™ (DLT) combine a Neo style cover plate, programmable keypad buttons, and easily customized labels on a backlit LCD screen that eliminates the need for custom labels.

These keypads are designed to be easy to install, customize, and use. By virtue of the variety of button configurations available, one compact DLT keypad can take the place of many single operation switches, ON/OFF toggles, dimmers, and timers.

Cool blue LEDs light the five keypad buttons, complementing the keypad's sleek lines and instantly showing the status of controlled devices.

Neo Style DLT Keypad

Technical Information

Voltage Requirements	15–36Vdc @ 22 mA required for normal operation, drawn from the C-Bus network
Number of Units on a Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
Electrical Isolation	3.75 kV RMS from C-Bus to power (provided externally)
Control Functions	Load switching, dimming, timing, scene control
Status Indicators	Blue, one dimmable LED per button
Backlight	White, dimmable, user configurable
Locator Option	User-configurable, adjustable blue LED for locating the unit in darkness, with "ignore first button press" option
Scene Control	4 scenes per keypad, 10 addresses per scene
Timers	1 sec–18 hr, 1 second intervals
Screen	64 x 128 pixels LCD
Response Time	200 m sec or less
C-Bus Connection	One terminal block to accommodate 24–16 AWG (0.2–1.31 mm2), CAT 5 UTP cable required
Dimensions	4.57 in. (L) x 2.95 in. (W) x 1.20 in. (D) [116 mm (L) x 76 mm (W) x 32 mm (D)]
Mounting	Standard plaster (mud) ring or wall box (not provided), minimum internal width 2.05 in. (52 mm) Centers: 3.31 in. (84 mm)
Weight	3.35 oz (95 g)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 95

Order numbers for the Neo DLT keypad assemblies indicate the color of the cover plate. White (WE), Brushed Aluminum and Slate (GB), Soft Grey (SG), Cream (CM), Desert Sand (DS).

Example: Order number SLC5055DL(WE), represents a Neo DLT keypad in white.

Product Features
- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Keypads have five physical buttons–four control buttons and one scroll/page button–combined with two screens of labels, for a total of eight control buttons and two scroll/page buttons
- Scene control includes ten group addresses per scene, four scenes per keypad
- Independent timers available for each button
- Button LEDs can be used as locator lights in the dark
- Time clock can be displayed at the bottom of the screen
- Displays up to 8 languages from a set of more than 65

Functional Aesthetics
- 64 x 128 pixel LCD screen with a white backlight
- Editable LCD labels, available for each button or control group, can display text, symbols, and graphics
- Dynamic graphic displays, such as bar graphs, can be enabled or disabled
- Bitmaps can be downloaded for each group address or scene
- Clean-lined low-profile keypads are wall mounted without external fittings
- Distinctive two-layer cover plate consists of an outer surround and an inner surround

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or a personal computer connected to the network

Catalog Number	Description
SLC5055DL( )	Neo DLT Keypad

Saturn™ Keypads
with Dynamic Labeling Technology™

The C-Bus™ Saturn™ Dynamic Labeling Technology™ (DLT) Keypads combine a Saturn style glass cover plate, programmable keypad buttons, and easily customized labels on a backlit LCD screen that eliminates the need for custom labels.

These keypads are designed to be easy to install, customize, and use. By virtue of the variety of button configurations available, one compact Saturn Keypad with DLT can take the place of many single operation switches, ON/OFF toggles, dimmers, and timers. The five keypad buttons are lit with cool blue LEDs that complement the keypad's sleek lines and show the status of controlled devices.

Saturn Style DLT Keypad

Technical Information

Voltage Requirements	15–36Vdc @ 22 mA required for normal operation, drawn from the C-Bus network
Number of Units on a Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
Electrical Isolation	3.75 kV RMS from C-Bus to power (provided externally)
Control Functions	Load switching, dimming, timing, scene control
Status Indicators	Blue, one dimmable LED per button
Backlight	White, dimmable, user configurable
Locator Option	User-configurable, adjustable blue LED illumination for locating the unit in darkness, with "ignore first button press" option
Scene Control	4 scenes per keypad, 10 addresses per scene
Timers	1 sec–18 hr, 1 second intervals
Screen	64 x 128 pixels LCD
Response Time	200 m sec or less
C-Bus	One terminal block to accommodate 24–16 AWG (0.2–1.31 mm²),
Connection	CAT 5 UTP cable required
Dimensions	4.57 in. (L) x 2.95 in. (W) x 1.20 in. (D) [116 mm (L) x 75 mm (W) x 30.4 mm (D)]
Mounting	Standard plaster (mud) ring or wall box (not provided), minimum internal width 2.05 in. (52 mm) Centers: 3.31 in. (84 mm)
Weight	5.29 oz (150 g)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device, EN61000-4-2 Immunity to ESD
Cover-Plate Colors	White, cream, black, mocha

For Diagram see technical section page 96

Product Features
- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Keypads have five physical buttons-four control buttons and one scroll/page button-combined with two screens of labels, for a total of eight control buttons and two scroll/page buttons
- Scene control includes ten group addresses per scene, four scenes per keypad
- Independent timers available for each button
- Button LEDs can be used as locator lights in the dark
- Time clock can be displayed at the bottom of the screen
- Displays up to 8 languages from a set of more than 65

Functional Aesthetics
- 64 x 128 pixel LCD screen with a white backlight
- Editable LCD labels, available for each button or control group, can display text, symbols, and graphics.
- Dynamic graphic displays, such as bar graphs, can be enabled or disabled
- Bitmaps can be downloaded for each group address or scene
- Clean-lined low-profile keypads are wall mounted without external fittings

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or a personal computer connected to the network

Order numbers for the Saturn DLT keypads include the stock number (SLC5085DL) and the code for the color of the cover plate: Black (BK), Mocha (BR), White (WE) and Cream (CM)
For example, SLC5085DLBR represents a complete catalog number for a Saturn DLT keypad with a mocha cover plate.

Catalog Number	Description
SLC5085DL ( )	Saturn Keypad with DLT in white (WE), cream (CM), black (BK), or mocha (BR)

Neo™
Decorator Style Keypads

Schneider Electric C-Bus™ Decorator Style Neo™ Keypads offer localized finger-tip control of lighting and electrical services. These elegant keypads incorporate a unique cover plate (ordered separately) that is easy to install, customize, and use. These Decorator style keypads are ordered without a face plate and can fit in any existing Decorator style keypad face plate. Matching face plates are also available in a variety of colors.

By virtue of the variety of button configurations available, one compact Neo Decorator style keypad can take the place of many single operation switches, ON/OFF toggles, dimmers, and timers.

Available in a one-, two-, three- or four- button keypad, Neo's modern style is complemented by blue LEDs that can instantly show the status of controlled devices.

Neo 4 Button Decorator Style Keypad

Technical Information

Voltage	15–36Vdc @ 22 mA required for normal operation,
Requirements	drawn from the C-Bus network
Number of Units on a Network	Determined with the C-Bus Calculator, a software utility used to evaluate the total network current load
Electrical Isolation	3.75 kV RMS from C-Bus to power (provided externally)
Control Functions	Load switching, dimming, timing, scene control
Locator	User-configurable, adjustable LED to help locate the unit in darkness,
Option	has "ignore first button press" option
Scene Control	Up to 4 scenes per keypad, 10 addresses per scene
Timers	1 sec–18 hr, 1 second intervals
Response Time	200 m sec or less
C-Bus Connection	One terminal block to accommodate 24–16 AWG (0.2–1.31 mm2), CAT 5 UTP cable required
Dimensions	4.57 in. (L) x 3.0 in. (W) x .91 in. (D) [116 mm (L) x 76 mm (W) x 23 mm (D)]
Weight	2.9 oz (82 g)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal FCC: Part 15.101, Class B Digital Device
Color Options	Slate, White, Cream, Brown, Black, Soft Grey, Desert Sand

For Diagram see technical section page 96

Multi-Functional Capabilities
- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Scene control includes up to ten group addresses per scene and four scenes per keypad
- Independent timers available for each button
- LED windows on each button can glow in cool blue or orange, indicating when a controlled device is ON or OFF
- Auto "fallback" can dim button LEDs at a set time after the last button press
- Locator LED can illuminate the keypad, helping a user find it in dim light
- Has infra red remote capabilities with Schneider Electric C-Bus remotes

Distributed Intelligence
- Compatible with all C-Bus devices and Powerlink® NF3000G3C controllers
- Configured by using Learn Mode or C-Bus software

Order numbers for the Neo Decorator keypads include the stock number, the number of buttons (1 thru 4) and the code for the button color: Black (BK), Brown (BR), White (WE), Cream (CM), Slate (GB), Soft Grey (SG) and Desert Sand (DS)

For example, SLC505(4)NLM(WE) represents a Neo Decorator style keypad with 4 buttons in white.

Note: Wallplate Sold Separately. Refer to individual product manual for order information.

Catalog Number	Description
SLC505( )NLM( )*	Neo Decorator Style Keypad

Saturn™
Decorator Style Keypads

Schneider Electric C-Bus™ Decorator Style Saturn™ Keypads offer localized finger-tip control of lighting and electrical services. These elegant keypads incorporate a unique glass face plate that is aesthetically pleasing with silver buttons that glow blue or amber. Also, these Decorator style keypads can be ordered separately without a face plate to fit in any existing Decorator style keypad cover plate.

By virtue of the variety of button configurations available, one compact Saturn Decorator style keypad can take the place of many single operation switches, ON/OFF toggles, dimmers, and timers.

Available in a one-, two-, three- or four- button keypad, Saturn's modern style is complemented by orange and blue LEDs that can instantly show the status of controlled devices.

Saturn 4 Button Decorator Style Keypad

Technical Information

Voltage	15–36Vdc @ 22 mA required for normal operation,
Requirements	drawn from the C-Bus network
Number of Units on a Network	Determined with the C-Bus Calculator, a software utility used to evaluate the total network current load
Electrical Isolation	3.75 kV RMS from C-Bus to power (provided externally)
Control Functions	Load switching, dimming, timing, scene control
Status Indicators	Two-color (orange and blue) user-configurable LEDs
Locator	User-configurable, adjustable LED to help locate the unit in darkness,
Option	has "ignore first button press" option
Scene Control	Up to 4 scenes per keypad, 10 addresses per scene
Timers	1 sec–18 hr, 1 second intervals
Response Time	200 m sec or less
C-Bus Connection	One terminal block to accommodate 24–16 AWG (0.2–1.31 mm2), CAT 5 UTP cable required
Dimensions	4.57 in. (L) x 3.0 in. (W) x .91 in. (D) [116 mm (L) x 76 mm (W) x 23 mm (D)]
Weight	2.9 oz (82 g)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD
Color Options	White, Cream, Mocha and Black

For Diagram see technical section page 96

Order numbers for the Saturn Decorator keypads include the stock number, the number of buttons (1 thru 4) and the code for the button color: Black (BK), Mocha (BR), White (WE), and Cream (CM).

For example, SLC508(4)NLM(WE) represents a Saturn Decorator style keypad with 4 buttons in white.

* Note: Wallplate Sold Separately. Refer to individual product manual for order information.

Multi-Functional Capabilities

- Button configurations include multi-point switching and dimming, master ON/OFF switching, and scene settings
- Scene control includes up to ten group addresses per scene and four scenes per keypad
- Independent timers available for each button
- Standard built-in infrared receiver permits keypad control at a distance with an optional infrared handheld universal remote
- Dual-color LED windows on each button can glow in cool blue, amber, or combinations of both, indicating when a controlled device is ON or OFF
- Auto "fallback" can dim button LEDs at a set time after the last button press
- Locator LED can illuminate the keypad, helping a user find it in dim light

Distributed Intelligence

- Compatible with all C-Bus devices and Powerlink® NF3000G3C controllers
- Configured by using Learn Mode or C-Bus software

Catalog Number	Description
SLC508( )NLM( )	Saturn Decorator Style Keypad

Mark II
Touch Screen

The Mark II Touch Screen is a unified wall-mounted panel for controlling lighting systems and accessories with the touch of a finger.

Designed with versatility in mind, these sleek touch screens are easy to install, customize, and use. Compact yet powerful, the touch screen has numerous configurations available, making it an attractive alternative to multiple single operation switches, ON/OFF toggles, dimmers, and timers which can clutter up even the nicest wall.

Schneider Electric C-Bus™ Mark II touch screens are available in stainless steel, as well as the Saturn™ and Neo™ style cover plates with a wide assortment of colors to choose from.

Mark II Touch Screen

Technical Information

Screen	
Type	LCD active matrix
Size	4.7 in. (119 mm) diagonal
Resolution	VGA, 320 x 240 pixels
Viewing Area	Left, right: 45°, up 50°, down 30°
Luminance	120 cd/m2
Weight	13.05 oz (370 g), excluding cover
Voltage Requirements	15–36Vdc @ 65 mA required for normal operation, drawn from the C-Bus network
Number of Units per Network	Determined with the C-Bus Calculator, a software utility for evaluating the total network current load
RS-232 Connector	(1) x 3.5 mm plug
C-Bus Connection	Loop in/loop out removable terminal block to accommodate 24-16 AWG (0.2-1.31 mm²), CAT 5 UTP cable required
Overall Dimensions	Neo Style Faceplate: 7.56 in. (W) x 5.39 in. (H) x 1.65 in. (D) [192 mm (W) x 137 mm (H) x 42 mm (D)] Saturn Style Faceplate: 7.68 in. (W) x 5.35 in. (H) x 1.65 in. (D) [195 mm (W) x 136 mm (H) x 42 mm (D)] Stainless Faceplate: 7.60 in. (W) x 5.28 in. (H) x 1.65 in. (D) [193 mm (W) x 134 mm (H) x 42 mm (D)]
Weight	13.05 oz (370 g), excluding cover
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 97

Product Features
- Multiple control screens can include multi-point switching and dimming, master ON/OFF switching, schedules, and scenes from a menu driven interface
- Astronomical clock with full scheduling and holidays
- Full feature logic engine provides ability to create custom controls and integrate 3rd party devices
- Locator option to help users find the screen in dim light
- Built-in infrared receiver w/remote control
- RS-232 port for third party device integration
- USB programming port accessible from the front of the unit

Functional Aesthetics
- Clean-lined low-profile touch screen can be wall-mounted without external fittings
- Display and controls can be configured with symbols, images, clocks and time, and text in multiple languages
- Area plans and other scenes can be graphically depicted

Distributed Intelligence
- Compatible with all C-Bus devices and Powerlink® NF3000G3C controllers
- Easily configured by using the C-Bus PICED software program

Catalog Number	Description	Accessories
SLC5050CTL2WE	Mark II w/Neo Style White Cover Plate	SLC5000CT2WB Mark II touch screen wallbox
SLC5050CTL2GB	Mark II w/Neo Style Brushed Alum. and Slate Cover Plate	SLC5000CT2RS Mark II mono RS-232 cable (3.5 mm to DB9 female connection)
SLC5050CTL2BK	Mark II w/Neo Style Black Cover Plate	
SLC5080CTL2WE	Mark II w/Saturn Style White Cover Plate	
SLC5080CTL2CM	Mark II w/Saturn Style Cream Cover Plate	
SLC5080CTL2BR	Mark II w/Saturn Style Mocha Cover Plate	
SLC5080CTL2BK	Mark II w/Saturn Style Black Cover Plate	
SLC5000CTL2SS	Mark II w/Stainless Steel Cover Plate	

Mark II
Desktop Touch Screen

The Mark II Desktop Touch Screen is a unified panel for controlling lighting systems and accessories with the touch of a finger.

Designed with versatility in mind, these sleek touch screens are easy to install, customize, and use. Compact yet powerful, the touch screen has numerous configurations available, making it an attractive alternative to multiple single operation switches, ON/OFF toggles, dimmers, and timers which can clutter up even the nicest wall.

Schneider Electric C-Bus™ Mark II Desktop Touch Screens are available in both black and white.

Mark II Desktop Touch Screen

Technical Information

Screen	
AC input impedance	13 K ohms @ 1kHz
Display type	4.7 inch (119 mm) active black and white LCDl
Resolution	320 x 240 pixels
Viewing Area	Left, right: 45∞; up: 50∞; down: 30∞
Luminance	120 cd/m≤
Backlight type	White LED
Touch surface durability	1 million presses (typical)
Maximum number of controlled loads	255 group addresses on each of the 10 applications
Third party interface	RS-232 port
Programming port	USB type

For Diagram see technical section page 97

Product Features
- Multiple control screens can include multi-point switching and dimming, master ON/OFF switching, schedules, and scenes from a menu driven interface
- Astronomical clock with full scheduling and holidays
- Locator option to help users find the screen in dim light
- Built-in infrared receiver w/remote control
- RS-232 port for third party device integration
- USB programming port accessible from the front of the unit

Functional Aesthetics
- Clean-lined low-profile touch screen can be wall-mounted without external fittings
- Display and controls can be configured with symbols, images, clocks and time, and text in multiple languages
- Area plans and other scenes can be graphically depicted

Distributed Intelligence
- Compatible with all C-Bus devices and Powerlink® NF3000G3C controllers
- Easily configured by using the C-Bus PICED software program

Catalog Number	Description
SLC5000CTD2BK	Mark II Desktop Touch Screen in Black
SLC5000CTD2WE	Mark II Desktop Touch Screen in White

Color
Touch Screen

The C-Bus™ Color Touch Screen is a unified panel for controlling lighting systems and accessories with the touch of a finger.

The touch screen's sophisticated appearance reflects the underlying craftsmanship of its design. Among its many capabilities, this powerful PC-based system supports graphical depiction of area plans, monitoring of various C-Bus devices, scheduling of lighting and other loads, finger-tip control of preset scenes, and operation from the touch screen or by remote controller.

Technical Information

Screen	
Type	LCD active matrix
Size	6.4 in. (diagonal)
Resolution	VGA, 640 x 480 pixels
Pixel Pitch	0.01 in. (H) x 0.01 in. (V) [0.204 mm (H) x 0.202 mm (V)]
Viewing Area	5.14 in. (H) x 3.82 in. (V) [130.6 mm (H) x 97.0 mm (V)]
Touch Overlay Type	Resistive membrane
Viewing Angle	Typical horizontal: 70° left and right / Typical vertical: 40° up, 70° down
Luminance	300 cd/m2
Backlight	Cold cathode with light sensor for automatic backlight level control
Memory	256 MB compact Flash memory, pre-programmed with panel firmware Backup: Lithium battery retains current date and time for 5 years.
Components and Connectors	
Front	Ethernet 10/100/RJ-45 terminal (hidden) Speaker (hidden), Infrared receiver, RS-232 via DB 9 terminal
Rear	C-Bus RJ-45 terminals (2) • Ethernet 10/100/RJ-45 terminal Composite video output via RCA terminal (75 ohm) • RS-232 via DB 9 terminal USB type A terminals (2) for future software support Remote infrared (IR) terminal (hardwired via a 3.5 mm mini-jack) External speaker/headphone terminal (3.5 mm mini-jack)
Overall Dimensions	9.8 in. (W) x 6.9 in. (H) x 2.9 in. (D) [246 mm (W) x 173 mm (H) x 72.5 mm (D)]
Weight	3.02 lbs. (1375 g) (excluding cover plate)
Operating Environment	Temp.: 50°F to 86°F (10°C to 30°C) / RH: 95% noncondensing
Standards	UL Listed 916 Energy Management Equipment CSA 22.2 Spec. 205 Signal Equipment FCC: Part 15.101, Class B Digital Device • EN61000-4-2 Immunity to ESD

Required Accessories
Power Supply (Sold Separately)

Power Supply	6.9 in. (L) x 3.1 in. (W) x 1.8 in. (H)
Dimensions	175 mm (L) x 80 mm (W) x 45 mm (H)
Adaptor Box	5.2 in. (L) x 2 in. (W) x .4 in. (H)
Dimensions	113 mm (L) x 50 mm (W) x 11 mm (H)
Weight	4.2 lb (1.925 kg)
Standards	UL: Listed 60950 Information Technology Equipment - Safety: General Requirements • CSA 22.2 Spec. 205 Signal Equipment FCC: Part 15.101, Class B Digital Device • EN61000-4-2 Immunity to ESD
Output Cable	65.6 ft (20 m)
DC Plug	7 pin, DIN, male

For Diagram see technical section page 97

Order numbers for the Neo and Saturn style touch screens include the stock number, and the code for the cover color. Saturn Colors: Black (BK), Mocha (BR), White (WE), and Cream (CM). Neo Colors: Brushed Aluminum and Slate (GB), White (WE) and Black (BK) For example, SLC5050CTC(WE) represents a Neo Style Touch Screen in white.

Color Touch Screen

Product Features
- Ability to configure controls including scenes, schedules, state changes and graphic animation
- Ability to customize buttons, sliders, photos and drawings
- Audio tools support use of custom WAV files for audible feedback and voice prompts
- Internal amplified speaker has volume control and external speaker terminal
- Built-in RJ-45 Ethernet and C-Bus network, RS-232, and USB terminals
- Infrared receiver for remote control and infrared input for accessories
- Controls can be password protected at multiple levels
- Astronomical and real time clocks

Functional Aesthetics
- Touch sensitive 6.4 inch (640 x 480) color LCD panel
- Light sensor for automatic backlight control
- Flush wall-mount design
- Cover plates available in Neo™ and Saturn™ styles
- Five color schemes available, complementing any décor

Distributed Intelligence
- Compatible with Powerlink® G3 3000C controller and all C-Bus components, including keypads, sensors, and dimmers
- Easily configured by using the C-Bus PICED Software

Power supply for color touch screen (sold separately)

Catalog Number	Description	Accessories	Description
SLC5050CTC( )	Neo™ Style Touch Screen	SLC5000CTCPS *	Color Touch Screen Power Supply
SLC5080CTC2( )	Saturn™ Style Touch Screen	SLC5000CTCWB * *	Color Touch Screen Wall Box
		SLC5000CTCNA* *	Color Touch Screen Wall Nail Bracket
		SLC5000CTCRM* *	Color Touch Screen Wall Plaster Board Bracket

Note: Required for every color touch screen installation.
***Note: Color touch screen must be mounted with one of these options*

C-Bus™
Ethernet Network Interface

The Schneider Electric C-Bus™ Ethernet Network Interface unit is a C-Bus system support device designed to provide an isolated communications path between an Ethernet Network and a C-Bus Network.

The following functions can be achieved through this interface: programming C-Bus Units, issuing commands to a C-Bus Network including scheduled activities as well as monitoring and data logging of activities on a C-Bus Network.

The C-Bus Ethernet Network Interface may also generate the system clock for communications data synchronization on the C-Bus Network and provide a software selectable Network Burden.

For ease of installation the unit is DIN rail mounted.

Technical Information

C-Bus Voltage Requirements	15–36Vdc
Supply Current	12V AC or DC @ 300 mA
C-Bus Input Voltage Does not draw current from the C-Bus Network	15 to 36V DC
External Power Supply (provided)	12Vdc @ 500 mA
Electrical Isolation	500V RMS continuous C-Bus/RS-232
Status Indicators	Ethernet LED/Comms LED
C-Bus System Clock	Software selectable
C-Bus Network Burden	Software selectable
Ethernet Connection	RJ-45 socket for connection to Ethernet
Dimensions	3.35 in. (H) x 2.83 in. (W) x 2.56 in. (D) [85 mm (H) x 72 mm (W) x 65 mm (D)]
Weight	4.59 oz (130 g)
Operating	Temp.: 32°F to 113°F (0°C to 45°C)
Environment	RH: 95%, noncondensing
Storage Environment	Temp.: 14°F to 140°F (-10°C to 60°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment

For Diagram see technical section page 98

Ethernet Network Interface

Product Features
• Programming C-Bus Units
• Issuing commands to a C-Bus Network, including scheduled activities
• Monitoring and Data Logging of activities on a C-Bus Network
• Software selectable C-Bus System Clock

Distributed Intelligence
• Compatible with all C-Bus devices and Powerlink® NF3000G3C controllers
• Easily configured by using the C-Bus Toolkit software

Catalog Number	Description
SLC5500CN	Ethernet Network Interface

C-Bus™
PC Interface

The C-Bus™ PC Interface (PCI) expands options for configuring, controlling, and monitoring C-Bus networks by providing an interface between the network and a personal computer (PC) or other external device.

The C-Bus PCI module easily mounts to a DIN rail and connects to external devices through its built-in connector ports. Power to the unit is provided through the C-Bus network.

PC Interface

Technical Information

Voltage Requirements	15–36Vdc @ 32 mA required for normal operation, drawn from the C-Bus network
Electrical Isolation	500V RMS continuous C-Bus/RS-232
Status	Unit/Comms: Unit power and data transmission
Indicators	C-Bus: Power levels and presence of C-Bus clock
Serial	(1) 9-pin RS-232 D-type serial connector
Port	(2) RS-232 RJ-45 connectors
Cable	6.6 ft (2 m), with DB9 connectors
C-Bus Connection	(2) RJ-45 sockets for connection to a C-Bus network
Dimensions	2.84 in. (H) x 3.35 in. (W) x 2.60 in. (D) [72 mm (H) x 85 mm (W) x 66 mm (D)]
Mounting	DIN rail, 4M wide
Serial Termination	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Storage Environment	Temp.: 14°F to 140°F (-10°C to 60°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 98

Product Features
- Unit/Comms LED shows the status of the unit's power and of any data transmissions
- C-Bus LED shows the status of the network at the unit, including the level of network power and the presence of the C-Bus clock
- System network clock for synchronizing communications data
- Three RS-232 serial connectors for connecting to a PC or to external devices: (1) 9-pin D-type serial connector (female) and (2) 8-pin RJ-45 connectors
- Two C-Bus network connector ports: RJ-45 sockets
- Data cable for connecting PCI and personal computer, including DB9 connectors

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller

Catalog Number	Description
SLC5500PC	PC Interface

C-Bus™
PC Interface USB

The C-Bus™ PC Interface (PCI) expands options for configuring, controlling, and monitoring C-Bus networks by providing an interface between the network and a personal computer (PC) or other external device.

The C-Bus PCI module easily mounts to a DIN rail and connects to external devices through its built-in connector ports. Power to the unit is provided through the C-Bus network.

PC Interface USB

Technical Information

C-bus input voltage	15-36Vd
Current drawn	22mA
Electrical isolation rating	500Vrms continuous C-Bus/RS232
Communications	USB Type A to B
Operating temperature	32-113°F (0-45°C)
Operating humidity range	95% RH; non-condensing
Terminals	C-Bus, RJ45 connectors (2), USB to PC
Dimensions	2.84 in. (L) x 3.35 in. (W) x 2.60 in. (D)
	[72 mm (L) x 85 mm (W) x 66 mm (D)]
Weight	0.23 lbs (104g)

For Diagram see technical section page 98

Product Features
- Unit/Comms LED shows the status of the unit's power and of any data transmissions
- C-Bus LED shows the status of the network at the unit, including the level of network power and the presence of the C-Bus clock
- System network clock for synchronizing communications data
- USB (B-Type) Connector
- Two C-Bus network connector ports: RJ-45 sockets
- Data cable for connecting PCI and personal computer, including DB9 connectors

Distributed Intelligence
- Compatible with all C-bus devices and the Powerlink® NF3000G3C controller

Catalog Number	Description
SLC5500PCU	PC Interface, USB Model

C-Bus™
Network Bridge

The C-Bus™ Network Bridge provides a communication channel between C-Bus units on separate networks, expanding the total number of units that can be configured, controlled, and monitored.

Network Bridge

Technical Information

Voltage Requirements	15–36Vdc @ 18 mA required for normal operation, drawn from each connected C-Bus network
Electrical Isolation	3.5 kV RMS for 1 min (between networks)
Status	Network A, Network B
Indicators	Power ON, Communications in progress Power OFF - Not connected/insufficient power
Propagation Delay	250 ms (delay for message transfer between two adjacent C-Bus Networks)
Interconnect	In parallel: 51 networks (50 network bridges)
Capacity	In series: 7 networks (6 network bridges)
C-Bus System Clock	Software selectable
C-Bus Network Burden	Software selectable
C-Bus Connection	(2) pair of RJ-45 sockets for connection to C-Bus networks
Dimensions	2.84 in. (H) x 3.35 in. (W) x 2.60 in. (D) [72 mm (H) x 85 mm (W) x 66 mm (D)]
Weight	3.35 oz (95 g)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 99

Product Features
- Increases transmission distances by acting as a repeater station for data transmission
- Expands the total number of C-Bus devices that can operate on the system by isolating devices to individual networks [In parallel: 50 networks (50 network bridges) In series: 7 networks (6 network bridges)]
- Indicates each network's status level
- Stores operating status in non-volatile memory for recovery from a power outage
- Uses built-in connectors to connect to a C-Bus network

Distributed Intelligence
- Compatible with all C-Bus devices and Powerlink® NF3000G3C controllers
- Easily configured by using the C-Bus Tool Kit software

Catalog Number	Description
SLC5500NB	Network Bridge

C-Bus™
Power Supply

The C-Bus™ Power Supply is specifically designed to operate with the C-Bus network as a power source for passive C-Bus devices.

The power supply mounts to a DIN rail and connects to the C-Bus network through built-in RJ-45 connectors.

These devices are UL listed as Class 2 power supplies and are suitable for parallel operation. Up to five power supplies can be connected to a single C-Bus network.

Power Supply

Technical Information

Nominal Line Voltage	Operates at 120 or 277Vac, ± 10%, with a frequency range from 50–60 Hz
Electrical Isolation	3.75 kV RMS from C-Bus to the line
Current Output	350 mA to the C-Bus network
Status Indicators	Unit: Unit power C-Bus: Network voltage level and presence of system clock
Power Supplies per Network	Up to five power supplies on a single C-Bus network
C-Bus Connection	(2) RJ-45 sockets for connection to the C-Bus network
Cable	(1) 15.75 in. (400 mm) patch lead included
Dimensions	3.35 in. (H) x 2.84 in. (W) x 2.60 in. (D) [85 mm (H) x 72 mm (W) x 66 mm (D)]
Mounting	DIN rail, 4M wide
Weight	7 oz (200 g)
Operating Environment	Temp.: 32°F to 104°F (0°C to 40°C) RH: 95%, noncondensing
Storage Environment	Temp.: 14°F to 140°F (–10°C to 60°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 99

Product Features
• Available in 120 and 277Vac models
• Regulating power supply compensates for line voltage and frequency variations, so there is constant output
• Sources up to 350 mA to the C-Bus network
• UL listed to operate in parallel with other C-Bus power supplies, up to five on a single C-Bus network
• Incorporates short circuit and reverse polarity protection
• Indicates the line voltage status with a Unit LED
• Indicates the network status, including the network power and the presence of the C-Bus clock, with a C-Bus LED
• Standard built-in C-Bus network connectors: (2) RJ-45

Distributed Intelligence
• Compatible with all C-Bus devices and Powerlink® NF3000G3C controllers
• Easily configured by using the C-Bus Tool Kit software

Catalog Number — Description

Catalog Number	Description
SLC5500TPS	120Vac Power Supply
SLC5500HPS	277Vac Power Supply

Powerlink®
Device Power Supply

The Powerlink® Device Power Supply is used to distribute power on a C-Bus™ network. Placed at critical points on the network, device power supplies will provide the current necessary for operating a variety of passive Schneider Electric C-Bus devices.

A Powerlink Device Power Supply consists of a C-Bus 8M enclosure containing one or two 4M Power Supplies.

Powerlink Device Power Supply

Technical Information

Nominal Line Voltage	Operates at 120 or 277Vac, ± 10%, with a frequency range from 50–60 Hz
Maximum Line Current	9.9 mA for 120V power supply 4.3 mA for 277V power supply
Electrical Isolation	3.75 kV RMS from C-Bus to the line
Current Output	350 mA (single power supply unit) 700 mA (dual power supply unit)
Dimensions	12.57 in. (L) x 8.88 in. (W) x 3.8 in. (D) [319 mm (L) x 226 mm (W) x 97 mm (D)]
Weight	One power supply: 8.84 lb (4.01 kg) Two power supplies: 9.28 lb (4.21 kg)
Operating Environment	Temp.: 32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 508A Industrial Control Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 99

Product Features
• Surface-mount NEMA 1 enclosure with trim assembly
• Unit and C-Bus LEDs indicate the status of the line voltage and the network
• Sources up to 700 mA (dual power supplies) to the C-Bus network
• 120 or 277Vac models available
• UTP connection jumper included for dual supply

Distributed Intelligence
• Compatible with all C-Bus devices and Powerlink NF3000G3C controllers
• Easily configured by using the C-Bus Tool Kit software

Catalog Number	Description
NFDP1120G3C	120V Powerlink Single Power Supply
NFDP2120G3C	120V Powerlink Dual Power Supply
NFDP1277G3C	277V Powerlink Single Power Supply
NFDP2277G3C	277V Powerlink Dual Power Supply

Powerlink®
Device Router

The Powerlink® Device Router allows the exchange of data between a Powerlink NF3000G3C controller and Schneider Electric C-Bus™ devices.

The bidirectional device router can receive data from C-Bus input devices and send the data to the Powerlink panel/network. It can also receive data such as a contact closure from the Powerlink input and send that data to a C-Bus output/network.

The device router consists of a 8M enclosure containing a PC Interface and a Power Supply. Communication between the device router and the NF3000G3C controller is made with the included 50-foot serial cable.

Powerlink Device Router

Technical Information

Nominal Line Voltage	Operates at 120 or 277Vac, ± 10%, with a frequency range from 50–60 Hz
Maximum Line Current	9.9 mA for 120V device router 4.3 mA for 277V device router
Electrical Isolation	3.75 kV RMS from C-Bus to the line
Current Output	350 mA to the C-Bus network
Status Indicators	Unit and Unit/Comms: Line voltage, unit power, and data transmission C-Bus: Power levels and presence of C-Bus clock
Serial Connection	(1) 9-pin RS-232 D-type serial connector (2) RS-232 RJ-45 connectors
C-Bus Connection	(2) RJ-45 sockets for connection to the C-Bus network
Data Cable	50 ft serial
Dimensions	12.57 in. (L) x 8.88 in. (W) x 3.8 in. (D) [319 mm (L) x 226 mm (W) x 97 mm (D)]
Weight	9.1 lbs (4.13 kg)
Operating Environment	Temp.: 32° to 113°F (0° to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 508A Industrial Control Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 99

Product Features
- Surface-mount NEMA 1 enclosure with trim assembly
- Unit, Unit/Comms, and C-Bus LEDs indicate the status of data transmission and power to the unit and the network
- System network clock for synchronizing communications data
- Network power source, supplying up to 350 mA
- 120 or 277Vac models available

Distributed Intelligence
- Compatible with all C-Bus devices and Powerlink NF3000G3C controllers
- Easily configured by using the C-Bus Tool Kit software

Catalog Number	Description
NFDR120G3C	120V Powerlink Device Router
NFDR277G3C	277V Powerlink Device Router

C-Bus™
Pascal Automation Controller

The C-Bus™ Pascal Automation Controller (PAC) provides extended conditional and real-time event programming to C-Bus systems. The PAC supports a full range of programming commands including conditional logic, flow control, variables and scheduling.

Systems integrators will appreciate the built-in scheduling tools, scene tools, and wizards for creating basic logic programs. Full programming capabilities can be achieved utilizing the free-form script editor based off the PASCAL programming language.

The PAC directly connects to a wired C-Bus system. Programs are downloaded from a personal computer through a USB connection.

Pascal Automation Controller

Technical Information

C-Bus™ Supply Voltage	15-36Vdc @ 32 mA Drawn from the C-Bus network
RS-232 Supply Voltage	24Vac @ 20 mA (power source not provided)
Battery Backup Supply Voltage	12Vdc @ 30 mA (power source not provided)
Connections	2 C-Bus RJ-45 sockets (in parallel), 2 RS-232 RJ-45 sockets, 1 USB type B socket, screw terminals for 12Vdc battery and 24Vac power
C-Bus System Clock	Software selectable
Network Burden	Software selectable
Status Indicators	Unit/Comms, C-Bus, Status and User
Dimensions	2.83 x 3.62 x 2.48 inches (72 x 92 x 63mm)
Weight	5.29 oz (150g)
Mounting	DIN 4M wide
Operating Environment	32°F to 113°F (0°C to 45°C) 10% - 95% RH, noncondensing
Standards	CSA 22.2 Spec 205 Signal Equipment

For Diagram see technical section page 100

Product Features
- Conditional and real-time events programming for C-Bus.
- Connects directly to C-Bus network
- Powered from the C-Bus network
- USB port for connection to personal computer
- (2) RS-232 ports for third party device control
- Real time, astronomical and C-Bus system clock included with 24 hour internal capacitor backup and external 12Vdc battery terminals

Programming capabilities including:
- Conditional logic (if, then, and, or, not, etc.)
- Flow Control (for, repeat, while)
- Variables (integer, real, Boolean, character, string)
- Control and monitoring of group addresses
- Control and monitoring of scenes

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured with the C-Bus Toolkit Software

Catalog Number   Description

Catalog Number	Description
SLC5500PACA	Pascal Automation Controller

C-Bus™
Telephone Interface Unit

The C-Bus™ Telephone Interface offers a dial-in and dial-out functionality, permitting control and status monitoring for a C-Bus system. It also includes an audio output, so that C-Bus events can be audibly announced.

The Telephone Interface is programmed using a connection to a PC running special configuration software. The interface can also act as a C-Bus PC Interface. In this way C-Bus can be programmed and configured either locally or from a remote site using a data modem.

The Telephone Interface is suitable for connection to the telephone network using a RJ31X connection, in parallel, or by insertion into a local circuit.

Telephone Interface Unit

Technical Information

C-Bus Supply Voltage	15 36Vdc @ 18 mA Nominal
DC Plug Pack	12Vdc @ 300-500 mA, 2.1mm plug with Center pin +VE
Audio Output	Line output, 1 Vp-p (nominal) into 10K Ohms
Control Functions	Dial in and Dial out functionality, control and status monitoring for a C-Bus system. Audio output. Standard C-Bus PCI allowing remote dial in and operation as a PCI with modem connection for remote operation of installation software
Status Indicators	Green LED- Power Orange LED-RS232 Comms, Line Grab Unit Comms and C-Bus
Start Up Time	10 seconds nominal after Power Up
Storage Temperature	32° to 140°F (0° to 60°C)
Operating Temperature Range	32° to 113°F (0° to 45°C)
Operating Humidity Range	0° to 95% RH, noncondensing
C-Bus Input Terminals	RJ45 sockets
Color	White with Black lettering and markings
Dimensions	5.8 x 5.7 x 1.2 in. (146.5 x 145 x 30mm)
Weight	1.31 lbs. (580g)
Mounting Centers	3.2 in. (80mm)
Standards	UL916 Energy Management Equipment CSA 22.2 Spec. 205 Signal Equipment FCC Part 15.101, Class B Digital FCC Part 68 Connections of Terminal Equipment to the Telephone Network

For Diagram see technical section page 100

Product Features
• Audio OUT
• Local or remote site access to C-Bus system
• 12Vdc power pack
• RS-232 connection
• 1 RJ45 patch lead
• 2 RJ12 patch leads
• Software available via website download

Catalog Number	Description
SLC5100TUS	Telephone Interface Unit

C-Bus™
General Input Unit

The C-Bus™ Four-Channel General Input Units are DIN-rail mounted devices that measure TTL digital and real-world analog quantities and generate messages about the measurements to the C- Bus network. By acting as an interface with various external sensors, the general input unit enables integration of the C-Bus network with a variety of system types, such as those for HVAC and for power monitoring.

Configuration options include selectable input types, eight adjustable decision thresholds per channel, definable actions, selectable filtering, broadcast rates, and a separate hysteresis value per channel.

General Input Unit

Technical Information

Nominal Voltage Requirements	15-36 volts @18 mA from the C-Bus network
Nominal	120Vac
Nominal Supply Voltage	16-27V AC/DC, +/- 10%, 50-60 Hz, provided by an external power supply (included)
AC Input Impedance	100 kOhm @ 1 kHz
External Power Supply	24Vac @ 500 mA
Electrical Isolation	500 V RMS per input
Nominal 24Vdc Output Voltage	24Vdc @ 250 mA, ±10% General Input
Digital Sensor Input	TTL, 5V from external source
Analog Sensor Inputs: Voltage Ranges Input Current Ranges Resistance Ranges	0–1, 0–5, 0–10, 0–20Vdc 0–20 mA DC, 4–20 mA DC 0–500 ohm, 0–1000 ohm, 0–3000 ohm, 0–10000 ohm
Maximum Input Voltages	-20 V to 60Vdc
Input Voltage Range Impedance	At least 100 kOhm
Current Sense Impedance	249 ohm
Resistance Range Injection Current	500 µA
Basic Accuracy after Calibration	0.5% of full scale
Maximum Input Frequency	10 Hz
Broadcast Rates	2–1024 sec
Number of Units per Network	10
C-Bus Connections	(2) RJ-45 connectors, CAT 5 UTP cable required
Cable	15.75 in. (400 mm) patch lead included
Terminals	Accommodate 16–12 AWG cable (2 x 1.31 mm² or 1 x 3.31 mm²)
Status Indicators	Unit/Comms: Unit power and data transmission C-Bus: Power levels and presence of C-Bus clock
Dimensions	5.7 in. (L) x 3.4 in. (W) x 2.6 in.(H) [144 mm (L) x 85 mm (W) x 65 mm (H)]
Weight	7 oz (190 g)
Mounting	DIN rail, 8M wide
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital EN61000-4-2 Immunity to ESD UL Listed 916 Energy Management Equipment

For Diagram see technical section page 100

Product Features

- Measures TTL digital quantities including voltage, current, or resistance from external sensors such as light level, pressure, and temperature
- Four channels of input, each with an adjustable hysteresis value, eight decision thresholds, and a software-selectable input value transformation in the form $y = ax + b$
- Input channels are compatible with a range of third-party sensors
- Look-up table with interpolation
- Capable of threshold switching or broadcasting values onto the network
- Control functions include load switching, dimming, trigger applications, enable control applications, and measurement applications
- Measures input signals up to 10 Hz and has an adjustable input-signal filter to reduce susceptibility to impulse and noise
- Supplies 250 mA to external sensors
- LEDs indicate the status of the network at the unit and the unit's power and data transmissions
- Software-selectable network burden and C-Bus system clock
- Standard built-in C-Bus network connectors: (2) RJ-45
- Non-volatile memory stores operating status for recovery from a power outage
- Includes 120V/24V AC power pack

Distributed Intelligence

- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured with the C-Bus Toolkit Software

Catalog Number	Description
SLCE5504TGI	4 Channel General Input Unit

C-Bus™
Bus Coupler

The C-Bus™ Bus Couplers are non-isolated input devices that provide an interface between dry-contact mechanical switches and a C-Bus network. The bus coupler increases the versatility of the C-Bus network by facilitating remote access with any dry-contact switch mechanism offered by Schneider Electric and other manufacturers.

A system's flexibility can be further enhanced by using the bus coupler with various other switch types, including reed, pressure, or micro switches.

Available in two- and four-channel models, the bus coupler is small enough to be used in restricted spaces. Configuration options include standard control functions such as ON/OFF, toggle, dimmers, and timers.

Four-Channel Bus Coupler

Technical Information

Nominal Voltage	15-36Vdc @ 18 mA, drawn from the
Requirements	C-Bus network
Electrical Isolation	None
Voltage Across Input	External Switch Opens: 5Vdc External Switch Closes: 0Vdc
Current–Switch Closed	Less than 50 µA
Distance Between	2-Channel Coupler: Up to 1 ft (0.3 m) each
Switch and Bus Coupler	4-Channel Coupler: Up to 3 ft (1 m) each
LED Drive Output	2-Channel Coupler only: 2 mA @ 12 V
Maximum Input Voltages	-20 to 60Vdc
Number of Units	Use the C-Bus Calculator, a software utility, to determine
per Network	the total network current load
C-Bus Connections	Two-way removable screw-type terminals accommodating 24–16 AWG cable (0.2–1.31 mm²)
Channel Input	Spring-loaded terminal block accommodating
Connections	24–12 AWG cable (0.2–3.31 mm²)
Status Indicators	Channel (2 or 4)
Timers	1 sec–18 hr, 1 sec intervals
Dimensions	2.2 in. (L) x 1.9 in. (W) x 0.7 in. (H)) [55 mm (L) x 49 mm (W) x 18 mm (H)]
Weight	1.1 oz (32 g)
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital, EN61000-4-2 Immunity to ESD

For Diagram see technical section page 100

Product Features
- Provides two or four non-isolated inputs for external voltage-free mechanical switches. Two-channel units feature independent remote LED outputs
- Control options include ON/OFF, toggle, dimmer, or timer
- Orange LED for each channel to indicate operational status
- Two-way removable terminal block for the C-Bus connection
- Terminal block allows connection of up to four external switches (four-channel coupler) or two external switches and two external LEDs (two-channel coupler)
- Small size for adaptation to restricted spaces
- Non-volatile memory stores operating status for recovery from a power outage
- Receives data and power over a network, so it does not require power packs or line voltage connections

Distributed Intelligence
- Compatible with all C-Bus devices and the Schneider Electric Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or the C-Bus Toolkit Software

Catalog Number	Description
SLC5102BCLEDL	Two-Channel Bus Coupler
SLC5104BCL	Four-Channel Bus Coupler

C-Bus™
Four-Channel Auxiliary Input

The C-Bus™ Four-Channel Auxiliary Inputs are isolated four-channel input units that provide an interface between voltage-free mechanical switches and a C-Bus network.

An auxiliary unit increases the versatility of the C-Bus network by facilitating remote access with any dry-contact switch mechanism offered by Schneider Electric or other manufacturers.

DIN-rail mounted for quick installation, the auxiliary unit can be configured with standard C-Bus control functions such as remote scene triggering, ON/OFF, toggle, dimmer, or timer.

Four-Channel Auxiliary Input Unit

Technical Information

Nominal Voltage Requirements	15-36Vdc @ 18 mA, drawn from the C-Bus network
Electrical Isolation	C-Bus/Remote Input: 500 V RMS Remote Input: 500 V RMS
Voltage Across Input	External Switch Opens: 5Vdc External Switch Closes: 0Vdc
Current–Switch Closed	0.4 mA
Switch Resistance	Up to 1000 ohm, including cable resistance (26.5 ohms per km resistance for #18 copper wire coated DC current resistance)
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connections	(2) RJ-45 connectors, CAT 5 UTP cable required
Cable	15.75 in. (400 mm) patch lead included
Terminals	Accommodate one 12 or two 14-22 AWG cables (1 x 3.1 mm2) or 2 x 2.0-0.3 mm2)]
Status Indicators	Channel: (4) orange LEDs to indicate the load status for each channel
Timers	1 sec–18 hr, 1 sec intervals
Dimensions	3.4 in. (L) x 2.8 in. (W) x 2.6 in. (H)) [85 mm (L) x 72 mm (W) x 65 mm (H)]
Weight	4.6 oz (130 g)
Mounting	DIN rail, 4M wide
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 101

Product Features
- Provides four isolated inputs for external voltage-free mechanical switches
- Control options include remote scene triggering, ON/OFF, toggle, dimmer, or timer operations
- Orange LEDs indicate operational status, one for each channel
- Standard built-in C-Bus network connectors: (2) RJ-45
- Non-volatile memory stores operating status for recovery from a power outage

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or the C-Bus Toolkit Software

Catalog Number	Description
SLCLE5504AUX	4 Channel Auxiliary Input Unit

C-Bus™
Indoor PIR Occupancy Sensor

The C-Bus™ Indoor PIR Occupancy Sensor provides reliable thermal-radiation-based control of lighting and other C-Bus output devices.

Suitable for wall or ceiling mounting, this sensor offers a continuous detection field of 400 square feet and a 90° field of view. The entire detection field has uniform sensitivity and no dead zones, making it an ideal lighting-control solution for offices, corridors, and conference rooms.

Configuration options include an adjustable light-level sensor that can be set to automatically turn off lights when ambient light levels are sufficient or turn on lights when ambient light levels are insufficient.

Indoor PIR Occupancy Sensor

Technical Information

Nominal Voltage Requirements	15-36Vdc @ 18 mA, drawn from the C-Bus network
Field of View	90°
PIR Detection Field	Typically 400 sq ft (37 sq m)
Light-Level inhibit Threshold	0.1 footcandle (1 lux) to full sunlight
Timer Delay Range	0 sec-18 hr, 1 sec interval
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connection	Screw-type terminals, input terminals accommodate 24-16 AWG cable (0.2-1.31 mm²)
Status Indicators	LED can be configured to turn on when movement is detected
Dimensions	3.9 in. (W) x 2.2 in. (H) [100 mm (W) x 57 mm (H)]
Weight	4.4 oz (125 g)
Mounting	Surface: Ceiling or wall Ht: 8 ft (2.4 m) above floor
Operating Environment	Indoor 32°F to 122°F (0°C to 50°C)
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 101

Product Features

- Indoor use, wall or ceiling-mounted unit with a 90° field of view and a detection area of 400 square feet
- LED can be configured to indicate motion detection
- Light-level sensor has Sunrise/Sunset settings, clock overrides, and adjustable sensitivity ranging from 0.1 foot candle to full sunlight
- Advanced circuitry to help prevent false triggering, including electrostatic and electromagnetic shields, dual element detectors, pyroelectric ceramic sensors, and an optical band pass filter
- Controls up to four C-Bus group addresses that can be individually scheduled
- Non-volatile memory stores operating status for recovery from a power outage
- Receives data and power over a network, so the sensor does not require power packs or line voltage connections

Distributed Intelligence

- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or the C-Bus Toolkit Software

Catalog Number   Description

Catalog Number	Description
SLC5751L	90° Indoor PIR Occupancy Sensor

C-Bus™
360° PIR Occupancy Sensor

The C-Bus™ 360° Indoor PIR Occupancy Sensor combines a passive infrared receiver (PIR) for occupancy sensing and a light-level sensor into a small, highly versatile unit. The multi-sensor's 2.8 inch face diameter makes it unobtrusive and ideally suited for flush mounting on the ceiling.

This sensor has a 360 degree field of view with an effective coverage pattern of more than 800 feet, so it is ideally suited for offices, copier rooms, closets, and restrooms. Multiple sensors can be connected to the same C-Bus network to provide larger coverage patterns.

Configuration options include adjustable time delays for automatic shut-off following a preset time period without detected motion and an adjustable light-level sensor that can be set to automatically turn off lights when ambient light levels are sufficient or turn on lights when ambient light levels are insufficient.

360° PIR Occupancy Sensor

Technical Information

Nominal Voltage Requirements	15-36Vdc @ 18 mA, drawn from the C-Bus network
Field of View	360°
PIR Rated	Typically 800 sq ft (74 sq m) when sensor is
Detection Field	mounted 8 ft (2.4 m) above floor
Light-Level inhibit Threshold	0.1 footcandle (1 lux) to full sunlight
Timer Delay	0 sec to 18 hr
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connection	Two removable terminal blocks, requires CAT 5 data cable
Status Indicators	LED can be configured to turn on when movement is detected
Dimensions	4.1 in. (L) x 2.8 in. (W) [103 mm (L) x 72 mm (W)]
Weight	4.4 oz (125 g)
Mounting	Surface: Ceiling Ht: 8 ft (2.4 m) above floor Max. Ht: 12 ft (3.7 m) above floor Min. Ceiling Thickness: 0.4 - 0.75 in. (10 - 19.1 mm)
Operating	Indoor only
Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 101

Product Features
- 360° detection pattern, indoor use
- Effective coverage area is more than 800 square feet when unit is mounted 8 feet above the floor
- Dual element detectors minimize false triggering
- LEDs indicate movement detection and status of the IR receiver, and the light-level sensor
- Can control up to four scenes or group addresses that can be individually scheduled
- Adjustable light-level sensor with Sunrise/Sunset and clock overrides
- Attractive, low profile unit can be flush mounted on ceiling or suspended from wall tiles where it is unobtrusive, with a face diameter of only 2.8 inches
- Non-volatile memory stores operating status for recovery from a power outage
- Receives data and power over a network. No power packs or line voltage connections required

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or the C-Bus Toolkit Software

Catalog Number	Description
SLC5753L	360° PIR Occupancy Sensor

C-Bus™
360° PIR Multi-Sensor

The C-Bus™ 360° PIR Multi-Sensor combines a passive infrared receiver (PIR) for occupancy sensing, a light-level sensor, and an infrared remote receiver into a small, highly versatile unit. The sensor's 2.8 inch face diameter makes it unobtrusive and ideally suited for flush mounting on the ceiling.

Configuration options for the occupancy sensor include adjustable time delays for automatic shut-off following a preset time period without detected motion and an adjustable light-level sensor to turn on lights automatically when ambient light levels are low or turn off lights when ambient light levels are sufficient. The built-in IR receiver accepts commands from an optional handheld remote controller, making the sensor ideal for classrooms and conference room areas.

360° PIR Multi-Sensor

Technical Information

Nominal Voltage Requirements	15-36Vdc @ 18 mA, drawn from the C-Bus network
Field of View	360°
PIR Rated	Typically 800 sq ft (74 sq m) when sensor is
Detection Field	mounted 8 ft (2.4 m) above floor
IR Receiver Rated	Typically 800 sq ft (74 sq m) when sensor is
Detection Field	mounted 8 ft (2.4 m) above floor
Light-Level inhibit Threshold	0.1 footcandle (1 lux) to full sunlight
Timer Delay	0 sec to 18 hr
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connection	Two removable terminal blocks, requires CAT 5 data cable
Status Indicators	PIR Sensor or IR Receiver (activity) PIR Sensor (enabled/disabled) Light Level Maint. (enabled/disabled)
Dimensions	4.1 in. (L) x 2.8 in. (W) [103 mm (L) x 72 mm (W)]
Weight	4.4 oz (125 g)
Mounting	Surface: Ceiling Ht: 8 ft (2.4 m) above floor Max. Ht: 12 ft (3.7 m) above floor Min. Ceiling Thickness: 0.4 - 0.75 in. (10 - 19.1 mm)
Operating	Indoor only
Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 102

Product Features

- 360° detection pattern, indoor use
- Effective detection area of occupancy sensor is more than 800 square feet when unit is mounted 8 feet above the floor. Effective IR coverage is 800 square feet.
- Dual element detectors minimize false triggering
- LEDs indicate movement detection and status of the IR receiver, the occupancy sensor, and the light-level sensor
- Can control up to eight C-Bus scenes or directly control up to eight C-Bus group addresses that can be individually scheduled
- Adjustable light-level sensor has Sunrise/Sunset and clock overrides
- Attractive, low profile unit can be flush mounted on ceiling or suspended from wall tiles where it is unobtrusive, with a face diameter of only 2.8 inches
- Optional handheld remote controller (SLC5084TX, SLC5088TX)
- Non-volatile memory stores operating status for recovery from a power outage
- Receives data and power over a network, so the sensor does not require power packs or line voltage connections

Distributed Intelligence

- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or the C-Bus Toolkit Software

Catalog Number	Description	Accessories	
SLC5753PEIRL	360° PIR Multi-Sensor	SLC5084TX	IR 4-Button Remote Controller (ordered separately)
		SLC5088TX	IR 8-Button Remote Controller (ordered separately)

C-Bus™
Outdoor Motion Sensor

The C-Bus™ Outdoor PIR Motion Sensor combines reliable thermal-radiation-based control of lighting with rugged construction suitable for outdoor requirements. The unit's advanced circuits and flat multi-segmented lens provide coverage of up to 3000 square feet in a 110° field of view.

The detection area incorporates a multi-faceted lens, which ensures fast response to motion and few dead zones. Electrostatic and electromagnetic shields, dual element detectors, an optical bandpass filter, and pyroelectric ceramic sensors are used to reduce the incidence of false triggering.

Configuration options include an adjustable light-level sensor that can be set to automatically turn off lights when ambient light levels are sufficient or turn on lights when ambient light levels are insufficient.

Outdoor PIR Motion Sensor

Technical Information

Nominal Voltage Requirements	15-36Vdc @ 18 mA, drawn from the C-Bus network
Field of View	110°
PIR Detection Field	Typically 3000 sq ft (279 sq m)
Light-Level inhibit Threshold	0.1 footcandle (1 lux) to full sunlight
Number of Detection Zones	18 Long Range, 16 Intermediate Range, 10 Short Range, 4 ultra Short
Timer Delay Range	0 sec to 18 hr
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connection	One terminal block
Status Indicators	LED can be configured to turn on when movement is detected
Dimensions	4.5 in. (L) x 2.9 in. (W) x 5.5 in. (D) [114 mm (L) x 74 mm (W) x 140 mm (D)]
Weight	8 oz (227 g)
Mounting	Standard plate/box with 3.3 in. (84 mm) mounting centers Surface: Ceiling or wall Ht: 8 ft (2.4 m) above floor
Operating	Outdoor only
Environment	32°F to +122°F (0°C to +50°C)
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 102

Product Features
- Outdoor use, wall or ceiling-mounted unit with a 110° field of view and a detection area up to 3000 square feet in diameter
- Lens has 12 overlapping zones on each of 4 levels, forming a continuous detection field
- Rugged construction and pre-wired flexible cord
- LED indicates motion detection
- Light-level sensor has Sunrise/Sunset settings, clock overrides, and adjustable sensitivity ranging from 0.1 footcandle to full sunlight
- Controls up to four C-Bus group addresses that can be individually scheduled
- Non-volatile memory stores operating status for recovery from a power outage
- Receives data and power over a network, so the sensor does not require power packs or line voltage connections

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or the C-Bus Toolkit Software

Catalog Number	Description
SLC5750WPL	110° Outdoor PIR Motion Sensor

C-Bus™
Light-Level Sensor

The C-BusT™ Light-Level Sensor measures ambient light levels and automatically issues ON, OFF, or ramp commands over a C-Bus network. The light-level sensor can control relays, dimmers, or remotely operated circuit breakers, changing their status according to pre-set ambient lighting levels.

The C-Bus light-level sensor has a dynamic range between 5-150 footcandles, and compensates for noise and rapid light intensity fluctuations by using filtering and hysteresis.

The light-level sensor can control up to two C-Bus group addresses: one address controls the switching ON/OFF of a lamp circuit according to the amount of ambient light, while the other is used to continuously regulate the light-level output of any number of lamps.

Light Level Sensor

Technical Information

Nominal Voltage Requirements	15-36Vdc @ 18 mA, drawn from the C-Bus network
Light Level	Reads: 2-278 footcandles (20-3000 lux) Controls: 5-148 footcandles (40-1600 lux)
Field of View	180°
C-Bus Connection	Accommodates 6 x 24 AWG cable (6 x 0.2 mm²)
Status Indicators	Can be configured to report state of any one of three group addresses: Enabled, ON/OFF, or Ramp
Dimensions	4.57 in. (L) x 2.99 in. (W) x 1.93 in. (D) [116 mm (L) x 76 mm (W) x 49 mm (D)]
Weight	3 oz (85 g)
Operating	Indoor only
Environment	32°F to 122°F (0°C to 50°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 102

Product Features
- Can maintain constant illumination levels of 5-150 footcandles
- Controls up to two C-Bus group addresses, one set for ON/OFF operations and one set for ramping operations
- 180° field of view
- Can be enabled or disabled over the C-Bus network
- Stores operating status in non-volatile memory for recovery from a power outage
- Receives data and power over a single C-Bus twisted pair cable
- Verifies status of input and output devices on same C-Bus application address, updating input status if necessary
- LED can be configured to indicate current status of any C-Bus group address
- Attractive, wall-mounted, low-profile unit

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using the C-Bus Toolkit Software and a personal computer connected to the C-Bus network

Catalog Number	Description
SLC5031PE	Light-Level Sensor

C-Bus™
Outdoor Light-Level Sensor

The C-Bus™ light-level sensor measures ambient light levels and automatically issues ON/OFF or ramp commands over a C-Bus network to maintain outdoor lighting levels. Primarily designed for outdoor use, this light-level sensor is also suitable for indoor settings in which a water resistant casing is desirable.

Outdoor Light Level Sensor

Technical Information

Nominal Voltage Requirements	15–36Vdc @ 18 mA, drawn from the C-Bus network
Field of View	180°
Light-Level Range	Reads: 2-278 footcandles (20-3000 lux) Controls: 5-148 footcandles (40-1600 lux)
C-Bus Connection	Screw-type input terminals accommodate 6 x 24 AWG cable (6 x 0.2 mm²) Connection requires CAT 5 data cable
Max. Units/Network	Based on the total network current load and available power
Conduit Openings	Sized for 20 mm and 25 mm conduit fittings
Dimensions	4 in. (L) x 4 in. (W) x 2.5 in. (D) [102 mm (L) x 102 mm (W) x 65 mm (D)]
Weight	10.8 oz (305 g)
Mounting	Indoor or outdoor, wall or ceiling Indoor Height: At least 6.5 ft (1.9 m) above floor
Operating Environment	Outdoor or indoor –22°F to 122°F (–30°C to 50°C) RH: 95%, noncondensing
Standards	FCC: Part 15.101, Class B Digital Device

For Diagram see technical section page 102

Product Features

- Outdoor use, wall- and ceiling-mounted low-profile unit
- Can maintain a constant illumination level of 5-150 footcandles
- Control of up to two C-Bus group addresses
- Sensors receive data and power over a single C-Bus twisted-pair cable, so they do not require power packs or line-voltage connections
- 180° field of view

Catalog Number	Description
SLC5031PEWP	Outdoor Light-Level Sensor

C-Bus™
Professional Series Dimmer

The C-Bus™ Professional Dimmers are designed to control incandescent and compatible low-voltage lighting. These dimmers are ideal for tight space applications where traditional rack mounted assemblies are not practical.

Professional dimmer units are available in 5 A (4 channels), 10 A (two channels), and 20 A (one channel) models. Each channel provides independent dimming and incorporates thermal overload and over-current protection. These dimmer units automatically compensate for voltage and frequency fluctuations and employ advanced phase-control techniques to reduce flicker and increase lamp life.

The aluminum enclosure acts as a heat sink and is designed for easy wall mounting, including keyhole mounts and removable terminals for the C-Bus and override connections. An optional terminal box is available for conduit connections. Configuration options include network monitoring of the channel load and network voltages, adjustable delays for dimming levels, and master override.

10A, 2-Channel Professional Dimmer Unit

Technical Information

Nominal Voltage Requirements	C-Bus voltage 15–36Vdc
Nominal Line Supply Voltage and Frequency	110–120Vac, ±10%, 50/60 Hz
Useable Output Current	60 mA
Frequency Drift	3 Hz per minute, maximum
Frequency Step Change	0.1 Hz (maximum)
Minimum Load	100 W per channel
Current Sensing	5–100% of full-rated load, 5% accuracy
Efficiency	98%
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connections	Four-way removable screw terminals, CAT 5 UTP cable required
Load Terminals	Accommodates one #12 or up to two #14 AWG cable [(3.31 mm² - 1.3 mm²)]
Auxiliary Contacts	2.5 A @ 120Vac, normally open, voltage free, resistive
Status Indicators	Channel, Unit and C-Bus
Dimensions	9.45 in. (L) x 7.95 in. (W) x 2.95 in. (H)) [240 mm (L) x 202 mm (W) x 75 mm (H)]
Weight	4.85 lb (2.2 kg)
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL508 Industrial Control Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 103

Product Features

- Suitable for use with resistive and inductive loads and low-voltage lamps utilizing iron core or electronic transformers
- Quick-mounting design, including keyhole mounts, front and rear cable access, and removable terminals for C-Bus connections
- Specialized dimming modes–soft turn on/off and linearized brightness control
- Built-in power supply sources 60 mA to the C-Bus network
- Compensates for fluctuations in frequency and voltage of power source
- Monitors load current by channel
- Integral thermal overload protection on each channel
- Individual channels can be turned On/Off at the unit or via C-Bus commands
- LEDs indicate the status of the network at the unit and the status of the unit's load and power
- Optional terminal box for connecting conduit
- Non-volatile memory stores operating status for recovery from a power outage

Distributed Intelligence

- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured with the C-Bus Toolkit Software

Catalog Number	Description	Accessories	Description
SLC5104TD5	Professional Dimmer 5A, 4 Channel, 120Vac	SLCU5100TB	Terminal Box
SLC5102TD10	Professional Dimmer 10A, 2 Channel, 120Vac		
SLC5101TD20	Professional Dimmer 20A, 1 Channel 120Vac		

C-Bus™
Phase Angle Dimmers

The C-Bus™ Phase Angle Dimmers are C-Bus controlled output units suitable for incandescent and compatible low-voltage lighting. These units are designed to be rack mounted in suitable DIN style enclosures.

Each of the unit's channels can independently control loads to create dynamic lighting scenes. These dimmer units automatically compensate for voltage and frequency fluctuations and employ advanced phase-control techniques to reduce flicker and increase lamp life.

Phase Angle Dimmer Unit with Power Supply

Technical Information

Nominal Voltage Requirements	15–36Vdc @ 18 mA from the C-Bus network when there is no external power source
Nominal Line Supply Voltage and Frequency	110 - 120Vac, ±10%, 50–60 Hz
C-Bus Source Current	200 mA (Models: SLC5508TD2A, SLC5504TD4A)
Load Rating per Channel	2A (SLC5508TD2A), 4A (SLC5504TD4A)
Minimum Load	15 W per channel
Efficiency	98%
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connections	(2) RJ-45 connectors, CAT 5 UTP cable required
Cable	15.75 in. (400 mm) patch lead included
Remote Override Connection	RJ-45 connector
Power Terminals	Accommodate 16–12 AWG cable
Load Terminals	2 x #14-16 gauge or 1 x #12 gauge
Status Indicators	Channel: (1) per channel Unit (1): Unit power C-Bus (1): Power levels and presence of C-Bus clock
Dimensions	8.5 in. (L) x 3.6 in. (W) x 2.5 in. (H)) [216 mm (L) x 92 mm (W) x 63 mm (H)]
Weight	23 oz (647 g)
Mounting	DIN rail, 12M wide
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL508 Industrial Control Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 103

Product Features
- Suitable for use with incandescent lamps and low-voltage lamps utilizing iron core or electronic transformers
- Specialized dimming modes - soft turn On/Off and linearized brightness control.
- Can supply up to 200 mA to the C-Bus network (models SLC5504TD4A and SLC5508TD2A with built-in power supply)
- Integral thermal overload protection on each channel
- Individual channels can be turned ON/OFF at unit or via C-Bus commands
- LEDs indicate the status of the network at the unit, the status of the unit's load and power, and the status of each channel
- Non-volatile memory stores operating status for recovery from a power outage

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured with the C-Bus Toolkit Software

Catalog Number / Description

Catalog Number	Description
SLC5504TD4A	Four-Channel 4A Dimmer, with power supply
SLC5504TD4AP	Four-Channel 4A Dimmer, without power supply
SLC5508TD2A	Eight-Channel 2A Dimmer, with power supply
SLC5508TD2AP	Eight-Channel 2A Dimmer, without power supply

C-Bus™
2 Channel DALI Gateway

The C-Bus™ Digital Addressable Lighting Interface (DALI) Gateway provides an isolated two-way communications path between a C-Bus network and two DALI networks, making it possible to use the C-Bus network to control and monitor DALI ballasts.

The DALI gateway constantly monitors both DALI networks and can detect and report faulty lamps in fluorescent ballasts or non-functional DALI ballasts.

DALI Gateway

Technical Information

Nominal Voltage Requirements	15-36Vdc @ 32 mA, drawn from the C-Bus network
Electrical Isolation	3.75 kV RMS, from interface to C-Bus network
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
C-Bus Connections	Built-in RJ-45 sockets (2) for connection to the C-Bus network
DALI Connections	Two screw-type terminal blocks accommodating 16–12 AWG cable (2 x 1.31 mm^2 or 1 x 2.5 mm^2)
Cable	(1) 15.75 in. (400 mm) patch lead included
Status Indicators	Unit/Comms: Unit power and data transmission C-Bus: Power levels and presence of C-Bus clock
Dimensions	3.4 in. (L) x 2.8 in. (W) x 2.6 in.(H) [85 mm (L) x 72 mm (W) x 65 mm (H)]
Weight	4.6 oz (130 g)
Mounting	DIN rail, 4M wide
Operating Environment	32°F to 113°F (0 °C to 45 °C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 103

Product Features
- Provides two-way communications between C-Bus and DALI networks, routing selected messages from one to the other
- Unit is transparent and invisible to DALI ballasts
- Pre-programmed C-Bus to DALI and DALI to C-Bus addressing structure
- Unit/Comms and C-Bus LEDs show the status of data transmissions, the unit's power, the C-Bus network's power, and the presence of the C-Bus clock
- Software-selectable network burden and network clock
- Standard built-in C-Bus network connectors: (2) RJ-45
- Non-volatile memory to store operating status for recovery from a power outage
- Receives data and power over the network, so the unit does not require power packs or line-voltage connections

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- C-Bus side of interface is easily configured with the C-Bus Toolkit Software

Catalog Number	Description
SLC5502DAL	Two-Channel DALI Gateway

C-Bus™
4 Channel 0-10V Fluorescent Ballast Dimmer

The C-Bus™ 4 Channel 0-10V Fluorescent Ballast Dimmer provides four channels of analog 0-10Vdc that can be used as the control signals for various peripheral devices, including electronically dimmable fluorescent lighting ballasts.

This analog output unit can sink or source current as appropriate for the connected load, and produces 0-10 V in response to commands from the C-Bus network.

Each channel can be individually adjusted from 0 to 100% at the unit, by C-Bus commands or remotely, and each can drive multiple loads.

4 channel 0-10V Fluorescent Ballast Dimmer

Technical Information

Power Requirements	C-Bus: 15–36Vdc @ 22 mA required for normal operation. Power: 120V or 277Vac connection, 10 W
Number of Units per Network	Use the C-Bus Calculator, a software utility, to determine the total network current load
Electrical Isolation	3.5 kV RMS from C-Bus to the line
Output Voltage Range	0-10Vdc (±0.5)
Output Rating	Sourcing: 2.5 mA (minimum of 4 kohm) Sinking: 15 mA at $V_{out} = 0V$ 8 mA at $V_{out} = 10V$ [i.e., $I = 15-(0.7 \times V_{out})$mA]
Status Indicators	Unit: Unit power C-Bus: Network voltage level and presence of system clock
C-Bus Connection	(2) RJ-45 terminals
Cable	(1) 15.75 in. (400 mm) CAT 5 patch lead with pre-terminated RJ-45 connectors
Output Terminals	Accommodates 2 X 16 AWG or 1 X 12 AWG cable (2 x 1.3 mm^2 or 1 x 3.3 mm^2)
Mounting	DIN rail, 4M wide
Dimensions	3.35 in. (L) x 2.83 in. (W) x 2.56 in. (D) [85 mm (L) x 72 mm (W) x 65 mm (D)]
Weight	8.64 oz (245 g)
Operating Environment	32°F to 122°F (0°C to 50°C) RH: 95%, noncondensing
Standards	UL: Listed 916 Energy Management Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 104

Product Features

- Produces four independently controllable channels of 0-10Vdc for controlling dimmable lighting ballasts or other loads
- Each channel can sink or source current and drive multiple loads
- Two RJ-45 connectors facilitate quick connections to the C-Bus network and between similar units
- Unit and C-Bus LEDs show the status of the unit and the network
- Non-volatile memory stores operating status for recovery from a power outage
- 120 or 277Vac models available

Distributed Intelligence

- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured by using Learn Mode or the C-Bus Toolkit Software

Catalog Number	Description
SLCLE5504TAMP	Analog Output Unit, 0-10V, 120V
SLCLE5504HAMP	Analog Output Unit, 0-10V, 277V

C-Bus™
10 Amp Relay Unit

The C-Bus™ Relays are DIN-rail mounted units with four or twelve independent, voltage free, relay contacts for general switching applications. They are suitable for use with resistive, inductive, incandescent and fluorescent loads.

Each channel is independently configurable and features a zero crossing magnetically latching relay designed for switching the harsh electrical loads associated with today's high efficiency lighting systems. Local toggle buttons are provided on each unit to allow individual channels to be toggled at each unit or via C-Bus network commands. Remote ON and OFF facilities are available, permitting all channels to be turned ON or OFF without C-Bus Network communications.

4 Channel 10 Amp Relay

Technical Information

Nominal Supply Voltage	110-120V (SLC5504TRVF, SLC5504TRVFP, SLC5512TRVF and SLC5512TRVFP) 277V (SLC5504HRVF, SLC5504HRVFP, SLC5512HRVF and SLC5512HRVFP)
Frequency Range(s)	50 - 60Hz
C-Bus C-Bus Supply Voltage	15–36Vdc @ 18 mA required for programming when electrical power source is not connected Sources 200 mA to the C-Bus Network with electrical power source connected (non-power supply versions) 15–36Vdc @ 0 mA is required for programming when electrical power source is connected
Electrical isolation	3.75 kV RMS from C-Bus to power source
Contact Type	Voltage Free, magnetically latched
C-Bus Connections	2 RJ-45 connectors, CAT 5 UTP cable req.
Electrical Terminals	Accommodates (1) #12 or up to (2) #14 - 16 AWG (3.31mm^2 - (2) x 2.08 - 1.31mm^2)
Status Indicators	C-Bus Indicator Unit Status Indicator Load Indicator
Dimensions	4 Channel - 5.67 x 3.35 x 2.56 inches (144 x 85 x 65mm) 12 Channel - 8.46 x 3.35 x 2.56 inches (215 x 85 x 65mm)
Weight	4 Channel - 14 oz (400g) (w/o Power Supply) 18 oz (510g) (w/Power Supply)
	12 Channel - 21 oz (600g) (w/o Power Supply) 28 oz (800g) (w/Power Supply)
Mounting	DIN rail, 4 Channel - 8M wide 12 Channel - 12M wide
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 508 Industrial Control Equipment CSA 22.2 No. 14 Industrial Control Equipment FCC: Part 15, Class B Digital Device EN61000-4-2 Immunity to ESD

For Diagram see technical section page 104

Product Features

- Four or twelve independently operating voltage free relay contacts
- Two convenient built-in C-Bus network connectors (RJ-45)
- Units available both with and without a 200 mA power supply
- Non-volatile memory stores operating status for recovery from power outage
- LED Indicators show the status of the network and the unit
- Load Rating (4 and 12 channel 10 Amp rated relay)
  - Resistive-10A
  - Inductive-10A
  - Fluorescent -10A
  - Motor -2A

Distributed Intelligence

- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured with the C-Bus Toolkit Software

Catalog Number Description

Catalog Number	Description
SLC5504TRVF	4 Channel, 120V, 10A w/power supply
SLC5504TRVFP	4 Channel, 120V, 10A w/o power supply
SLC5504HRVF	4 Channel, 277V, 10A w/ power supply
SLC5504HRVFP	4 Channel, 277V, 10A w/o power supply
SLC5512TRVF	12 Channel, 120V, 10A w/power supply
SLC5512TRVFP	12 Channel, 120V, 10A w/o power supply
SLC5512HRVF	12 Channel, 277V, 10A w/power supply
SLC5512HRVFP	12 Channel, 277V, 10A w/o power supply

C-Bus™
20 Amp Relay Units

The C-Bus™ 20 Amp Relays are DIN-rail mounted units with four independent, voltage free, relay contacts. They are suitable for use with resistive, inductive, incandescent and fluorescent loads.

Each channel is independently configurable and features a zero crossing magnetically latching relay designed for switching the harsh electrical loads associated with today's high efficiency lighting systems. Local toggle buttons are provided on each unit to allow individual channels to be toggled at each unit or via C-Bus network commands. Remote ON and OFF facilities are available, permitting all channels to be turned ON or OFF without C-Bus Network communications.

4 Channel 20A Relay

Technical Information

Nominal Supply Voltage	110-120V (SLC5504TRVF20 and SLC5504TRVF20P) 277V (SLC5504HRVF20 and SLC5504HRVF20P)
Frequency Range(s)	50 - 60Hz
C-Bus Supply Voltage	15–36Vdc @ 18 mA required for programming when electrical power source is not connected. Sources 200 mA to the C-Bus Network with electrical power source connected.
Electrical isolation	3.75 kV RMS from C-Bus to power source
Contact Type	Voltage Free, magnetically latched
C-Bus Connections	2 RJ-45 connectors, CAT 5 UTP cable req.
Electrical Terminals	Accommodates (1) #12 or up to (2) #14 - 16 AWG (2 x 1.3 mm^2 or 1 x 3.3 mm^2)
Status Indicators	C-Bus Indicator Unit Status Indicator Load Indicator
Dimensions	8.46 x 3.35 x 2.56 inches (215 x 85 x 65mm)
Weight	20.46 oz (580g)
Mounting	DIN rail, 12M wide
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL508 Industrial Control Equipment CSA 22.2 Spec 205 Signal Equipment FCC: Part 15.101, Class B Digital Device EN61000-3-2 Low Frequency Emissions

For Diagram see technical section page 104

Product Features
- Four independently operating voltage free relay contacts
- Two convenient built-in C-Bus network connectors (RJ-45)
- Units available both with and without a 200mA power supply
- Non-volatile memory stores operating status for recovery from power outage
- LED Indicators show the status of the network and the unit
- Remote ON/OFF override capabilities
- Load Rating (4 channel 20 Amp rated relay)
  - Resistive 20A
  - Inductive 20A
  - Fluorescent 20A
  - Motor 4A

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured with the C-Bus Toolkit Software

Catalog Number	Description
SLC5504TRVF20	4 Channel, 120V, 20A with power supply
SLC5504TRVF20P	4 Channel, 120V, 20A without power supply
SLC5504HRVF20	4 Channel, 277V, 20A with power supply
SLC5504HRVF20P	4 Channel, 277V, 20A without power supply

C-Bus™
Changeover Relay Units

The C-Bus™ Changeover Relays are DIN-rail mounted devices with four independent, voltage free, changeover relay contacts.

Schneider Electric C-Bus Changeover Relays are designed to operate three-speed motors and two-way motor control devices. Some of their most common applications include operating motorized blinds, shutters, curtains and skylights (open/closed) where they provide a much simpler alternative to traditional and obtrusive relay interlocking systems.

Changeover Relay Unit

Technical Information

Nominal Supply Voltage	110-120V (SLC5504TRVFC and SLC5504TRVFCP) 250-277V (SLC5504HRVFC and SLC5504HRVFCP)
Frequency Range(s)	50 - 60Hz
C-Bus Supply Voltage	15–36Vdc @ 18 mA required for programming when electrical power source is not connected. Sources 200 mA to the C-Bus Network with electrical power source connected.
Electrical isolation	3.75 kV RMS from C-Bus to power source
Contact Type	Changeover, Non-latching
C-Bus Connections	2 RJ-45 connectors, CAT 5 UTP cable req.
Electrical Terminals	Accommodates (1) #12 or up to (2) #14 - 16 AWG (2 x 1.3 mm² or 1 x 3.3 mm²)
Status Indicators	C-Bus Indicator Unit Status Indicator Load Indicator
Dimensions	5.67 x 3.35 x 2.60 inches (144 x 85 x 65mm)
Weight	13 oz (370g) (With Power Supply) 17 oz (490g) (Without Power Supply)
Mounting	DIN rail, 8M wide
Operating Environment	32°F to 113°F (0°C to 45°C) RH: 95%, noncondensing
Standards	UL: Listed 508 Industrial Control Equipment CSA 22.2 No. 14 Industrial Control Equipment FCC: Part 15, Class B Digital Device

For Diagram see technical section page 105

Product Features
• Four (4) isolated independently operating relay channels
• Two (2) convenient built-in C-Bus™ network connectors (RJ-45)
• Non-volatile memory stores operating status for recovery from power outage
• LED Indicators show the status of the network and the unit
• Changeover Relays ratings: (120V AC Max)
• 2A Exhaust fans (shaded pole induction motors)
• 2A Ceiling fans (split-phase induction motors)

Distributed Intelligence
• Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
• Easily configured with the C-Bus Toolkit Software

Catalog Number	Description
SLC5504TRVFC	4 Channel changeover relay unit 120Vac, with power supply
SLC5504TRVFCP	4 Channel changeover relay unit 120Vac, without power supply
SLC5504HRVFC	4 Channel changeover relay unit 277Vac, with power supply
SLC5504HRVFCP	4 Channel changeover relay unit 277Vac, without power supply

C-Bus™
Low Voltage Relay

The C-Bus™ 8 Channel Low Voltage Relay is used for switching loads such as irrigation solenoids, and LV air conditioning dampers. The Relay may also be used for switching LV pulse signal control loads into third party products.

The C-Bus 8 Channel Low Voltage Relay is a C-Bus output device that controls eight low voltage relay channels. The unit is powered from the C-Bus network and requires no other power source. The unit can be daisy chained or placed at the end of a C-Bus network.

Low Voltage Relay

Technical Information

C-Bus network supply voltage	15 to 36Vdc @ 32mA required for programming and operation
Maximum units per C-Bus network	50
C-Bus connections	2 wire, twisted pair
Warm up time	5 seconds
Load rating per relay channel	2A at 30Vdc maximum or 30Vac RMS suitable for resistive and inductive loads
Contact type	Voltage free, SPDT (changeover)
Relay terminal connections	C common, N/O normally open, N/C normally closed
Types of electrical connection	Fixed load terminal for: 1 x 1.0mm² wire per tunnel (13AWG),
Fixed aux (C-Bus) connectors for:	2 x 1.5mm²
Dimensions (W x H x D)	8.66 x 3.15 x 1.50in. (220 x 80 x 38mm)
Weight	11.64oz (330g)
Mounting mode	Surface: 4 mounting screw holes and keyhole mount
EMC environment	Environment A
Operating ambient temperature	32 to 122°F (0 to 50°C)
Storage temperature	32 to 140°F (0 to 60°C)
Operating humidity	10 to 90% non condensing
Standards:	CSA C22.2 No. 205 - Signal Equipment UL916 - Energy Management Equipment, FCC Part 15 - Class B Digital Device for Home or Office Use

For Diagram see technical section page 105

Product Features
- Software-selectable C-Bus system clock
- Synchronize data communication on the C-Bus network
- Switch Low Voltage Loads
- Control 3rd party products
- 2 Status Indicator Lights

Catalog Number	Description
SLC5108RELVP	C-Bus 8 Channel Low Voltage Relay

C-Bus™ Enclosures and Area Lighting Panels
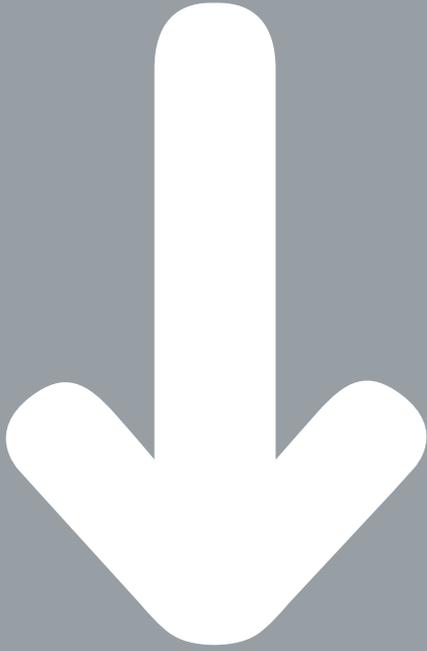
Introduction to C-Bus™ Enclosures and Area Lighting Panels

Area lighting panels from Schneider Electric are a simple, convenient way to area dimming and multi-scene controls, as well as daylight harvesting schemes in an individual conference room or suite within a commercial building. They are ideally suited to meet energy code requirements related to reduction in lighting loads by dimming, or integrating natural light with artificial light.

Area lighting panels offer the flexibility of being set up as a stand-alone system or connected as a part of a larger C-Bus™ network. A simple Cat-5 cable connection gives the pre-engineered enclosed panels the ability to integrate light-level detection, occupancy detection, keypads and switching. Along with ease of network connectivity and simplified programming, area lighting panels also provide easy installation and reduced field-wiring costs.

Outfitting a conference room or suite with a C-Bus light-level sensor allows an area lighting panel to automatically dim lights to capitalize on available natural light. When using C-Bus occupancy sensors, the panel automatically turns lights off after everyone leaves. Additionally, various pre-programmed lighting scenes can be automatically executed by the panel by pressing a button on a C-Bus lighting control keypad.

Area lighting panels provide unparalleled installation flexibility for electrical contractors. They provide the ability to integrate C-Bus keypads and light-level sensors and occupancy sensors without the complexity of line-voltage wiring connections. A single Cat-5 cable is all that is required in most applications to connect the inputs to a panel, which may be mounted in either an electrical closet or ceiling space. Power is distributed to the panel from a single home-run connection to the power source. Consultants will find that designing rooms in a commercial building with a focus on energy savings and tasteful lighting scenes is easier, because there is less wiring complexity.

C-Bus™
Area Lighting Panels

The C-Bus™ Area Lighting Panels are ideally suited to meet lighting control energy code requirements in classrooms, offices and other small spaces. These devices provide the ability to integrate keypads, occupancy sensing, light level detection, and switching without the mess of complex control wiring. A simple CAT-5 cable is all that is required to connect sensors and keypads.

Area Lighting Panels can operate as independent stand-alone islands or as part of an entire facility wide lighting control system. Enclosures can easily be mounted in electrical closets or in ceiling spaces. They include all necessary connections and are UL Listed. Area Lighting Panels can also be used in conjunction with Powerlink® panels.

Area Lighting Panels can be used for on/off switching, stepped dimming or continuous dimming applications. All relays feature rugged 20A rated contacts for switching electronic ballast loads. Models with continuous dimming capabilities are rated for either NEC Class 1 or Class 2 wiring.

8 channel 20A Relay Area Lighting Panel

Technical Information

Rated Voltage	120V & 277V 50/60Hz
Number of Units per Network	Use the C-Bus calculator, a software utility to determine total network current load or Toolkit software
Electrical isolation	3.5kV RMS from C-Bus to the line
Relays	20A
Short Circuit Current Rating	65kA (120V), 14kA (277V)
C-Bus Connections	RJ45
Dimensions	
12M Enclosure	12.78 in. x 9.09 in. x 4.0 in.
24M Enclosure	14.50 in. x 14.94 in. x 4.0 in.
Standards	UL: Listed 508A, FCC part 15.101, Class B Device EN61000-4-2 Immunity to ESD

For Enclosure Diagram see technical section page 106

Product Features
- Relay models: Four or eight relay outputs, rated 20A
- 0-10V outputs for control of 0-10V dimmable fluorescent ballast (suitable for use with MARK 7®, Sylvania Quicktronic®, and Universal SuperDim®)
- Integral neutral and ground bar terminal strips
- Plenum-rated for ceiling applications
- Bypass mode to facilitate quick start up
- Meets NEC Article 409
- UL Listed 508A, SCCR current ratings: 65kA (120V), 14kA (277V)
- Surface Mount NEMA 1 Enclosure

Distributed Intelligence
- Compatible with all C-Bus devices and the Powerlink® NF3000G3C controller
- Easily configured with Learn Mode or with C-Bus Toolkit software

Catalog Number	Enclosure	Description
4 Channel 20A Relay Models		
SLCZ042000T	12M	4 Channel 20A Relay @ 120V with power supply*
SLCZ042000H	12M	4 Channel 20A Relay @ 277V with power supply*
SLCZ042000TP	12M	4 Channel 20A Relay @ 120V without power supply
SLCZ042000HP	12M	4 Channel 20A Relay @ 277V without power supply
8 Channel 20A Relay Models		
SLCZ082000T	24M	8 Channel 20A Relay @ 120V with power supply*
SLCZ082000H	24M	8 Channel 20A Relay @ 277V with power supply*
SLCZ082000TP	24M	8 Channel 20A Relay @ 120V without power supply
SLCZ082000HP	24M	8 Channel 20A Relay @ 277V without power supply
4 Channel 20A Relay Models with 0-10V Output Units		
SLCZ04204AT	24M	4 Channel 20A Relay @ 120V with power supply and 4 Channel 0-10V Output Unit*
SLCZ04204AH	24M	4 Channel 20A Relay @ 277V with power supply and 4 Channel 0-10V Output Unit*
SLCZ04204ATP	24M	4 Channel 20A Relay @ 120V without power supply and 4 Channel 0-10V Output Unit
SLCZ04204AHP	24M	4 Channel 20A Relay @ 277V without power supply and 4 Channel 0-10V Output Unit
4 Channel Phase Angle Dimmer Models		
SLCZ00004DT	12M	4 Channel Phase Angle Dimmer @ 120V with power supply
SLCZ00004DTP	12M	4 Channel Phase Angle Dimmer @ 120V without power supply
4 Channel 20A Relay Models with Phase Angle Dimmer Units		
SLCZ04204DT	24M	4 Channel 20A Relay @ 120V with power supply and 4 channel phase angle dimmer unit
SLCZ04204DTP	24M	4 Channel 20A Relay @ 120V without power supply and 4 channel phase angle dimmer unit

* For stand-alone applications order unit with power supply

C-Bus™
8M Enclosure

The C-Bus™ Enclosures provide a housing for various C-Bus DIN-mounted devices. The 8M enclosure is specifically designed for distributed applications that require physical proximity between DIN units and keypads, sensors or controlled loads.

Suitable for surface mounting, the 8M enclosure consists of a box with a cover and a DIN rail for mounting one 8M or two 4M units. The enclosure also has provisions for mounting neutral and ground bars.

8M Enclosure

Technical Information

8M Enclosure	
Type	NEMA 1
DIN Module Capacity	One 8M or two 4M C-Bus units
Dimensions	12.57 in. (L) x 8.88 in. (W) x 3.8 in. (D) [319 mm (L) x 226 mm (W) x 97 mm (D)]
Mounting	DIN rail
Weight	8.4 lb (3.81 kg)

For Diagram see technical section page 105

Product Features
- Surface-mount NEMA 1 enclosure
- Welded sheet steel with knockouts
- Gray baked enamel, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- DIN rail, suitable for mounting one 8M or two 4M C-Bus DIN modules
- UL Listed

Catalog Number	Description	Accessories	
SLC8M	8M DIN Enclosure*	PK7GTA	Ground/Neutral Bar†
		PKGTAB	Neutral Insulator Kit†
		SLC4CSF8	Filler Plate, 4M

* Includes one ground bar, one filler plate, cable ties and mounts for wire management.
† Additional terminal bar and insulator for devices that require neutral connection points for loads, such as a relay unit.
Note: The C-Bus 8M Enclosure will accept one additional terminator bar (PK7GTA) intended for load neutral connections.
This is to be used when the C-Bus unit mounted inside requires neutral connection points for loads, i.e. a relay unit. Use in conjunction with a Neutral Insulator Kit (PKGTAB)

C-Bus™
12M Enclosure

The C-Bus™ Enclosures provide a housing for various C-Bus DIN-mounted devices. The 12M enclosure is specifically designed for distributed applications that require physical proximity between DIN units and keypads, sensors or controlled loads.

Suitable for surface mounting, the 12M enclosure consists of a box with a cover and a DIN rail for mounting three 4M C-Bus units, one 8M unit plus one 4M unit or one 12M unit. The enclosure also has factory mounted neutral and ground bars.

12M Enclosure

Technical Information

12M Enclosure	
Type	NEMA 1
DIN Module Capacity	One 12M, one 8M + one 4M or three 4M C-Bus units
Dimensions	12.78 in. (W) x 9.09 in. (T) x 4.0 in. (D) [325 mm (L) x 231 mm (W) x 102 mm (D)]
Standard	UL Standard 50 Enclosures for electrical equipment
Mounting	DIN rail
Weight	11.7 lb (5.3 kg)

For Diagram see technical section page 106

Product Features

• Surface-mount NEMA 1 enclosure
• Welded sheet steel with knockouts
• Gray baked enamel, electrodeposited over cleaned, phosphatized steel
• Triple-lead cover screws for fast installation of cover
• DIN rail, suitable for mounting one 12M or three 4M or one 8M and one 4M C-Bus DIN module
• UL Listed

Catalog Number	Description	Accessories	
SLC12MSG	12M DIN Enclosure*	PK7GTA	Ground/Neutral Bar
		PKGTAB	Neutral Insulator Kit

* Includes one DIN rail, one ground bar, and one insulated neutral terminal bar pre installed on the mounting pan. Also included are 2 ft. of flexible, Class 2 barrier, four pan mounting screws, four cover mounting screws, and two DIN rail stops.

C-Bus™
24M Enclosure

The C-Bus™ Enclosures provide a housing for various C-Bus DIN-mounted devices. The 24M enclosure is specifically designed for distributed applications that require physical proximity between DIN units and keypads, sensors or controlled loads.

Suitable for surface mounting, the 24M enclosure consists of a box with a hinged door and two rows for mounting C-Bus DIN-mounted units. Each row can hold one 12M unit, one 8M unit plus one 4M unit, or three 4M units. The enclosure also has provisions for additional neutral and ground bars.

24M Enclosure

Technical Information

24M Enclosure	
Type	NEMA 1
DIN Module Capacity	Two rows for mounting C-Bus DIN-mounted units. Each row can
	hold one 12M unit, one 8M unit plus one 4M unit, or three 4M units
Dimensions	14.50 in. (W) x 14.94 in. (T) x 4.0 in. (D) [368 mm (L) x 379 mm (W) x 102 mm (D)]
Mounting	DIN rail
Standard	UL Standard 50 Enclosures for electrical equipment
Weight	18.9 lb (8.6 kg)

For Diagram see technical section page 106

Product Features
• Surface-mount NEMA 1 enclosure
• Welded sheet steel with knockouts
• Gray baked enamel, electrodeposited over cleaned, phosphatized steel
• Triple-lead cover screws for fast installation of cover
• Hinged trim for easy access
• DIN rail, suitable for mounting C-Bus DIN-mounted C-Bus units. Each row can hold one 12M unit, one 8M unit plus one 4M unit, or three 4M units.
• UL Listed

Catalog Number	Description	Accessories	
SLC24MSG	24M DIN Enclosure*	PK7GTA	Ground/Neutral Bar†
		PKGTAB	Neutral Insulator Kit†

* The enclosure comes with two DIN rails, two ground bars, and two insulated neutral terminal bars pre-installed on the mounting pan. Also included are 2 ft. of flexible, Class 2 barrier, four pan mounting screws, and four door mounting screws, and four DIN rail stops.

† Additional terminal bar and insulator for devices that require neutral connection points for loads, such as a relay unit.

Note: The C-Bus 24M Enclosure will accept one additional terminator bar (PK7GTA) intended for load neutral connections. This is to be used when the C-Bus unit mounted inside requires neutral connection points for loads, i.e. a relay unit. Use in conjunction with a Neutral Insulator Kit (PKGTAB)

C-Bus™
36M Enclosures

The C-Bus™ Enclosures provide a multi-purpose means for housing various C-Bus DIN-mounted devices. Suitable for flush or surface mounting, the enclosure consists of a cabinet, a mounting pan assembly, and a cover assembly. The cabinet can be ordered separately, allowing for its installation with the rough-in of field wiring. The mounting pan comes with one L barrier, four horizontal barriers, and three DIN rails pre-installed. Optional accessories are available to meet the needs of particular installations.

The 36M enclosure provides three rows for mounting DIN-mounted C-Bus units. Each row has the capacity to hold one 12M unit, one 8M unit with one 4M unit, or three 4M units.

Schneider Electric 36M Enclosures are specifically designed for conventional installation near the main breaker panel. They provide a simple means of installing C-Bus DIN-mounted units with all of the necessary wiring, neutral bar, barriers and other components included. Once installed, the enclosure system allows for easy system maintenance with the units accessible.

Additional barriers provide greater flexibility to meet requirements of NEC Article 725 for separation of class 2 circuits.

36M Enclosure

Technical Information

36M Enclosure	
Type	NEMA 1
DIN Module Capacity	Three DIN rails, each with the capacity for one 12M, one 8M with one 4M, or three 4M C-Bus DIN units
Dimensions with Cover	40.6 in. (L) x 15.4 in. (W) x 3.9 in. (D) [1031 mm (L) x 392 mm (W) x 99 mm (D)]
Standard	UL Standard 50 Enclosures for electrical equipment
Module Mounting	DIN rail
Total Weight	57.7 lb (26.17 kg)

For Diagram see technical section page 106

Product Features

• NEMA® 1 enclosure suitable for flush or surface mounting
• Welded sheet steel with knockouts
• Gray baked enamel paint, electrodeposited over cleaned, phosphatized steel
• Triple-lead cover screws for fast installation of cover
• Three DIN rails, each suitable for mounting C-Bus DIN units in one of the following configurations:
  One 12M unit
  One 8M module with one (1) 4M unit
  Three 4M units
• UL Listed

Catalog Number	Description	Accessories	
SLC36C	Enclosure Cabinet, 40 in.	PK18GTA	Neutral bar, 18 terminal[1,2,3]
SLC36MFG	Mounting pan with gray flush-mount cover	PKGTAB	Neutral insulator kit
SLC36MSG	Mounting pan with gray surface-mount cover	PK23GTA	Ground bar, 23 terminal[4]
SLC36MFW	Mounting pan with white flush-mount cover	SLCNT10	Isolated neutral terminal strip (10 position)[3,5]
		SDM4AC	Two duplex power receptacles
		SDM8AC	Four duplex power receptacles
		PK4FL	Door latch, locking
		SLC4CSF8	Filler plate, 4M
		SLC36LB	L barrier[6]

[1] For use as a neutral bar; requires one grounding bar insulator kit (PKGTAB).

[2] Maximum of four neutral terminal bars (two at top, two at bottom). Use neutral terminal bars in common neutral applications.

[3] Mixing of neutral terminal bars and isolated neutral terminal strips is permitted. Mixing permits an additional bar at both top and bottom (three at top and three at bottom).

[4] One ground bar is provided as standard. The pan will accept up to two additional ground bars.

[5] Maximum of four isolated neutral terminal strips (two at top, two at bottom). Isolated neutral terminal strips allow individual neutrals to be maintained.

[6] A second L barrier is required when neutral terminal bars or strips are mounted in both ends of the enclosure. A second L barrier cannot be used if a duplex power outlet (SDM4AC or SDM8AC) is installed.

C–Bus™
36MS Enclosures

The C-Bus™ Enclosures provide a multi-purpose means for housing various C-Bus DIN-mounted devices. Suitable for flush or surface mounting, the enclosure consists of a mounting, pan assembly, and a cover assembly. The cabinet can be ordered separately, allowing for its installation with the rough-in of field wiring. Optional accessories are available to meet the needs of particular installations.

The 36MS enclosure provides three rows for mounting DIN-mounted C-Bus units. Each row has the capacity to hold one 12M unit, one 8M unit with one 4M unit, or three 4M units.

36MS Enclosures are specifically designed for conventional installation near the main breaker panel. They provide a simple means of installing DIN-mounted units with all of the necessary wiring, neutral bars, ground bars and other components included. Once installed, the enclosure system allows for easy system maintenance with the C-Bus units accessible.

36MS Enclosure

Technical Information

36M Enclosure	
Type	NEMA 1
DIN Module Capacity	Three DIN rails, each with the capacity for one 12M, one 8M with one 4M, or three 4M C-Bus DIN units
Dimensions with Cover	40.6 in. (L) x 15.4 in. (W) x 3.9 in. (D) [1031 mm (L) x 392 mm (W) x 99 mm (D)]
Standard	UL Standard 50 Enclosures for electrical equipment
Module Mounting	DIN rail
Total Weight	57.7 lb (26.17 kg)

For Diagram see technical section page 107

Product Features

- NEMA® 1 enclosure suitable for flush or surface mounting
- Welded sheet steel with knockouts
- Gray baked enamel paint, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- Three (3) DIN rails, each suitable for mounting C-Bus DIN units in one of the following configurations:
  - One (1) 12M unit
  - One (1) 8M module with one (1) 4M unit
  - Three (3) 4M units

Catalog Number	Description	Accessories	
SLC36SC	Enclosure Cabinet	PK7GTA	Grnd/Neutral
SLCMSFG	Flush Mount Gray	PKGTAB	Neutral Isolator Kit
SLCMSSG	Surface Mount Gray	SLC4CSF8	Filler Plate
SLCMSFW	Flush Mount White		
SLC2REC	Dual Receptacle Bracket		

C-Bus™
60M Enclosures

The C-Bus™ Enclosures provide a multi-purpose means for housing various C-Bus DIN-mounted devices. Suitable for flush or surface mounting, the enclosure consists of a cabinet, a mounting pan assembly, and a cover assembly. The cabinet can be ordered separately, allowing for its installation with the rough-in of field wiring. Options are available to meet the needs of particular installations.

The 60M enclosure provides five rows for mounting DIN-mounted C-Bus units. Each row has the capacity to hold one 12M unit, one 8M unit with one 4M unit or three 4M units.

Schneider Electric 60M Enclosures are specifically designed for conventional installation near the main breaker panel. They provide a simple means of installing DIN-mounted units with all of the necessary wiring, neutral bar, barriers and other components included. Once installed, the enclosure system allows for easy system maintenance with the C-Bus units accessible.

60M Enclosure

Technical Information

60M Enclosure	
Type	NEMA Type 1
DIN Module Capacity	Five DIN rails, each with the capacity for one 12M, one 8M with one 4M, or three 4M C-Bus DIN units
Dimensions with	40.6 in. (L) x 15.4 in. (W) x 3.9 in. (D)
Cover (flush mount)	[1031 mm (L) x 392 mm (W) x 99 mm (D)]
Dimensions with	39.4 in. (L) x 14.2 in. (W) x 3.9 in. (D)
Cover (surface mount)	[1000 mm (L) x 360 mm (W) x 99 mm (D)]
Dimensions of	39.4 in. (L) x 14.2 in. (W) x 3.69 in. (D)
Enclosure Cabinet	[1000 mm (L) x 360 mm (W) x 99.8 mm (D)]
Standard	UL Standard 50 Enclosures for electrical equipment
Module Mounting	DIN rail
Total Weight	57.7 lb (26.17 kg)

For Diagram see technical section page 107

Product Features

- NEMA Type 1 enclosure suitable for flush or surface mounting
- Welded sheet steel with knockouts
- ANSI Gray #49 baked enamel paint, electrodeposited over cleaned, phosphatized steel
- Triple-lead cover screws for fast installation of cover
- UL listed, 600V rated Class 2 barrier included
- (3) pre-installed 23 position ground bars and (5) 12 position isolated neutral assemblies included
- Five DIN rails, each suitable for mounting C-Bus DIN units in one of the following configurations:
  One 12M unit
  One 8M unit with one (1) 4M unit
  Three 4M units
- UL Listed

Catalog Number	Description	Accessories	Description
SLC36C	Enclosure Cabinet, 40 in.	SDM4AC	Two duplex power receptacles
SLC60MFG	Mounting pan with gray flush-mount cover	PK4FL	Door latch, locking
SLC60MSG	Mounting pan with gray surface-mount cover	SLC4CSF8	Filler plate, 4M
SLC60MFW	Mounting pan with white flush-mount cover		

Neo™ Keypad - Specifying Colors When Ordering
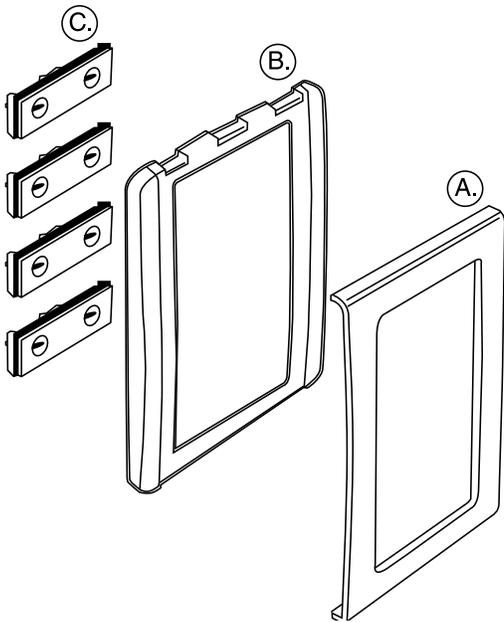
Illustration shows: Inner Surround (A), Outer Surround (B) and Button Covers (C)

Keypad Assemblies

Order numbers for the Neo Keypad assemblies indicate the number of buttons desired on the keypad and the color of each customizable component (inner surround, outer surround, and button cover).

Color numbers are taken from the "Neo Colors" table and must be given in the following order: outer surround, inner surround, and button covers.

For example, in the diagram below, SLC5058NL282 represents an order for a Neo Keypad with eight buttons, a white (#2) outer surround, a brushed aluminum (#8) inner surround, and white (#2) button covers.

Keypad Assemblies Standard

For easy ordering there are 3 standard keypad colors available.
White: SLC505( )NLWE
Cream: SLC505( )NLCM
Brushed Aluminum w/Slate: SLC505( )NLGB
( ) - designates space for button configuration

SLC505( )NLWE   SLC505( )NLCM   SLC505( )NLGB

S L C 5 0 5 ⑧ N L ② ⑧ ②

Catalog	Keypad
Number	Buttons
2	Two
4	Four
8	Eight

Outer Surround Color
Inner Surround Color
Button Cover Color

Name	Color Number	Color
Slate	1	
White	2	
Cream	3	
Soft Gray	4	
Desert Sand	5	
Black	6	
Brown	7	
Brushed Aluminum*	8	
Gold*	9	

Only the inner surround is available in Brushed Aluminum and Gold
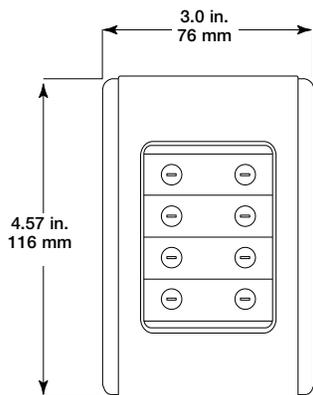
94

Neo™ Keypads

Front view of keypad, including external height and width measurements of case
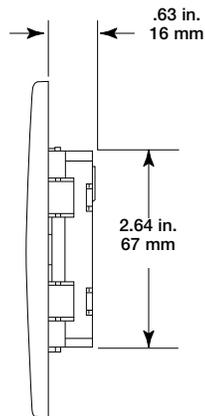
Side view of keypad, including height and depth requirements for insertion into wall
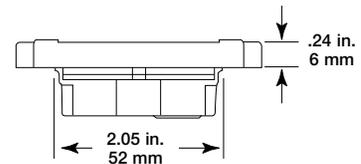
Bottom view of keypad, including measurements for width of unit and depth case extends from wall

Saturn™ Keypads
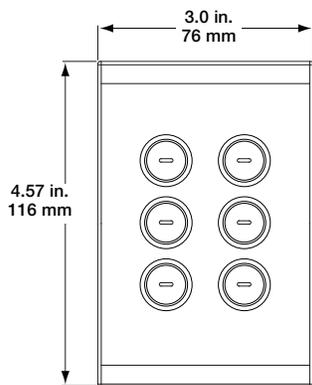
Front view of keypad, including external height and width measurements of case
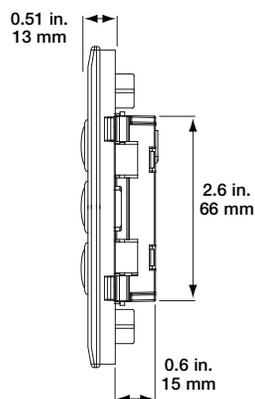
Side view of keypad, including height and depth requirements for insertion into wall
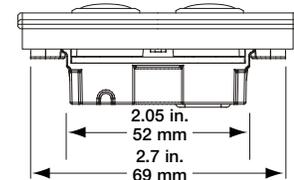
Top view of keypad showing width

Neo™ Keypads with Dynamic Labeling Technology™
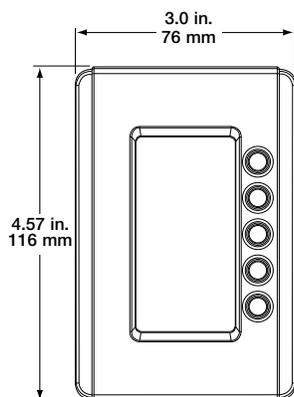
Front view of keypad, including external height and width measurements of case
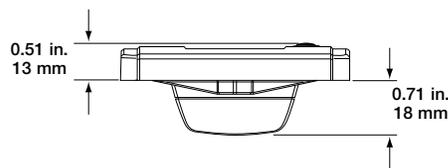
Top-side view of the Neo DLT keypad illustrates the depth the case extends into and out of a wall

Saturn™ Keypads with Dynamic Labelling Technology™

3.0 in.
76 mm

4.57 in.
116 mm

.43 in.
10.8 mm

1.13 in.
28.8 mm
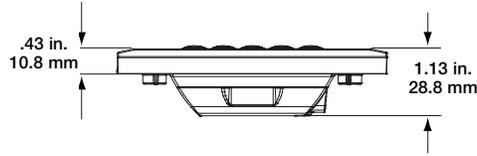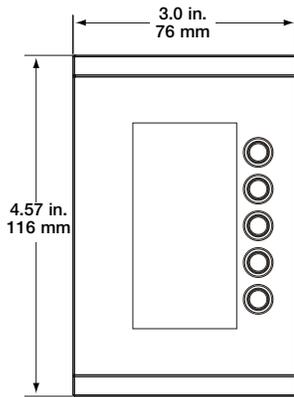
Front and top-side views of the Saturn DLT keypad illustrate its length and width and the depth the case extends into and out of a wall

Neo™ Style Decorator Keypads
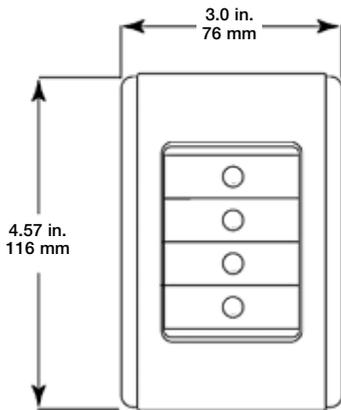
3.0 in.
76 mm

4.57 in.
116 mm

0.63 in.
16 mm

2.76 in.
70 mm

1.69 in.
43 mm

0.28 in.
7 mm

Front view of keypad, including external height and width measurements of Faceplate
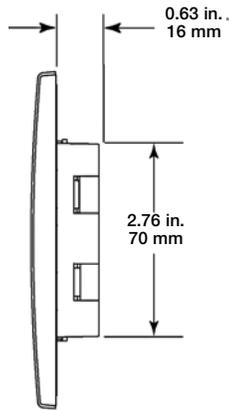
Side view of keypad, including height and depth requirements for insertion into wall
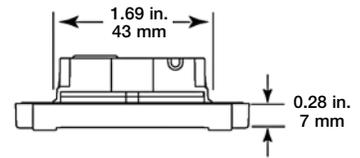
Top view of keypad, including depth of face plate

Saturn™ Style Decorator Keypads
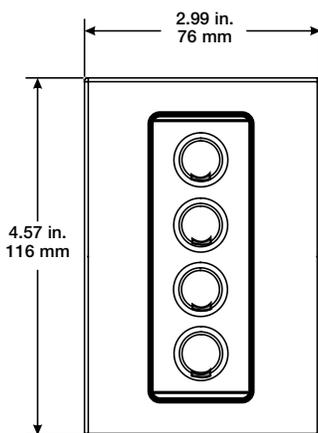
2.99 in.
76 mm

4.57 in.
116 mm

0.35 in.
9 mm

2.76 in.
70 mm

1.65 in.
42 mm

2.87 in.
73 mm

0.71 in.
18 mm

Front view of keypad, including external height and width measurements of face plate

Side view of keypad, including height and depth requirements for insertion into wall

Top view of keypad showing width

96

Mark II Touch Screen

4.53 in.
115 mm

5.98 in.
152 mm
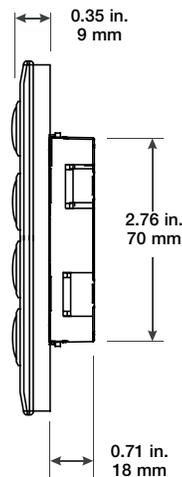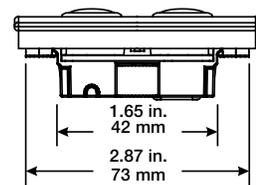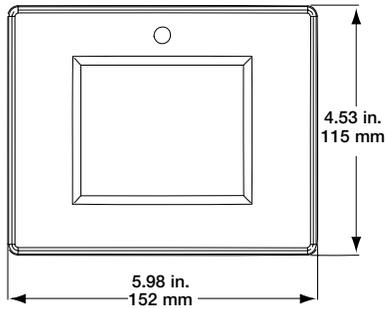
Front view of Mark II Touch Screen

0.75 in.
19 mm

0.75 in.
19 mm
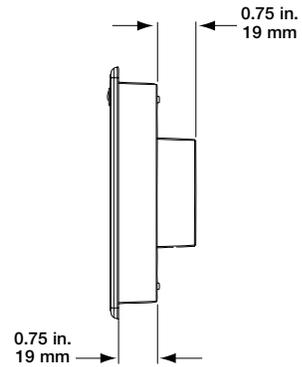
Side view of Mark II Touch Screen

Mark II Desktop Touch Screen

7.5 in.
191 mm

6 in.
152 mm

5.5 in.
140 mm

3.75 in.
95 mm

Color Touch Screen

6.9 in.
173 mm

9.8 in.
246 mm

protrusion from wall:
0.9 in. (23.5 mm)

mounting depth into wall:
2.2 in. (54 mm)

cover plate

2.9 in. (72.5 mm)
excluding cover plate
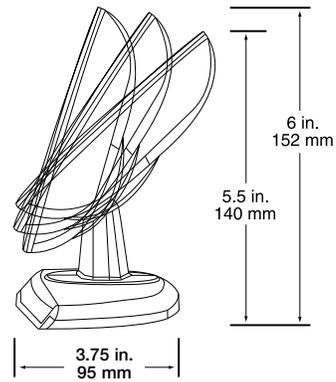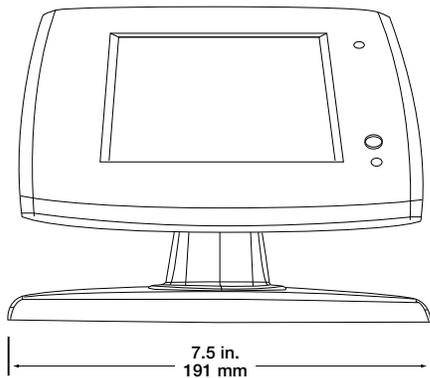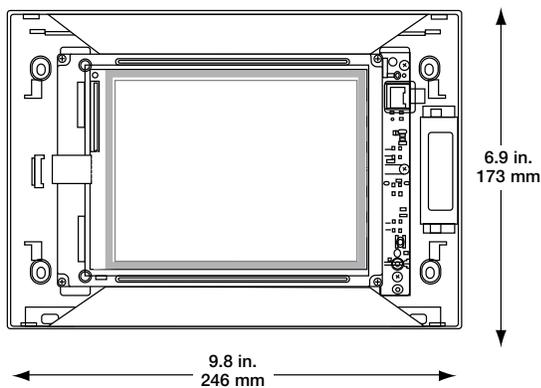
Front view of Color Touch Screen
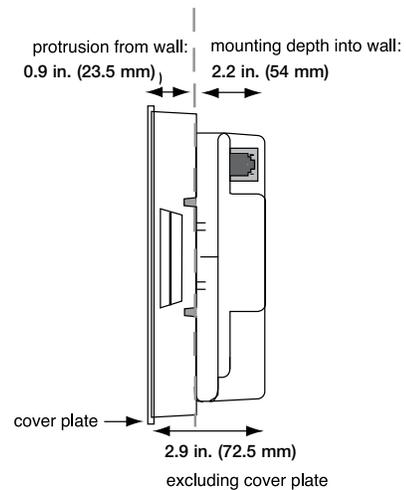
Side view of Color Touch Screen

Ethernet Network Interface

2.83 in.
72 mm

2.56 in.
65 mm

3.35 in.
85 mm

12V   ETHERNET

Ethernet

C-Bus/Unit/Comms

Network Interface

C-Bus CONNECTIONS
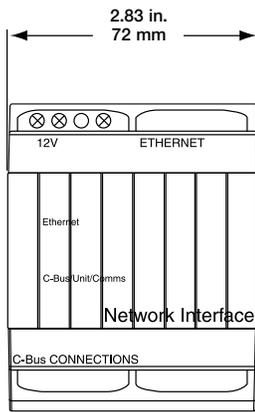
View of the Ethernet Network Interface showing width
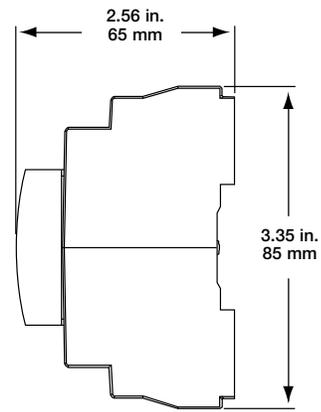
View of the Ethernet Network Interface showing height and depth

PC Interface
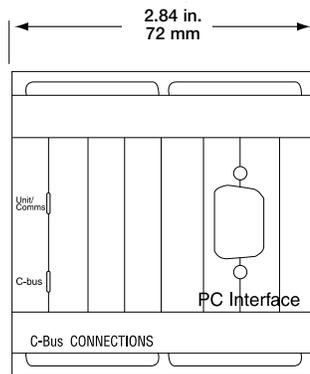
2.84 in.
72 mm

2.56 in.
65 mm

3.35 in.
85 mm

Unit/
Comms

C-bus

PC Interface

C-Bus CONNECTIONS

Front view of the PC Interface showing width
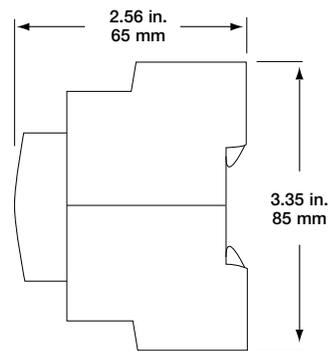
Side view of the PC Interface showing height and depth

USB Interface
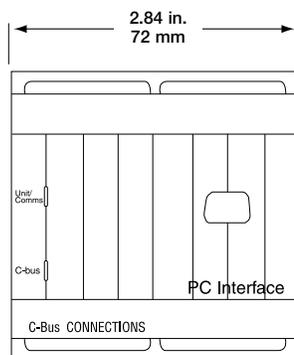
2.84 in.
72 mm

2.60 in.
66 mm

3.35 in.
85 mm

Unit/
Comms

C-bus

PC Interface

C-Bus CONNECTIONS

Front view of the PC Interface showing width
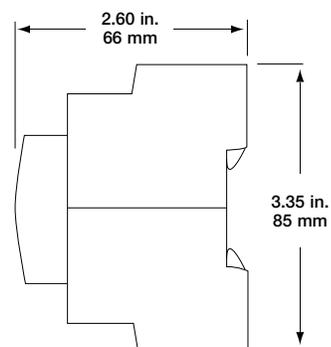
Side view of the PC Interface showing height and depth

Network Bridge
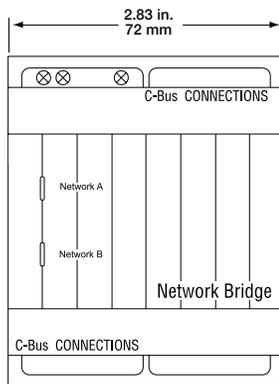
Front view of the Network Bridge showing width
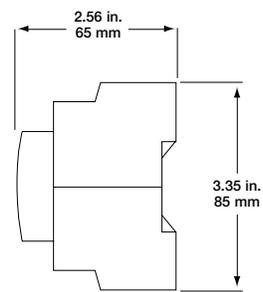
Side view of Network Bridge showing height and depth

Power Supply
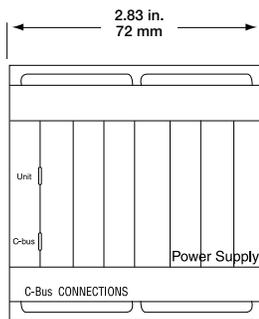
Front view of a Power Supply showing width
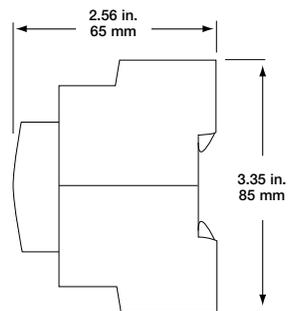
Side view of a Power Supply showing depth and height

# Device Router/Device Power Supply
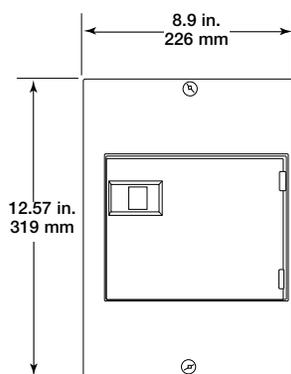
Front view of 8M Enclosure box
showing height and width
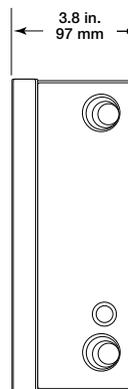
Side view of 8M Enclosure
box showing depth
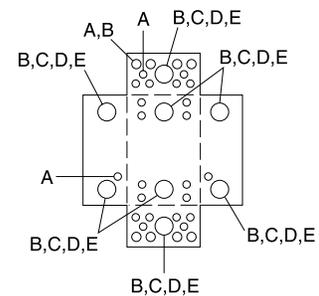
Conduit knockouts for the 8M Enclosure

C-Bus™ 8M Enclosure Knockouts

Symbol	A	B	C	D	E
Conduit Size	½	¾	1	1 ¼	1 ½

Pascal Automation Controller

Front view of the Pascal Automation Controller
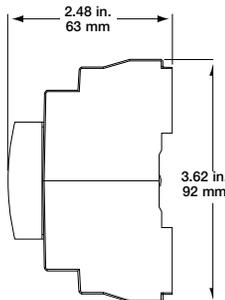
2.83 in.
72 mm

Unit-Comms
C-Bus
USB
Pascal Automation Controller

Side view of the Pascal Automation Controller

2.48 in.
63 mm

3.62 in.
92 mm

Telephone Interface Unit

5.77 in.
146.5 mm

RS-232
LINE GRAB
RS-232 COMMS
UNIT COMMS
C-BUS
C-BUS C-BUS

Audio IN Audio OUT

Power
12V DC

SECONDARY PHONE-OUT   PRIMARY PHONE-OUT   PHONE IN

TELEPHONE INTERFACE

5.71 in.
145 mm
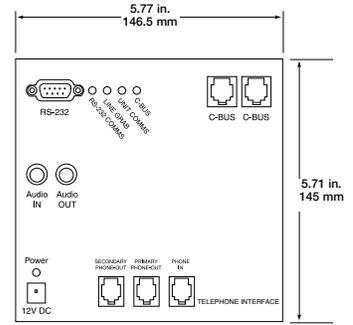
Front view of Telephone Interface Unit

1.18 in.
30 mm

Side view of Telephone Interface Unit

General Input Unit

5.7 in.
144 mm

Unit/Comms
C-Bus
General Input

24   24 COM 24   COM   A   1   B   A   2   B   A   3   B A   4   B

VDC OUT
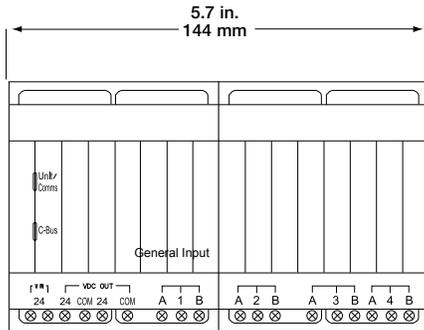
Top view of General Input Unit

2.6 in.
65 mm

3.4 in.
85 mm
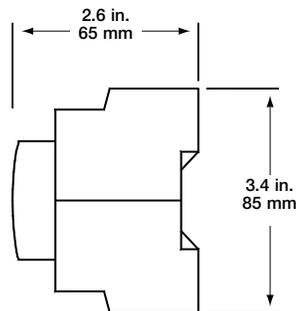
Side view of General Input Unit

Bus Coupler

0.71 in.
18 mm
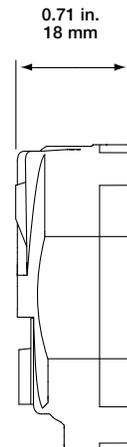
Side view of the Four-Channel Bus Coupler

2.2 in.
55 mm

1.9 in.
49 mm

5104BCL
Bus Coupler

1   2   3   4

1 C 2 C 3 C 4 C

Top view of Four-Channel Bus Coupler

100

Four-Channel Auxiliary Input Unit

2.8 in.
72 mm

1A 1B 2A 2B 3A 3B 4A 4B

3.4 in.
85 mm
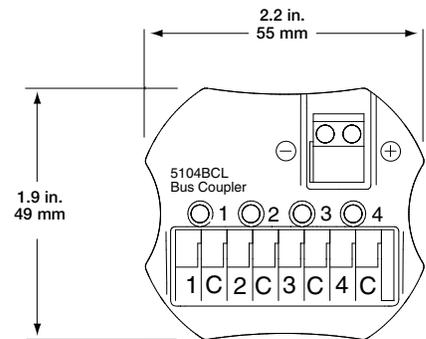
Auxiliary Input

Top view of Four-Channel Auxiliary Input Unit

2.6 in.
65 mm
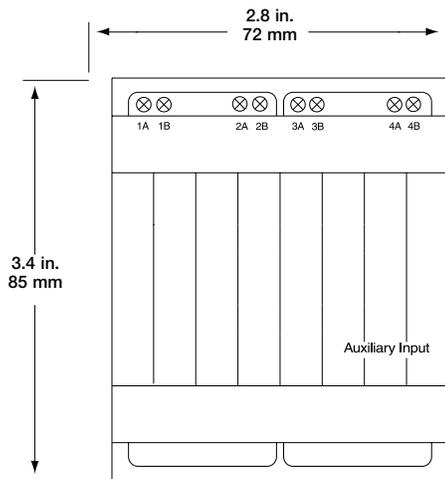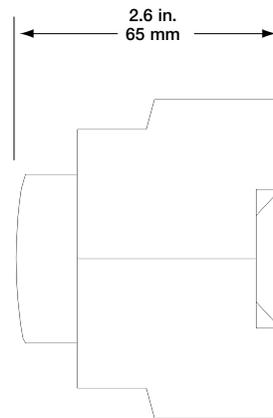
Side view of Four-Channel Auxiliary Input Unit

Indoor PIR Occupancy Sensor

Wall

Sensor

20 ft
6 m

20 ft
6 m

90°

28 ft
8.5 m
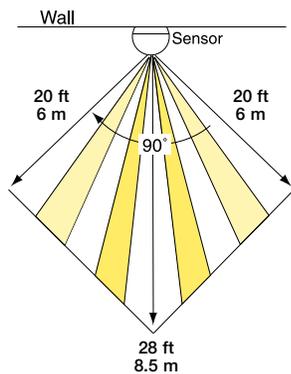
Field of view from top of indoor occupancy sensor

8 ft
2.4 m

Ceiling

28 ft
8.5 m

90°

28 ft
8.5 m
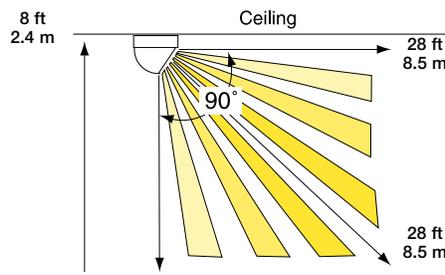
Field of view from side of indoor occupancy sensor

3.9 in.
100 mm

2.2 in.
57 mm
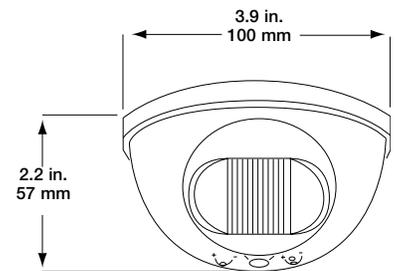
Front view of indoor occupancy sensor

360° PIR Occupancy and Multi-Sensor

26 ft
8 m

8 ft
2.4 m

13 ft   7 ft   0   7 ft   13 ft
4 m   2 m   2 m   4 m
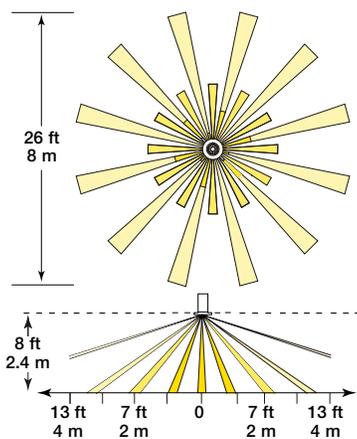
Field of view from top and side for 360 PIR Occupancy
Sensor mounted 8 ft. above floor

2.83 in.
72 mm

Front view of C-Bus 360° PIR Occupancy Sensor

.59 in.
15 mm

3.46 in.
88 mm

1.85 in.
47 mm

1.97 in.
50 mm
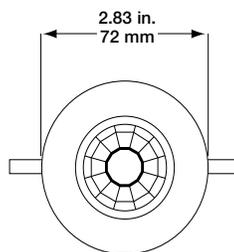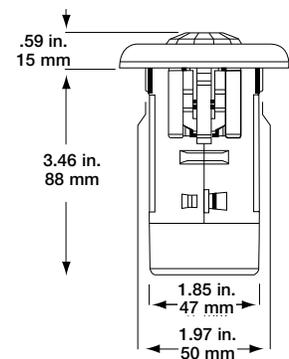
Side view of C-Bus 360° PIR Occupancy Sensor

Outdoor Motion Sensor

ZONES and NOMINAL RANGES

Sensor

59 ft
18 m

110°

Ultra short - 4 ft
1.2 m

Short - 13 ft
4 m

Intermediate - 26 ft
8 m

Long - 59 ft
18 m

Optimum "Approach Path"
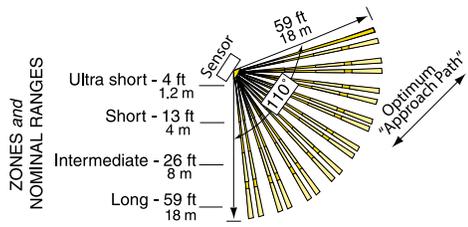
Field of view from top of Outdoor Motion Sensor

Sensor

8 ft
2.4 m

5°

30°
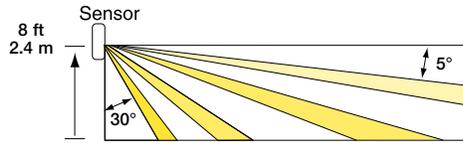
Field of view from side of Outdoor Motion Sensor

5.5 in.
140 mm

INFRASCAN

4.5 in.
114 mm

2.9 in.
74 mm
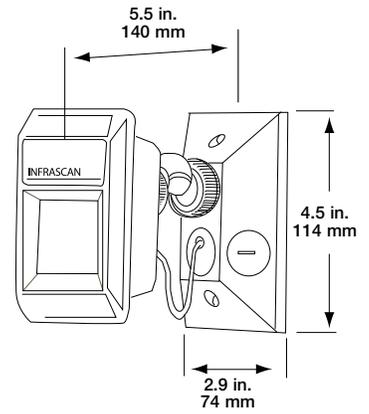
Side view of Outdoor Motion Sensor

Light-Level Sensor

2.99 in.
76 mm

4.57 in.
116 mm
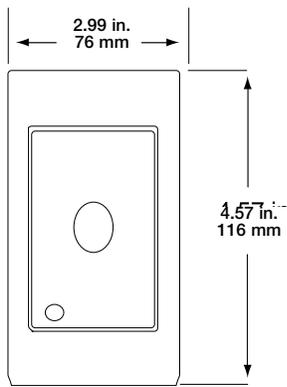
Front view of Light-Level Sensor

0.52 in.
13 mm

2.83 in.
72 mm
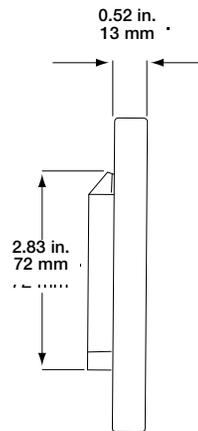
Side view of Light-Level Sensor

0.49 in.
12.5 mm

1.93 in.
49 mm
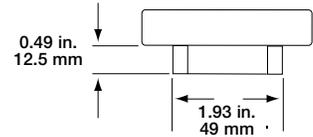
Top view of light-level sensor

Outdoor Light-Level Sensor

4 in.
102 mm

4 in.
102 mm

2.5 in.
65 mm
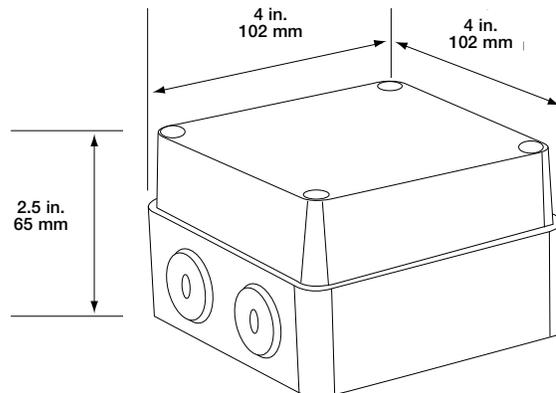
View including height, width and depth dimensions

102

Professional Series Dimmer

7.5 in.
190 mm

7.7 in.
195 mm

CHANNEL 4
CHANNEL 3
CHANNEL 2
CHANNEL 1

ON   NORMAL
FLASHING   LOW VOLTAGE
OFF   NO CLOCK PRESENT
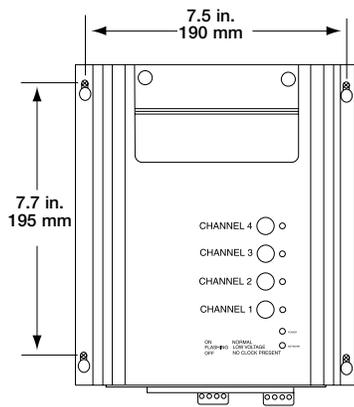
Front view including mounting centers

9 in.
230 mm

0.4 in.
10 mm

Side view

8 in.
202 mm

3 in.
75 mm
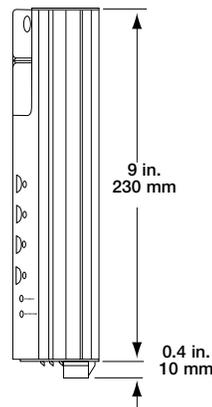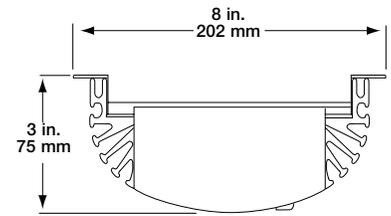
Top view

Phase Angle Dimmer Unit

8.5 in.
215 mm

1 2

3 4

Unit

C-Bus

1 2 3 4

Dimmer   with Power Supply

C-Bus CONNECTIONS
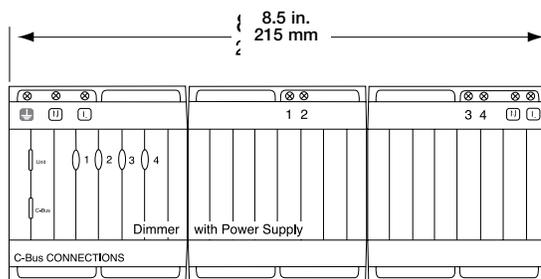
Front view of the Phase Angle Dimmer Unit

2.6 in.
65 mm

3.4 in.
85 mm
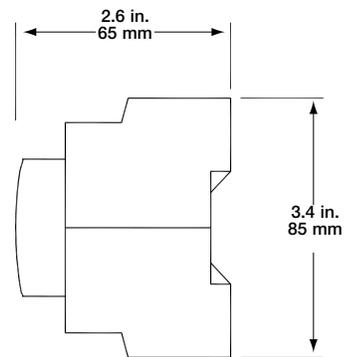
Side view of the Phase Angle Dimmer Unit

2 Channel DALI Gateway

2.83 in.
72 mm

DALI   DALI

Unit/
Comms

C-Bus

DALI Gateway

C-Bus CONNECTIONS
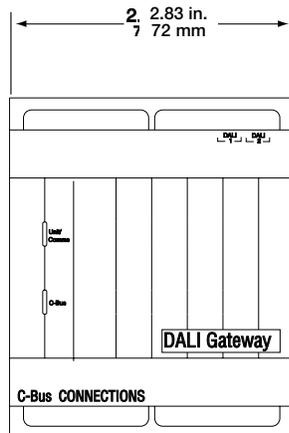
Front view of DALI Gateway

2.6 in.
65 mm

3.4 in.
85 mm
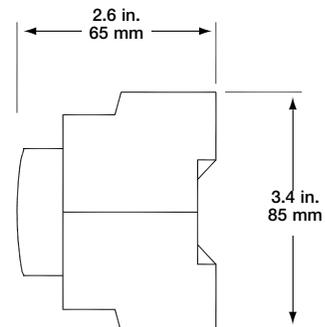
Side view of DALI Gateway

4 Channel 0-10V Fluorescent Ballast Dimmer
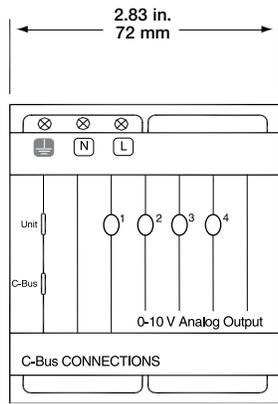
Front view of the 0-10V Fluorescent Ballast Dimmer
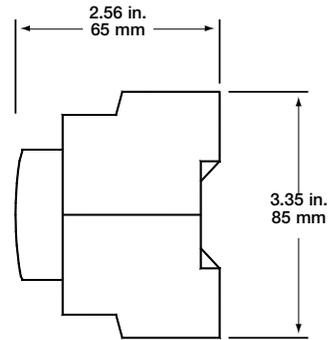
Side view of the 0-10V Fluorescent Ballast Dimmer

10 Amp Relay Unit
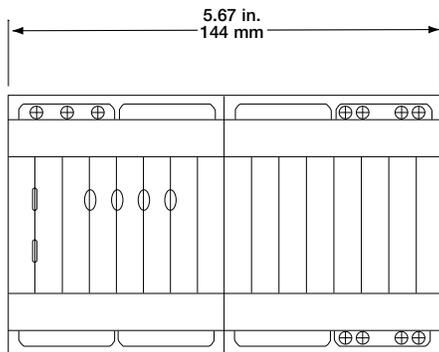
Front view of a C-Bus 4 Channel 10 Amp
Relay without power supply
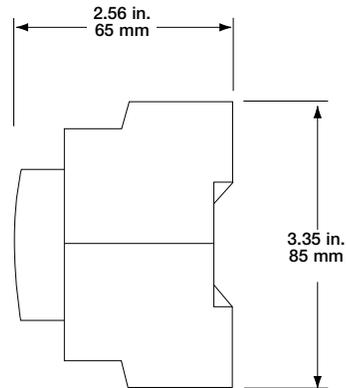
Side view of a C-Bus 4 Channel 10 Amp Relay

20 Amp Relay Units
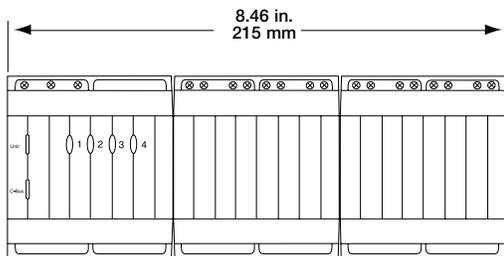
Front view of a C-Bus 4 Channel 20 Amp Relay with Power Supply
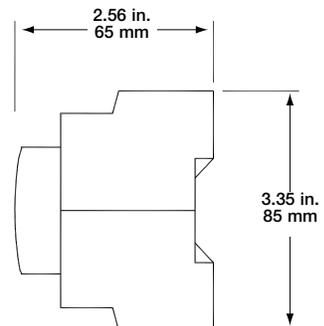
Side view of a C-Bus 4 Channel 20 Amp Relay

Changeover Relay Units

5.67 in.
144 mm

⊕ N L
USE COPPER WIRE ONLY

C ─ NO NC   C ─ NO NC
1   2

Unit

C-Bus

C-Bus CONNECTIONS

3   4
NC NO   C   NC NO   C
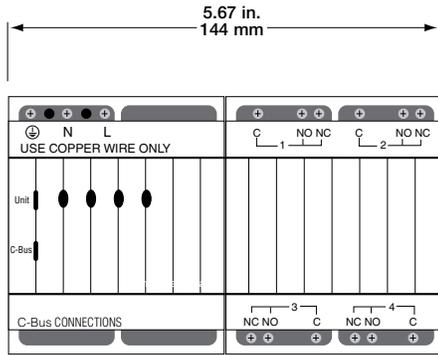
Front view of a C-Bus Changeover Relay

2.60 in.
66 mm

3.35 in.
85 mm
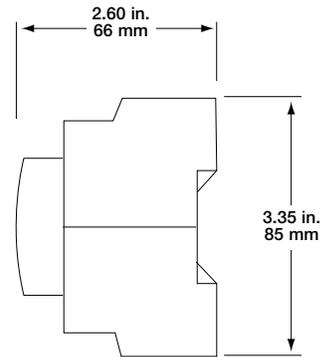
Side view of a C-Bus Changeover Relay

Low Voltage Relay 8 Channel
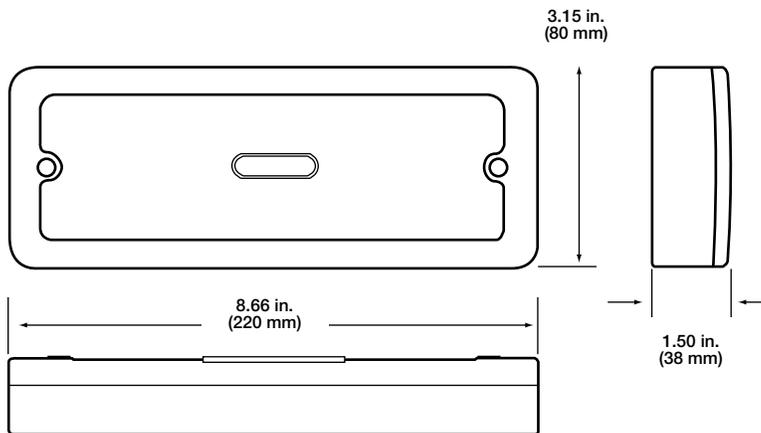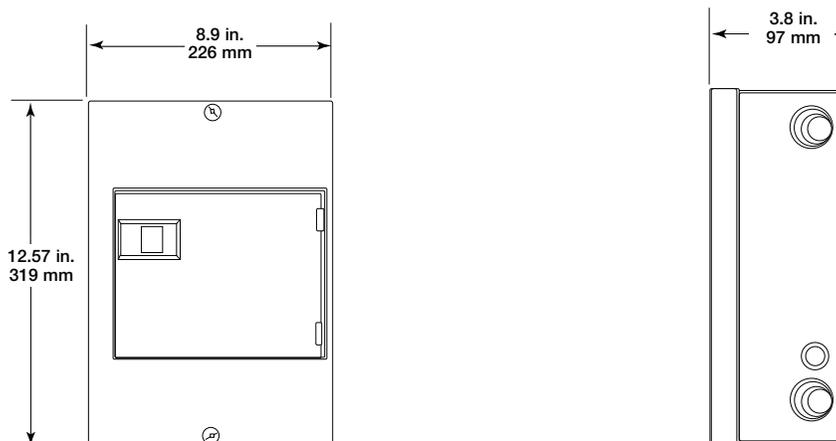
3.15 in.
(80 mm)

8.66 in.
(220 mm)

1.50 in.
(38 mm)

8M Enclosure

8.9 in.
226 mm

12.57 in.
319 mm

3.8 in.
97 mm

Front view of 8M Enclosure box showing height and width

Side view of 8M Enclosure box showing depth

12M Enclosure

12.78 in.
325 mm

9.09 in.
231 mm

4.0 in.
102 mm
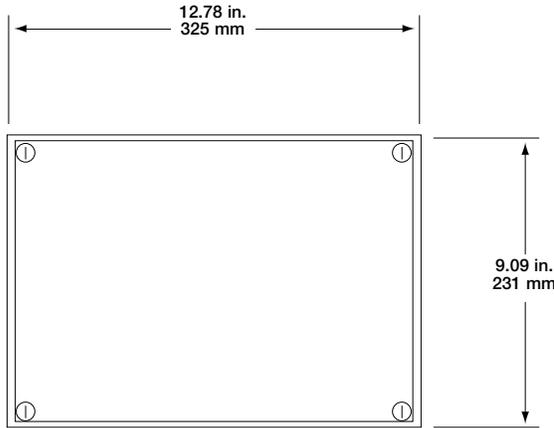
Front view of 12M Enclosure box showing height and width
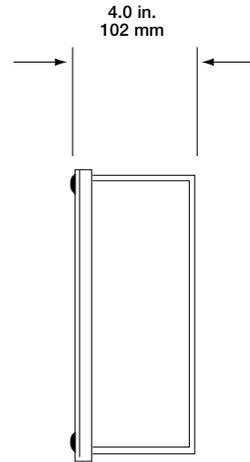
Side view of 12M Enclosure box showing depth

24M Enclosure

14.50 in.
368 mm

14.94 in.
379 mm

4.0 in.
102 mm
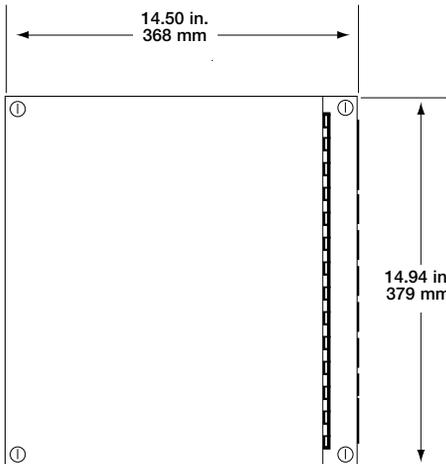
Front view of 24M Enclosure box showing height and width
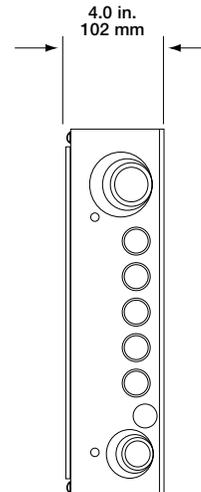
Side view of 24M Enclosure box showing depth

36M Enclosure

15.4 in.
392 mm

3.9 in.
99 mm

40.6 in.
1031 mm

C,D,E,F,G
B,C,D,E
A A,B
B,C,D,E
C,D,E,F
D,E,F,G
D,E,F,G
B,C
A,B
A
C,D,E,F
A,B,C,D
B,C,D,E
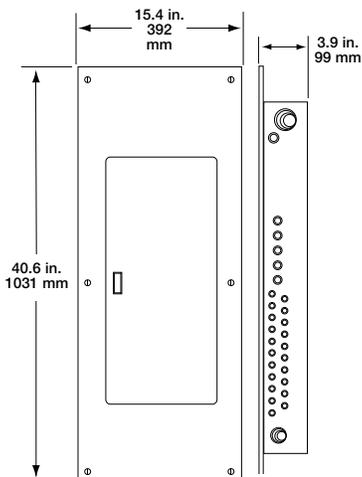
Front and side view (flush mount)
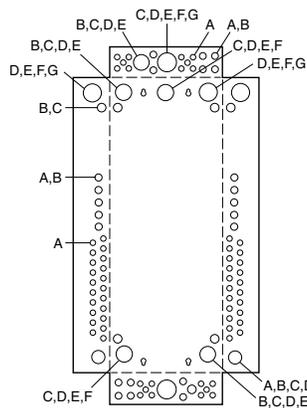
Knockouts

36M Knockouts

Symbol	Conduit Size	Symbol	Conduit Size
A	½	E	1 ½
B	¾	F	2
C	1	G	2 ½
D	1 ¼		

106

36MS Enclosure

3.81 in.
(97 mm)

15.44 in.
(392 mm)

22.12 in.
(562 mm)

Dimensions for the 36MS
Enclosure Flush Mounted

14.24 in.
(362 mm)

20.93 in.
(532mm)

Dimensions for the 36MS
Enclosure Surface Mounted

C, D, E, F, G,
B, C, D, E,
C, D, E, F,
A,
A, B,
A, B,
A,
A, B, C, D,

36MS Knockouts

Symbol	Conduit Size	Symbol	Conduit Size
A	½	E	1 ½
B	¾	F	2
C	1	G	2 ½
D	1 ¼	H	3

60M Enclosure

15.4 in.
392 mm

3.9 in.
99 mm

40.6 in.
1031 mm

Front and side view (flush mount)

B,C,D,E
C,D,E,F,G
A
A,B
B,C,D,E
C,D,E,F
D,E,F,G
D,E,F,G
B,C
A,B
A
C,D,E,F
A,B,C,D
B,C,D,E
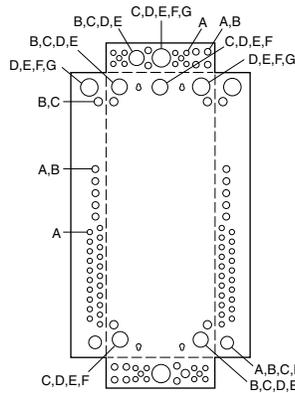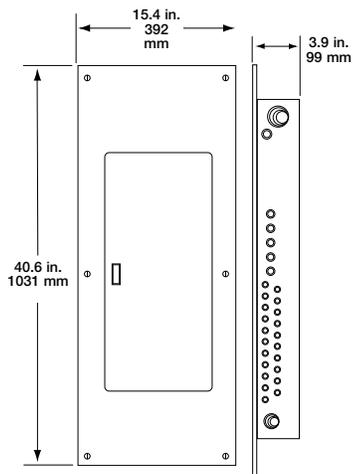
Knockouts

60M Knockouts

Symbol	Conduit Size	Symbol	Conduit Size
A	½	E	1 ½
B	¾	F	2
C	1	G	2 ½
D	1 ¼		

C-Bus™ Multi-Room Audio, Remote Controls and IR Accessories

Introduction to C-Bus™ Multi-Room Audio, Remote Controls and IR Accessories

Extend the capabilities of a C-Bus system by incorporating award winning C-Bus multi-room audio. Multi-room audio augments a C-Bus lighting control system, providing high quality sound throughout a home or business.

C-Bus multi-room audio readily integrates with other C-Bus controls, providing a single source for audio and lighting from a single keypad or touch screen. Sound is distributed throughout the home through the matrix switcher and routed to local amplifiers.

A typical C-Bus Multi-room Audio system distributes up to four analog audio inputs, five if an audio distribution unit is used, and one optical input. These inputs are distributed up to eight zones, each consisting of one or more amplifier.

Additionally, each amplifier is capable of accepting a local analog audio input, providing up to seven stereo audio channels for each amplifier.

C-Bus™
Matrix Switcher

The C-Bus™ Audio Matrix Switcher provides a revolutionary means for distributing audio throughout a home. This Matrix Switcher provides up to eight zones of audio output from four source inputs. Audio sources can be switched via the front panel or by any C-Bus input device such as touch screen keypads.

The matrix switcher is ideally suited for multi-room audio and structured wiring systems. Keypads and other C-Bus devices connect to the matrix switcher with CAT-5 modular jacks. Outputs to remote and desktop amplifiers are made with low voltage wiring.

In addition to the six source inputs, two mono broadcast annunciation inputs are provided for connection to intercoms or other systems. Broadcast annunciation input can be given priority over other source inputs and feature fully adjustment volume and over-stepping mute features.

Audio Matrix Switcher

Technical Information

Supply Voltage	120V AC
Line Frequency Range	47 to 53 Hz and 57 to 63 Hz
AC Input Impedance	47 kΩ
Power Consumption	200 W maximum
C-Bus™ Output Voltage	36Vdc maximum
C-Bus Output Current	≤ 330 mA DA Conversion
Network Clock/Burden	Software selectable
Analogue Input Signal Level (source inputs)	2.8V p-p maximum (47 kΩ)
A/D Conversion	16 Bit PCM
Operating Temperature	50 - 104°F (10 to 40°C)
Operating Humidity Range	10 to 90% RH, non-condensing
Standards	UL60065 - Audio, Video, and Similar Electronic Apparatus - Safety Requirements

System Audio Performance

Parameter	Matrix Switcher + Amplifier
Frequency Response	40 Hz to 20 kHz (+ 2.4/-0.75 dB)
Total Harmonic Distortion	0.16% (1 kHz, 20 W RMS into 4 ohms)
Signal to Noise Ratio	> 63 dB (peak, unweighted)
Input/Outputs	
Infrared Outputs	(2) 3.5 mm sockets to connect to IR Emitter Leads
Mono Broadcast Inputs	(2)
USB (Type B)	(1) To configure Matrix Switcher
Digital Optical Output	(1)
Digital Optical Output	(1) Digital audio format must be 44.1 or 48 kHz stereo. Some formats (such as surround sound) are not compatible with the Matrix Switcher
Optical Inputs	(1)
Digital Zone Outputs	(8)
Digital Audio Input	(1)
Stereo Analog Inputs	(4) RCA pairs
Mono Level Adjustment	(2)

For Diagram see technical section page 115

Product Features
- Fully digital noise-free audio reproduction
- Stereo analog inputs (4 X RCA pairs)
- Two mono broadcast annunciation inputs
- One digital, one optical
- Voice annunciation of channel changes (configurable)
- One fiber optic SPDIF input (digital audio compatible)
- One custom digital input for cascading on multiple matrix switchers
- Eight stereo zone outputs (45m of ea. star wired output)
- Cat-5 cable jack for connection to C-Bus™ network
- Reticulated IR support
- User interface LCD display and switches
- Integral C-Bus PC serial interface for connection to personal computers
- Integral power supply for remote amplifiers
- Configurable through serial or USB connections

Distributed Intelligence
- Compatible with C-Bus devices

Catalog Number	Description
SLC560884T	Matrix Switcher

C-Bus™
Multi-Room Amplifiers

The C-Bus™ Multi-Room Amplifiers provide efficient, high fidelity audio to individual rooms. Available in either desktop or remote mount versions, these amplifiers are specifically designed to operate on the C-Bus network as an extension of the lighting control system, without third party gateways or custom integration. This means the ability to control amplifiers with the same keypad or touch screen used to control lighting levels.

When combined with the C-Bus Matrix Switcher (part SLC560884T), these amplifiers deliver excellent stereo sound at 10 Watts without a separate power supply. When furnished with optional power supply these amplifiers provide 25 Watts. Connections are provided for up to two sets of 8 ohm speakers.

Both desktop and remote amplifiers provide a local input connection for attaching to CD or mp3 players, etc. In addition, the desktop amplifier will accept remote commands via its infrared receiver. Infrared remote included.

Desktop Audio Amplifier

Remote Mounted Audio Amplifier

Technical Information

Supply Voltage	27Vdc (powered by Matrix Switcher via digital audio connection), and/or 24Vdc @ 3.75 A (via external switch mode power supply) or 21Vac @ 3.5 A (via external linear power supply)
C-Bus™ Supply Voltage	15 to 36Vdc @ 22 mA
Power Consumption	90 W maximum
Network Clock and Burden	Software selectable
Analog Input Signal Level (source inputs)	2.8V p-p maximum (47 kΩ)
DA Conversion	16 Bit PCM
Maximum Power Output	28 W RMS into 4Ω (0.514% THD)
Frequency Response	40Hz to 20 kHz (+ 1 dB)
Total Harmonic Distortion	0.36% (using analog input) (1 kHz, 20 W RMS into 4 ohms)
Signal to Noise Ratio	> 67 dB (peak, unweighted)
Operating	Desktop Amp: 50 - 104° F (10 to 40° C)
Temperature	Remote Amp: 50 - 158° F (10 to 70° C)
Operating Humidity Range	0 - 95% RH, non-condensing
Standards	UL60065 - Audio, Video, and Similar Electronic Apparatus - Safety Requirements

Product Features

- 10 Watt digital efficient stereo amplifier, 25 Watts when connected to local power supply (optional)
- Super quiet design
- On board 8 ohm loudspeaker connections
- Local source input - RCA jack
- C-Bus connection (connects with CAT-5 cable)
- Volume control (desktop model)
- On-board IR receiver (desktop model)
- Stereo headphone connection (desktop model)
- Infrared remote included (desktop model only)

Distributed Intelligence

- Compatible with C-Bus devices

System Audio Performance

Parameter	Matrix Switcher + Amplifier	Distribution Unit + Amplifier
Frequency	40Hz to 20 kHz	40Hz to 20 kHz
Response	(+ 2.4/-0.75 dB)	(+ 2.3 dB)
Total Harmonic Distortion	0.16%	0.20%
	(1 kHz, 20 W RMS into 4 ohms)	
Signal to Noise Ratio	> 63 dB (peak, unweighted)	

For Diagram see technical section page 115

Catalog Number   Description

Catalog Number	Description
SLC560125D	Desktop Amplifier
SLC560125R	Remote Amplifier
SLC5600P243750T	Audio Amplifier Power Supply
SLC560125MB	Remote Amplifier Mounting Bracket

C-Bus™
Audio Distribution Unit

The C-Bus™ Audio Distribution Unit is an optional device that can be used in conjunction with the C-Bus Multi Room Audio System to further enhance C-Bus enabled audio product family.

The C-Bus Audio Distribution Unit distributes a single digitized stereo audio input source to multiple locations via amplifiers wired in a parallel format. Functions such as Volume, Bass, Treble and Balance can be adjusted from a C-Bus input device at any of the audio output locations.

The C-Bus Audio Distribution Unit converts a single analog stereo audio input to a digital audio output. That output can then be connected to the Matrix Switcher as an additional input or to the C-Bus Desktop or Remote Amplifier as a stand-alone configuration.

Audio Distribution Unit

Technical Information

Supply Voltage	27Vdc (powered by Amplifier via digital audio connection), or 24Vdc @ 500 mA (via external power pack)
Analog Input Signal Level (audio inputs)	2.8 V p-p maximum (31 k Ω)
Harmonic Distortion	≤ 0.05%
Frequency Response	100 Hz to 20 kHz
Dimensions (WxHxD)	6.52 in. x 1.97 in. x 1.2 in. (165.5mm x 50mm x 30mm)
IR Port	Yes
A/D Conversion	16 bit PCM
Operating Temperature	50-104°F (10-40°C)
Operating Humidity	90% RH (non-condensing)
Standard	UL Listed 60065 Audio, Video and Similar Electronic Apparatus - Safety Requirements

Product Features
- Distributes a single stereo audio source to C-Bus Audio Amplifiers via a digitized signal over Cat-5 cable
- Does not require any C-Bus programming (hardware only)
- One stereo analog audio source input (2 X RCA)
- One digital audio output
- Output can be looped between C-Bus Audio Amplifiers
- IR emitter port

Catalog Number	Description
SLC560011	Audio Distribution Unit
SLC5600P24500S	Amp External Power Supply (only needed if Audio distribution unit is used to provide an additional digital input for the Matrix Switcher)

C-Bus™
Audio Speakers

The C-Bus™ Audio Speakers are available as indoor or outdoor models and are designed to be used with home theater, multi-room, and outdoor audio applications that will accept 8 Ohm speakers, such as the Schneider Electric C-Bus Multi-Room Audio (MRA) system.

The indoor speakers come in wall- or ceiling-mount versions that are installed with the front of the speaker flush with the mounting surface. The indoor/outdoor speakers can be placed on a shelf or hung on a surface by using the included bracket.

Indoor Speakers

Indoor Audio Speakers

Installation	Ceiling Mount or Wall Mount
Speaker Dimensions	Ceiling Mount - 9.45 in. (Dia) x 3.125 in. (D) (240 mm x 79.38 mm)
	Wall Mount -12.125 in. (H) x 8.7 in. (W) x 3.125 in. (D) (308 mm x 221 mm x 79 mm)
Speaker Diameter	Ceiling Mount - 6.0 in. (152 mm) Wall Mount - 6.0 in. (152 mm)
Weight	Ceiling Mount - 3.31 lb. Wall Mount - (1.5 kg) 3.31 lb. (1.5 kg)
Material	Kevlar®**, Polypropylene*
Operating Environment	
Temperature	Ceiling Mount: -13°F - 158°F (-25°C - 70°C)
	Wall Mount: -13°F - 158°F (-25°C - 70°C)
Relative Humidity	20 - 90% noncondensing
Audio Performance	
Frequency Response	Ceiling Mount - 48 Hz-20 kHz, 58 Hz-20 kHz
	Wall Mount- 65 Hz-20 kHz, 58 Hz-20 kHz
Power Rating	60 W RMS
Impedance	8 Ohm
Sensitivity	48 Hz-20 kHz, 58 Hz-20 kHz: 90 dB
	65 Hz-20 kHz: 91 dB
	58 Hz-20 kHz: 88 dB

**Kevlar drivers have a fourth order 24/24 dB crossover for both tweeter and woofer
*Polypropylene drivers have a second order 12/12 dB crossover for both tweeter and woofer

Outdoor Speakers

Outdoor Audio Speakers

Installation	**Indoor, outdoor, shelf**
Overall Dimensions	9.8 in. (H) x 6.75 in. (W/front) x 2.75 in. (W/rear) x 6 in. (D)
	[248.9 mm (H) x 171.5 mm (W/f) x 69.9 mm (W/r) x 152.4 mm (D)]
Speaker Diameter	4.0 in. (102 mm)
Weight	4.41 lb. (2 kg)
Material	Polypropylene*
Operating Environment	
Temperature	-13°F - 158°F (-25°C - 70°C)
Relative Humidity	20 - 90% noncondensing
Audio Performance	
Frequency Response	70 Hz to 20 kHz
Nominal Power Rating	35 W RMS
Impedance	8 Ohm
Sensitivity	88 dB

*Polypropylene drivers have a second order 12/12 dB crossover for both tweeter and woofer
*For Diagram see technical section page 116

Product Features

- Flush-mount, shelf-mount, and surface-mount models
- Indoor and outdoor models
- High-impact plastic components and powder coated metal grills produce a long-lasting unit suitable for indoor and outdoor use
- Available with Kevlar® (indoor units only) or polypropylene drivers (indoor and outdoor units) for high-quality sound in all applications
- All models are off the floor, saving floor space
- Convenient and reliable sound coverage, almost completely independent of furniture or entertainment equipment layout
- Indoor/Outdoor Speakers have a pre-installed, removable mounting bracket
- Indoor/Outdoor Speakers can be placed on a shelf or hung from a surface by their bracket (included)
- Tracing/painting template included

Catalog Number / Description

Catalog Number	Description
SLC5600IWP	In-Wall Polypropylene speakers
SLC5600IWK	In-Wall Kevlar speakers
SLC5600ICP	In-Ceiling Polypropylene speakers
SLC5600ICK	In-Ceiling Kevlar speakers
SLC5600ODPBK	Outdoor Black Polypropylene speakers
SLC5600ODPWE	Outdoor White Polypropylene speakers

C-Bus™
Universal Remote

The C-Bus™ Universal Remote is a digital universal remote control that is easy to use, allowing control of electronic devices that are equipped with an infrared remote.

The Schneider Electric C-Bus Universal Remote can control up to 16 devices, including C-Bus devices, DVDs, TVs, VCRs and satellite receivers.

The remote is easily configured by using either automatic code detection or the learn option. In addition, the advanced macro function allows the recording of a chain of up to 60 commands with the single touch of a button.

Universal Remote Control

Technical Information

LCD Screen	1.6 in. (W) x 3.6 in. (H)
Backlighting	Brilliant blue LED
Learning Frequency	20 kHz to 455 kHz & pulse
Memory	512 kB flash memory
Batteries	Uses 4 (AAA) alkaline batteries (not included)
Touch Screen Soft Keys	42 keys
Rubber Hard Buttons	20 buttons
Power	LCD Off: 35 µA
Consumption	LCD On: 420 µA Operation: 30-150 mA (Max)
Operating Distance	Approx. 32 feet
Dimensions	2.4 in. (W) x 8.3 in. (H) x 1.0 in. (D) [61 mm (W) x 210 mm (H) x 25 mm (D)]
Weight (w/o batteries)	5.3 oz (150 g)

For Diagram see technical section page 122

Product Features

- Large touch screen display with LED backlight
- Macro function (up to 60 commands per macro)
- Learns infrared codes from original equipment remote controls
- User programmable buttons for each device
- Pre-programmed manufacturer's codes
- Multiple timers (day of week, date and "alarm") to automate functions (i.e., record movies, turn on music)
- Quick channel buttons
- Favorite channels grouping
- Built in motion detector
- System set-up transmission
- Sleep mode

Distributed Intelligence
- Compatible with C-Bus Devices

Catalog Number	Description
SLC5030URC	Universal Remote Control

C-Bus™
Four & Eight Button Remote Controllers

The C-Bus™ Four- and Eight- Button Infrared (IR) Remote Controllers provide hand held remote control operation of lighting and other loads. Designed to work in conjunction with C-Bus devices containing IR receivers, these convenient remote controls can switch, dim and control lighting scenes.

C-Bus Four- and Eight- Button Remote Controllers control multiple input units as well as separately configured units.

These versatile remote controls have a range of up to 49 feet (15 meters) and are easily configured by programming the IR receiving device in the C-Bus Toolkit software.

4 and 8 Button Remote Controls

Technical Information

Supply Voltage	3 V DC required for normal operation
Battery Type	(2) x AAA alkaline Speaker Diameter
IR Transmission Range	Up to 49 ft. (15 m)
Dimensions	5.9 in. (L) x 2.1 in. (W) x 1.0 in. (D) [149 mm (L) x 52 mm (W) x 25 mm (D)]
Weight (w/o batteries)	2 oz (61 g)
Remote Control Holder	
Dimensions	4.3 in. (L) x 2.2 in. (W) x 1.3 in. (D) [108 mm (L) x 55 mm (W) x 32 mm (D)
Mounting Centers	2.2 - 2.4 in. (55 - 60 mm)
Mounting Screw Size	#6 (7/8 in.) flathead wood screw (3.5 mm x 20 mm)
Wall Anchor Size	1/4 in. (7 mm x 25 mm)
Weight	1 oz (28 g)

For Diagram see technical section page 122

Product Features
• Four and Eight button options
• Wall mount storage holder included with each remote control
• Removeable front cover for label insertion (labels included)
• (2) AAA batteries included

Distributed Intelligence
• Compatible with C-Bus IR Input devices

Catalog Number   Description

SLC5084TX	Four Button IR Remote Controller
SLC5088TX	Eight Button IR Remote Controller

IR Accessories

IR TUBE TARGET

Infra-red IR target designed to receive IR commands from Infra-red remote controls. Simple in-ceiling mounting. Includes phoenix connector and 2 meters of wire. Comes with optional clear lens.

IR Shelf Mount Target

Infra-red IR target designed to receive IR commands from Infra-red remote controls. Simply set unit on shelf for easy IR command access. Includes phoenix connector and 2 meters of wire.

IR Flat Target

Infra-red IR target designed to receive IR commands from Infra-red remote controls. Designed to mount in diffusers and small areas to mask appearance. Includes phoenix connector and 2 meters of wire.

IR Emitter Leads

IR Leads plug into the C-Bus Multi room audio matrix switcher or C-Bus Nirts, and emit IR codes to the third party devices. Single and dual emitter leads available. Includes transparent adhesive sticker for application.

NIRT

The C-Bus NIRT is a wall mounted IR transmitter, that is designed to work with the C-Bus control system. The NIRT transmits up to 2 channels of IR commands to control third party components, ie: DVD players, TV's, etc.

IR Reader

The C-Bus IR Reader is a programming tool that is used to learn 3rd party remote control IR commands. Using Circa software (free download) plug IR Reader into a PC via USB port and send remote control signal capture IR Code.

Catalog Number	Description
SLC8050TT	IR Tube Target
SLC8050ST	IR Shelf Mount Target
SLC8050FT	IR Flat Target
SLC8050LD	IR Emitter Leads- Single
SLC80502LD	IR Emitter Leads- Dual
SLC5034NIRT	NIRT
SLC5100RP	IR Reader

Matrix Switcher

0.33 in.
8.3 mm

11 in.
280 mm

16.7 in.
424 mm

2.6 in.
66 mm

13.6 in.
346 mm

0.3 in.
8 mm
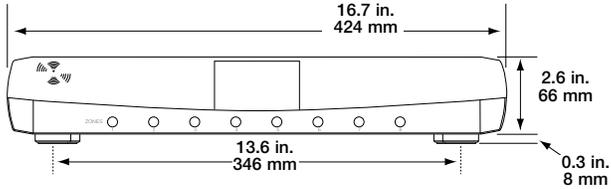
Top View

Bottom View

Multi-Room Amplifiers
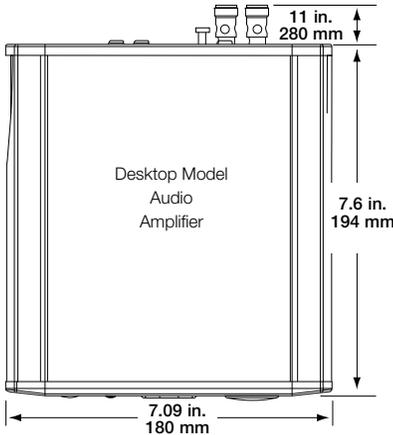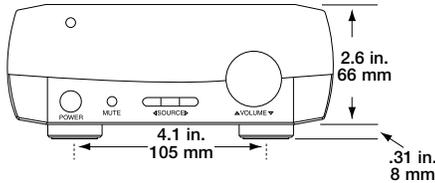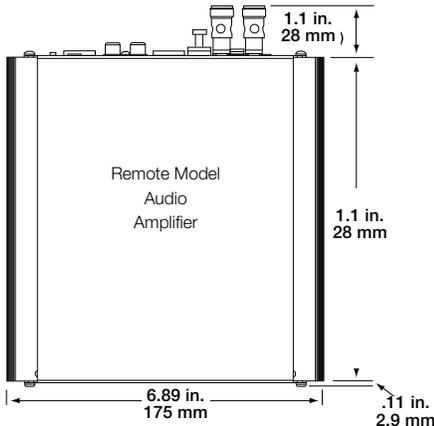
11 in.
280 mm

Desktop Model
Audio
Amplifier

7.6 in.
194 mm

7.09 in.
180 mm

2.6 in.
66 mm

POWER   MUTE   ◄SOURCE►   ▲VOLUME▼

4.1 in.
105 mm

.31 in.
8 mm

Top View

Front View

1.1 in.
28 mm

Remote Model
Audio
Amplifier

1.1 in.
28 mm

6.89 in.
175 mm

.11 in.
2.9 mm

2.44 in.
62 mm

4.13 in.
105 mm

0.31 in.
8 mm

Top View

Front View

118

Audio Distribution Unit

5.61 in.
142.5 mm

1.20 in.
30.5 mm

Top View

6.52 in.
165.5 mm

1.97 in.
50 mm

Bottom

Audio Speakers

9.45 in.
240 mm

3.125 in.
79.38 mm
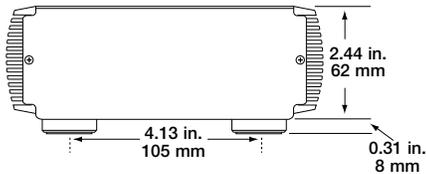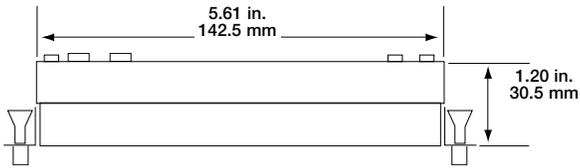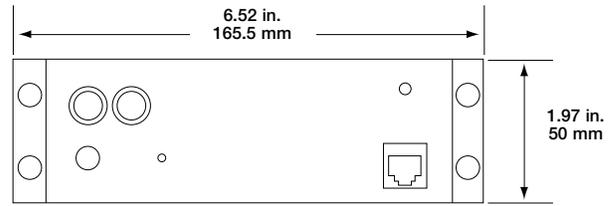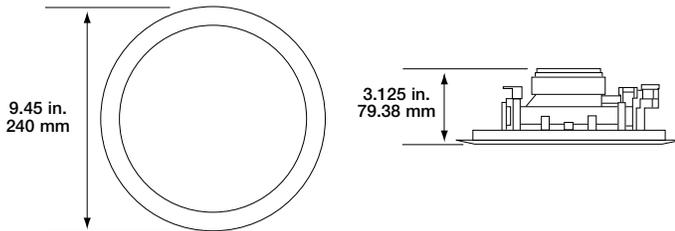
Ceiling Mount Speaker Dimensions

8.7 in.
221 mm

8.7 in.
221 mm

12.125 in.
308 mm

12.125 in.
308 mm

3.125 in.
79 mm

Wall Mount Speaker Dimensions

6.75 in.
171 mm

6.0 in.
152 mm

9.8 in.
248 mm
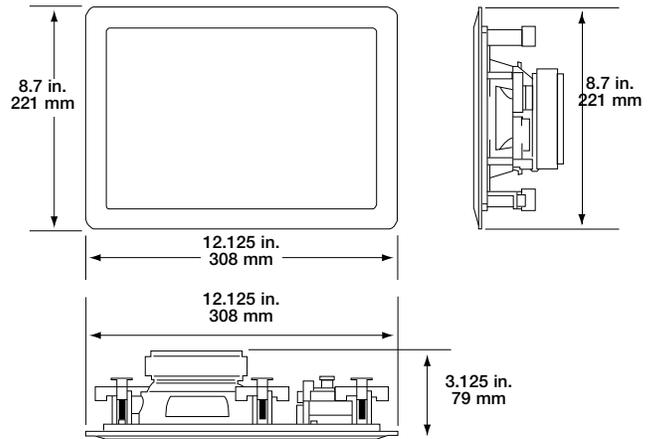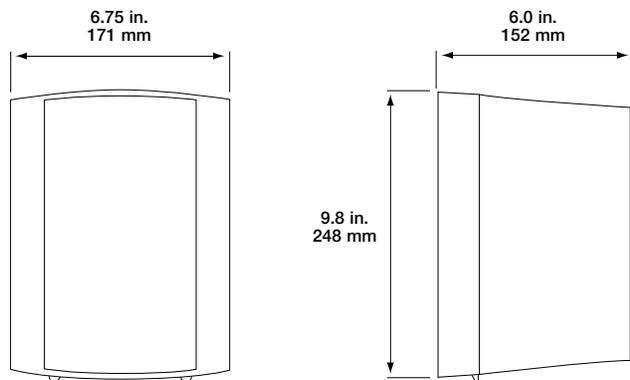
Outdoor Speaker Dimensions

C-Bus™ Universal Remote

Infrared Eye

Quick Channel

LCD

Touchscreen
(soft key)

Backlight

Hard key

Page/Date

Device key

Learn eye

2.4 in.
61 mm

8.3 in.
210 mm

C-Bus™
Four & Eight Button Remote Controllers

2.1 in.
52 mm

5.9 in.
149 mm

1 in.
25 mm
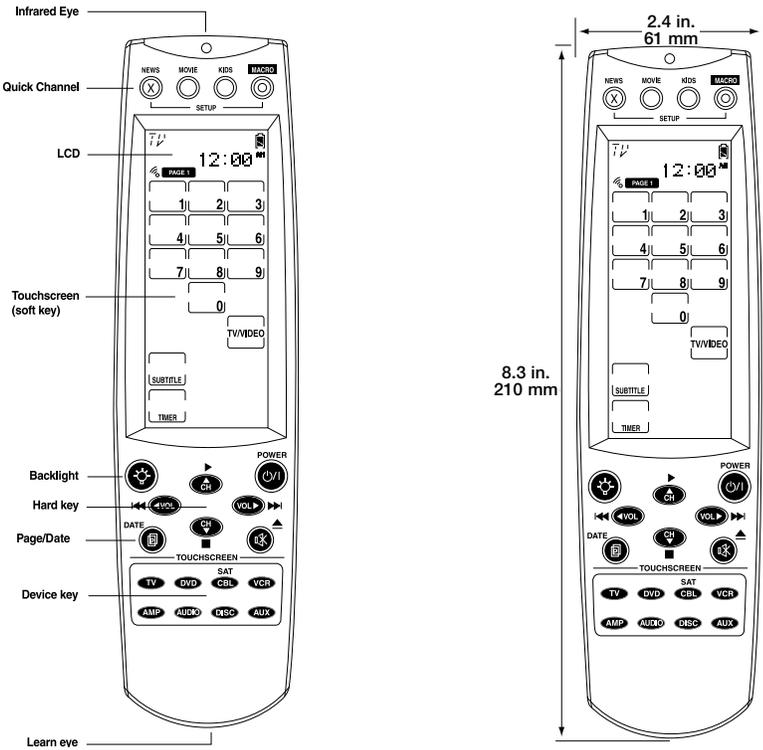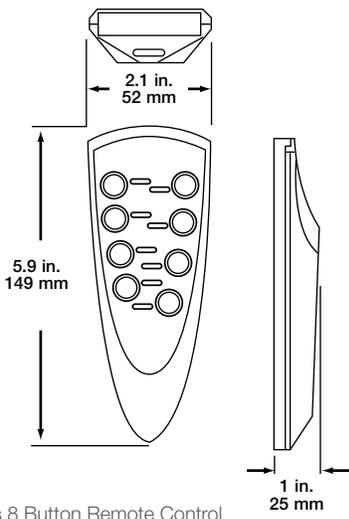
C-Bus 8 Button Remote Control

2.1 in.
52 mm

5.9 in.
149 mm

C-Bus 4 Button Remote Control

1.3 in.
32 mm

2.2 in.
55 mm

4.3 in.
108 mm
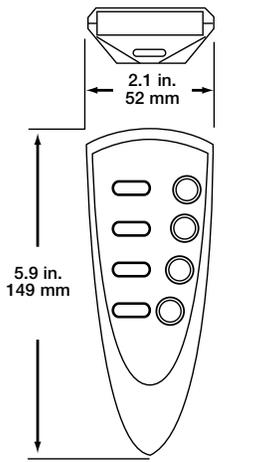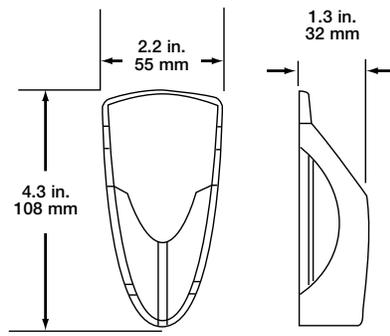
C-Bus 4 and 8 Button Remote Control Holder

120

C-Bus™ HVAC Controls

Introduction to C-Bus™ HVAC Controls

C-Bus™ thermostats are used to regulate the air temperature of zones by controlling heating-ventilation-air conditioning (HVAC) equipment.

With C-Bus thermostats, you have the flexibility of any keypad becoming a comfort control point. C-Bus thermostats may operate as stand alone devices, or be controlled via other C-Bus devices such as wall switches or touch screens.

Programmable four-zone Thermostats can schedule up to four set points during a day, and unique schedules can be programmed for each day of the week. Both models include setback mode (saves power by using a wider acceptable temperature range within which heating or cooling is not performed) and temperature guard (ensures the temperature is maintained within a specified temperature range).

C-Bus™
Basic Single Zone Thermostats

The C-Bus™ wall mounted, Single Zone Thermostats include support for control of HVAC units via C-Bus or the internal HVAC relays. They also allow the user to manually set the temperature and mode of operation (heating, cooling or ventilation). The easy to use operator interface includes fan speed control, set back or economy mode and an integral LCD to display the current temperature and mode of operation.

- Temperature adjustment from the unit
- A dedicated HVAC controller (via the on-board relays)
- A C-Bus Relay unit
- Mode button, i.e., heating, cooling, ventilation
- Manual fan speed control
- Incorporates 'setback' mode
- Programmable via C-Bus Toolkit software
- Broadcasts the displayed temperature on C-Bus
- Can fully integrate with the C-Bus Network

Basic Thermostat

C-Bus™
Programmable 4 Zone Thermostats

The C-Bus™ Programmable 4 Zone Thermostats include on board 7-day HVAC time scheduling (user programmable) manual fan speed control, set back mode and an easy to use interface, comprising of an LCD, manual control buttons and a rotating dial with an integral press switch. From the unit, the user can manually adjust the temperature set point, the mode of operation (heating, cooling, ventilation) and time schedules.

- Full 7 day programmable schedule, 4 events per day
- Accepts up to four remote temperature sensor inputs (via C-Bus)
- Four zones plus common (un-switched) zone
- Set and control via other C-Bus devices
- Supports setback temperatures
- Powered from C-Bus
- Backlit LCD and buttons
- Integral temperature sensor
- Manual fan speed control
- Zone button sets the active zones in the system
- Can fully integrate with the C-Bus Network

Programmable Thermostat (4 zone)

Catalog Number	Description	Catalog Number	Description
SLC5070THBWE	Single Zone Thermostat White (no on-board relays)	SLC5070THPWE	4 Zone Thermostat White (no on-board relays)
SLC5070THBBK	Single Zone Thermostat Black (no on-board relays)	SLC5070THPBK	4 Zone Thermostat Black (no on-board relays)
SLC5070THBSS	Single Zone Thermostat Stainless (no on-board relays)	SLC5070THPSS	4 Zone Thermostat Stainless (no on-board relays)
SLC5070THBRWE	Single Zone Thermostat White (w/relay)	SLC5070PRWE	4 Zone Thermostat White (w/relay)
SLC5070THBRBK	Single Zone Thermostat Black (w/relay)	SLC5070PRBK	4 Zone Thermostat Black (w/relay)
SLC5070THBRSS	Single Zone Thermostat Stainless (w/relay)	SLC5070PRSS	4 Zone Thermostat Stainless (w/relay)

C-Bus™ Basic Single Zone Thermostats

3.62 in.
92 mm

press & hold for setup

fan — press & hold for timer

type — press & hold for setback

5.0 in.
127 mm

1.06 in.
27 mm

C-Bus™ Programmable 4 Zone Thermostats

4.13 in.
105 mm

zone   setup   mode   type

5.9 in.
150 mm

1.26 in.
32 mm
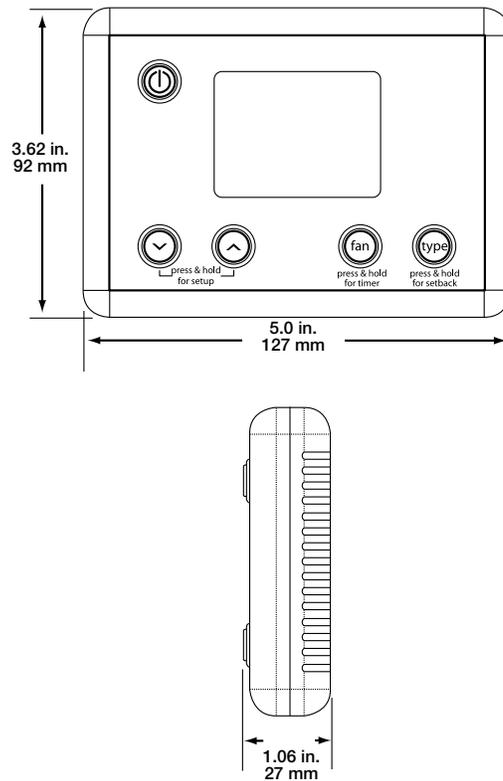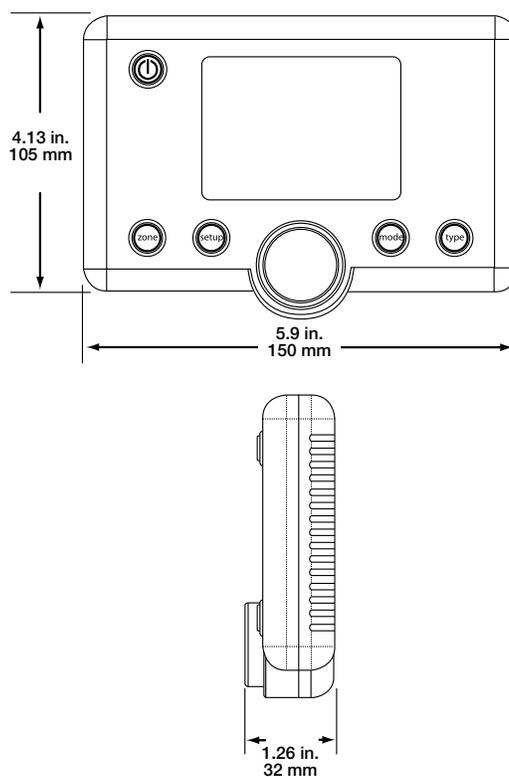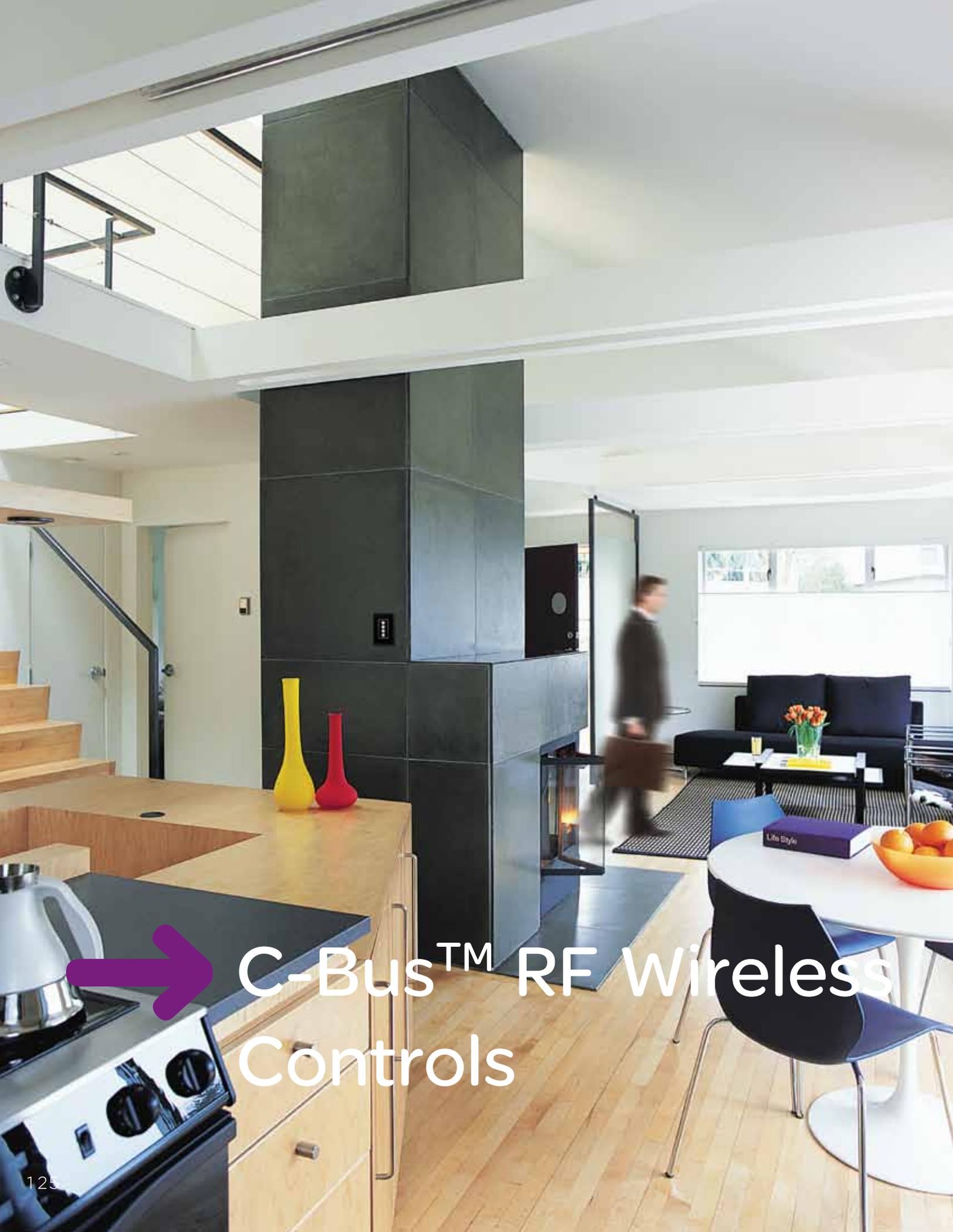
C-Bus™ RF Wireless Controls
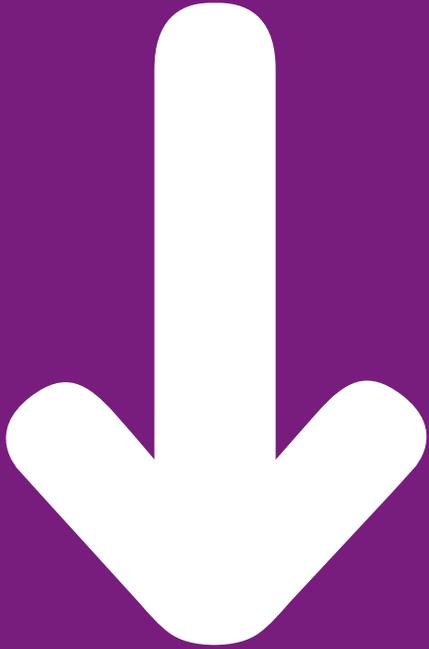
Introduction to
C-Bus™ RF Wireless Controls

Break loose from the cumbersome wiring and associated cost of home control systems with C-Bus™ RF wireless communication. Designed to easily replace standard wall switches, C-Bus RF offers seamless dimming and scene control technology with the elegant aesthetic of Neo™ and Saturn™ decorator-style keypads.

Intelligent. Innovative. C-Bus RF features an all-in-one solution that other wireless control systems simply don't have… complete functionality in every device, eliminating the need for stand-alone repeaters and central controllers.

C-Bus RF Wireless Wall Units include Switches, leading–edge Dimmers and Scene Controllers. The units are designed to replace standard wall switches and dimmers. By eliminating the need for additional wiring runs, C-Bus RF offers the perfect solution for retrofit applications.

C-Bus™ RF Wireless Controls
600W RF Dimmers

C-Bus™ RF Wireless dimmers operate all common lighting loads and work in conjunction with other C-Bus wired and wireless controls to provide full dimming control. These decorator style, leading edge dimmers are available in both the Neo™ and Saturn™ styles with either 2 or 4 button configuration.

Neo and Saturn Decorator Style Keypads

Technical Information

Supply Voltage	120V AC @ 60 Hz
RF Frequency	916 Mhz
Transmitting Power	5 mW
Typical Range (range depends on building construction and proximity to dense or metallic objects)	80 to 100 ft. (24.4 to 30.5m) in buildings with timber frame / brick veneer construction 65 to 80 ft. (19.8 to 24.4m) in buildings with brick, stone, or steel frame construction 50 to 65 ft. (15.2 to 19.8m) in buildings with steel reinforced concrete construction
Maximum Range	200 ft. (61m) in open air
Status Indicator	Color Buttons and reset - blue Learn – red (unit not set up as a repeater) blue (unit set up as a repeater)
Warm-Up Time	5 Seconds
Operating Temperature Range	32 to 104O F (0 to 40O C)
Operating Humidity Range	10 to 95% RH
Off-State Power Consumption	5 W
Off-State Leakage Current	300 mA
Control Functions	Load switching, dimming, timer, scenes
Min. Load Per Channel	25 W
Max. Load Per Channel	600 W
Compatible Loads / Rating	Incandescent, Tungsten, Iron Core Trans. Low Voltage Lighting / 5A
Dimensions (H x W x D)	2.8 in. x 1.7 in. x 1.8 in. (71mm x 44mm x 45mm)
Dimensions w/Heatsink	4.2 in. x 2.5 in. (107.5mm x 63mm)
Weight	3.7 oz. (105g)
Fixing Centers	3.3 in. (84mm)
Standards	UL Listed - 244A Solid State Controls For Appliances
Appliances	FCC Part 15 - Class B Digital Device for Home or Office Use

** For additional ordering information see technical section page 135

Product Features

2 and 4 button options
• Mounts in standard wall box
• Neo or Saturn Decorator Styling
• Multi-function buttons - configurable to control any load on the C-Bus network
• Last level button recall (pre-set)
• Compatible with a wired C-Bus system using wireless gateway (not included)
• Compatible with C-Bus wireless remote (not included)
• No neutral required

Keypad ordering: Neo Style

• Order numbers for the Neo RF decorator style keypads indicate the number of buttons desired on the keypad and the color of the keypad itself.
• 2 and 4 buttons available, color codes are: Slate (GB), White (WE), Cream (CM), Soft gray (SG), Desert sand (DS), Black (BK), and Brown (BR). For example, SLC585(4) D8LUM(DS) represents an order for a Neo RF keypad with four buttons in Desert Sand.

Keypad ordering: Saturn Style

• Order numbers for the Saturn RF decorator style keypad indicate the number of buttons desired on the keypad and the color of the keypad itself.
• 2 and 4 buttons available, color codes are: White (WE), Cream (CM), Black (BK), and Mocha (BR).
• For example, SLC588(4)D8LUM(BK) represents an order for a Saturn RF decorator keypad with four buttons in black.

Catalog Number	Description
SLC585(x)D4LUM(xx)*	Neo Decorator Style RF 600 W Dimmer
SLC588(x)D4LUM(xx)*	Saturn Decorator Style RF 600 W Dimmer

* Note: Wallplate Sold Separately. Refer to individual product manual for order information.

C-Bus™ RF Wireless Controls
1000W RF Dimmers

C-Bus™ RF Wireless dimmers operate all common lighting loads and work in conjunction with other C-Bus wired and wireless controls to provide full dimming control. These decorator style, leading edge dimmers are available in both the Neo™ and Saturn™ styles with either 2 or 4 button configuration.

Neo and Saturn Decorator Style Keypads

Technical Information

Supply Voltage	120V AC @ 60 Hz
RF Frequency	916 Mhz
Transmitting Power	5 mW
Typical Range (range depends on building construction and proximity to dense or metallic objects)	80 to 100 ft. (24.4 to 30.5m) in buildings with timber frame / brick veneer construction 65 to 80 ft. (19.8 to 24.4m) in buildings with brick, stone, or steel frame construction 50 to 65 ft. (15.2 to 19.8m) in buildings with steel reinforced concrete construction
Maximum Range	200 ft. (61m) in open air
Maximum Units on a Network	100 Units
Status Indicator	Color Buttons and reset - blue Learn – red (unit not set up as a repeater) blue (unit set up as a repeater)
Warm-Up Time	5 Seconds
Operating Temperature Range	32 to 104O F (0 to 40O C)
Operating Humidity Range	10 to 95% RH
Off-State Power Consumption	.5 W
Off-State Leakage Current	300 mA
Control Functions	Load switching, dimming, timer, scenes
Min. Load Per Channel	25 W
Max. Load Per Channel	1000 W
Compatible Loads / Rating	Incandescent, Tungsten, Iron Core Trans. Low Voltage Lighting / 8A
Dimensions (H x W x D)	2.8 in. x 1.7 in. x 1.8 in. (71mm x 44mm x 45mm)
Dimensions w/Heatsink	4.2 in. x 2.5 in. (107.5mm x 63mm)
Weight	3.7 oz. (105g)
Fixing Centers	3.3 in. (84mm)

*** For additional ordering information see technical section page 135*

Product Features

2 and 4 button options
• Mounts in standard wall box
• Neo or Saturn Decorator Styling
• Multi-function buttons - configurable to control any load on the C-Bus network
• Last level button recall (pre-set)
• Compatible with a wired C-Bus system using wireless gateway (not included)
• Compatible with C-Bus wireless remote (not included)
• No neutral required

Keypad ordering: Neo Style

• Order numbers for the Neo RF decorator style keypads indicate the number of buttons desired on the keypad and the color of the keypad itself.
• 2 and 4 buttons available, color codes are: Slate (GB), White (WE), Cream (CM), Soft gray (SG), Desert sand (DS), Black (BK), and Brown (BR). For example, SLC585(4) D8LUM(DS) represents an order for a Neo RF keypad with four buttons in Desert Sand.

Keypad ordering: Saturn Style

• Order numbers for the Saturn RF decorator style keypad indicate the number of buttons desired on the keypad and the color of the keypad itself.
• 2 and 4 buttons available, color codes are: White (WE), Cream (CM), Black (BK), and Mocha (BR).
• For example, SLC588(4)D8LUM(BK) represents an order for a Saturn RF decorator keypad with four buttons in black.
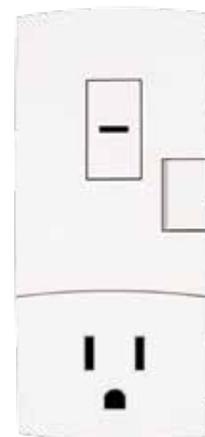
Catalog Number	Description
SLC585(x)D8LUM(xx)*	Neo Decorator Style RF 1000 W Dimmer
SLC588(x)D8LUM(xx)*	Saturn Decorator Style RF 1000 W Dimmer

* Note: Wallplate Sold Separately. Refer to individual product manual for order information.

C-Bus™ RF Wireless Controls
RF Switch and Scene Controllers

The C-Bus Neo™ and Saturn™ RF Switches and Scene Controllers are part of the C-Bus wireless wall unit family. The switches are a two-wire retrofit range using the switching leg (line and load). Switches are available in 2 and 4 button models, and come in a decorator style. Scene Controllers can be used for 3-way switching, 4-way switching, or scene control. They use a line and neutral connection. Scene Controllers are available in 4 button models.

Neo and Saturn Decorator Style Keypads

Technical Information

Supply Voltage	120V AC @ 60 Hz
RF Frequency	916 Mhz
Transmitting Power	5 mW
Typical Range (range depends on building construction and proximity to dense or metallic objects)	80 to 100 ft. (24.4 to 30.5m) in buildings with timber frame / brick veneer construction 65 to 80 ft. (19.8 to 24.4m) in buildings with brick, stone, or steel frame construction 50 to 65 ft. (15.2 to 19.8m) in buildings with steel reinforced concrete construction
Maximum Range	200 ft. (61m) in open air
Status Indicator Color	Buttons and reset - blue Learn – red (unit not set up as a repeater) blue (unit set up as a repeater)
Warm-Up Time	5 Seconds
Operating Temperature Range	32 to 104O F (0 to 40O C)
Operating Humidity Range	10 to 95% RH
Off-State Power Consumption	.5 W
Off-State Leakage Current	300 mA
Control Functions	Load switching, timer, scenes
Min. Load Per Channel	25 W
Max. Load Per Channel	8A
Compatible Loads / Rating (switch)	Incandescent, Tungsten, Fluorescent Ballast, Magnetic/Electronic Low Voltage Lighting, HID (High intensity discharge) / 8A
FLA. Motor	12 LRA / 2A
Dimensions (H x W x D)	2.8 in. x 1.7 in. x 1.8 in. (71mm x 44mm x 45mm)
Dimensions w/Heatsink	4.2 in. x 2.5 in. (107.5mm x 63mm)
Weight	3.7 oz. (105g)
Fixing Centers	3.3 in. (84mm)

** For additional ordering information see technical section page 135

Product Features
• Neo and Saturn Decorator Style Keypads
• Use in 3 and 4 way applications (Scene Controller)
• Control Scenes and Loads
  Switch - controls scenes & loads
  Scene controller - multi location switching & scene control
• Color options
  Neo: Slate, White, Cream, Brown, Soft Grey, Black and Desert Sand
  Saturn: White, Cream, Mocha and Black
• Compatible with a wired C-Bus system using wireless gateway (not included)
• Easy retrofit option
• No neutral required

Keypad ordering: Neo Style
• Order numbers for the Neo RF decorator style keypads indicate the number of buttons desired on the keypad and the color of the keypad itself.
• 2 or 4 buttons available, color codes are: Slate (GB), White (WE), Cream (CM), Soft gray (SG), Desert sand (DS), Black (BK), and Brown (BR).
• For example represents an order for a Neo RF keypad with four buttons in Desert.

Keypad ordering: Saturn Style
• Order numbers for the Saturn RF decorator style keypad indicate the number of buttons desired on the keypad and the color of the keypad itself.
• 2 and 4 buttons available, color codes are: White (WE), Cream (CM), Black (BK), and Mocha (BR).
• For example, SLC585(4)R8FUM(DS) represents an order for a Saturn RF decorator keypad with four buttons in black.

Catalog Number / Description

Catalog Number	Description
SLC585(x)R8FUM(xx)*	Neo Decorator Style RF Switch
SLC588(x)R8FUM(xx)*	Saturn Decorator Style RF Switch
SLC5854NL(xx)*	Neo Decorator Style RF Scene Controller (4 button only)
SLC5884NL(xx)*	Saturn Decorator Style RF Scene Controller (4 button only)

* Note: Wallplate Sold Separately. Refer to individual product manual for order information.

C-Bus™ RF Wireless Controls Plug Adaptors

C-Bus™ RF Plug Adaptors allow the control of appliances and/or lamps using C-Bus RF Wireless Keypads. Plug adaptors come in two different models, a standard switch unit (8A) or 600W dimmer unit. Both models are programed easily using Learn Mode, or by using the C-Bus Toolkit Software.

Plug Adaptor

Technical Information

Supply Voltage	120V AC @ 60 Hz
Supply voltage	120V AC @ 60Hz
RF frequency	916Mhz
Transmitting power	5mW
Typical range (Range depends on building construction and the proximity to dense or metallic objects)	80 to 100 ft. (24.4 to 30.5m) in buildings with timber frame / brick veneer construction 65 to 80 ft. (19.8 to 24.4m) in buildings with brick, stone, or steel frame construction 50 to 65 ft. (15.2 to 19.8m) in buildings with steel reinforced concrete construction
Maximum range	200 ft. (61m) in open air
Control functions	Load switching, timer, LE dimming (dimmer)
Status Indicator color	Blue
Warm-up time	5 seconds
Operating temperature range	0 to 40 °C
Operating humidity range	10 to 95% RH
Min. load per channel	25 W
Max load per channel	600W (dimmer) 8A (Switch)
Compatible loads/rating: Dimmer	Incandescent/Tungsten Iron core trans. LV lighting - 5A
Compatible loads/rating: Switch	Incandescent / Tungsten / Fluorescent Ballast / Magnetic/ Electronic LV lighting, HID - 8A (High Intensity Discharge) 10A
FLA Motor	12LRA - 2A
Off state power consumption	0.5W
Off state leakage current	300mA
Dimensions (H x W x D)	4.5 in. x 2.0 in. x 1.7 in. (115mm x 51mm x 44mm)
Standards	UL Listed - 244A Solid State Controls For Appliances
Appliances	FCC Part 15 - Class B Digital Device for Home or Office Use

*** For additional ordering information see technical section page 135*

Product Features

- Plugs into a standard general purpose electrical outlet
- Communicates directly with other C-Bus wireless devices
- Both dimming and relay output models available
- Relay output version available (8A)
- Integral, easily accessible control/override/ programming buttons
- Can be controlled via C-Bus wired input units (via a Wireless RF Gateway Unit)
- Unique C-Bus wireless house code
- 128-Encrypted communications
- Programmable via C-Bus learn mode or via C-Bus Toolkit Software.

Catalog Number	Description
SLC5812R8F1UD	Plug Adaptor, 1 Channel Relay 8A
SLC5812D5L1UD	Plug Adaptor, 1 Channel Leading Edge 600W

C-Bus™ RF Wireless Controls
RF Remote Control

The C-Bus™ Wireless RF Remote Control provides control of C-Bus Wireless RF Control Systems keypads and/or plug adapter units.

Up to ten separate keypad or plug adapter unit buttons can be controlled by the remote control. The buttons can be on various units on different wireless networks. A single button on a keypad or plug adapter unit can be controlled by up to two RF remote controls.

C-Bus Wireless RF Remote Control

Technical Information

Supply Voltage	2 x AAA, batteries
Radio Frequency	916 MHz
Transmitting Power	10 mW
Typical range (range depends on building construction and the proximity to dense or metallic objects)	Wood frame / brick veneer construction 49 to 66 feet (15 to 20 m) Brick, stone, or steel frame construction 33 to 49 feet (10 to 15 m) Steel reinforced concrete construction 16 to 33 feet (5 to 10 m)
Maximum Range (open air)	164 ft. (50m)
Dimensions	2.0 x 5.9 x 1.3 in. (52 mm x 149 mm x 33 mm)
Option	darkness, has "ignore first button press" option
Operating Environment	Temp.: 32OF to 104OF (0OC to 40OC) RH: 95%, noncondensing
Standards	FCC Part 15.101 - Class B digital device for home or office use
Remote Control Holder	
Dimensions	2.2 x 4.3 x 1.3 in. (55 mm x 108 mm x 33 mm)
Mounting Centers	2.2 to 2.4 in. (55 to 60 mm)
Mounting Screw Size	0.1 x 0.8 in. (3.5 mm x 20 mm)
Wall Anchor	0.3 x 1.0 in. (7mm x 25mm)

For Diagram see technical section page 136

Product Features
- Compatible with all C-Bus RF keypads
- 10 separate programmable buttons
- All OFF button
- Dim up/down button
- LCD screen w/button indicator and 'learn mode' indicator
- Wall-mountable holder (included)
- Two AAA batteries (included)

Catalog Number   Description

Catalog Number	Description
SLC5888TXBD	C-Bus Wireless RF Handheld Remote Control

C-Bus™ RF Wireless Controls
Wireless Gateway

The C-Bus™ RF Gateway provides a C-Bus protocol communication bridge between a single C-Bus RF wireless system and a single C-Bus wired network.

Both the wired and wireless C-Bus network types use the same protocol commands, thus by using the Gateway, a C-Bus RF wireless and wired network can communicate and seamlessly interact with each other. This allows a wireless C-Bus control system third party functionality, with the ability to control audio, blinds, irrigation systems, etc.

The RF Gateway can be installed horizontally, by using the adhesive feet (included) or vertically, using the keyhole cutouts on the base of the unit.

Wireless Gateway

Technical Information

C-BusTM Supply Voltage	15 to 36 V DC, 32 mA
RF Frequency	916 Mhz
Transmitting Power	5 mW
Typical Range (range depends on building construction and proximity to dense or metallic objects)	50 to 65 ft. (15 to 20m) in buildings with timber frame / brick veneer construction 30 to 50 ft. (9 to 15m) in buildings with brick, stone, or steel frame construction 15 to 30 ft. (5 to 9m) in buildings with steel reinforced concrete construction
Maximum Range	200 ft. (61m) in open air
Status Indicator Color	Off - No C-Bus connection or insufficient power Slow Flashing – Normal connection to C-Bus network Quick Flashing - Confirms that the RF Gateway has been linked to the RF Wireless system
Operating Temperature Range	32 to 104O F (0 to 40O C) Timers
Operating Humidity Range	Time 10 to 95% RH
Dimensions (W x H x D)	4.1 in. x 5.9 in. x 1.0 in.105mm x 149mm x 26mm)
Weight	3.7 oz. (105g)
Mounting Centers	1.6 in. (40mm)
Weight	2.7 oz (77 g)
Standards	UL 916 - Energy Management Equipment CSA C22.2 No. 205 - Signal Equipment FCC Part 15 - Class B Digital Device for Home or Office Use

For Diagram see technical section page 136

Product Features
• Easy to program
• Control between wired and wireless C-Bus networks
• Mount horizontally or vertically
• Enable third party operability by connecting a wireless network to a wired network
• Adjustable antenna for clear reception
• Simple Cat-5 connection to C-Bus wired system
• C-Bus system clock

Catalog Number	Description
SLC5800WCGD	RF Gateway

C-Bus™ Neo™
Decorator Style RF Keypads
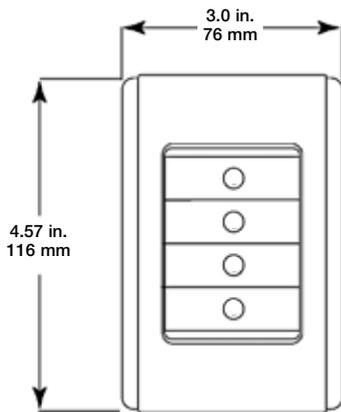
3.0 in.
76 mm

4.57 in.
116 mm

0.91 in.
23mm

2.76 in.
70 mm

1.69 in.
43 mm

0.28 in.
7 mm

Front view of keypad, including external height and width measurements of Faceplate
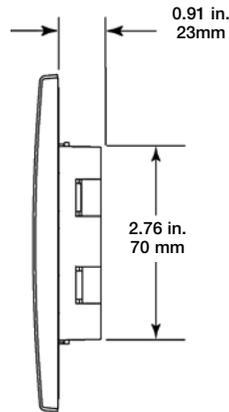
Side view of keypad, including height and depth requirements for insertion into wall
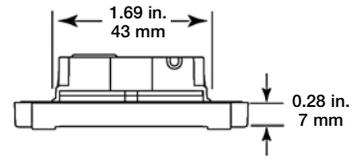
Top view of keypad, including depth of face plate

C-Bus™ Saturn™
Decorator Style RF Dimmers
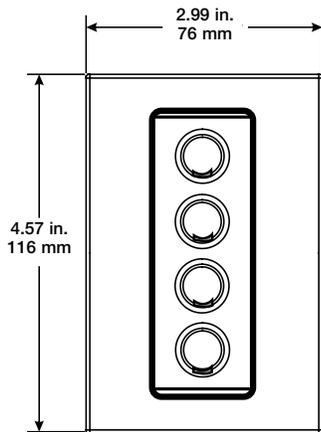
2.99 in.
76 mm

4.57 in.
116 mm

0.98 in.
25 mm

2.76 in.
70 mm

0.71 in.
18 mm

1.65 in.
42 mm

2.87 in.
73 mm

Front view of keypad, including external height and width measurements of case
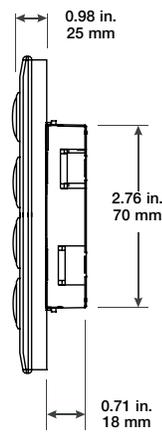
Side view of keypad, including height and depth requirements for insertion into wall
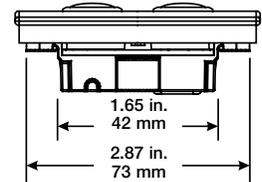
Top view of keypad showing width

C-Bus™ RF Wireless Controls
Plug Adaptors

4.5 in.

1.7 in.

2.0 in.
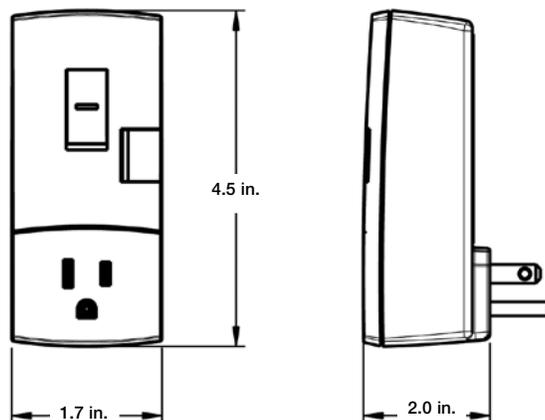
C-Bus™ RF Wireless Controls
RF Remote Control

Dimensions for the RF Remote Control
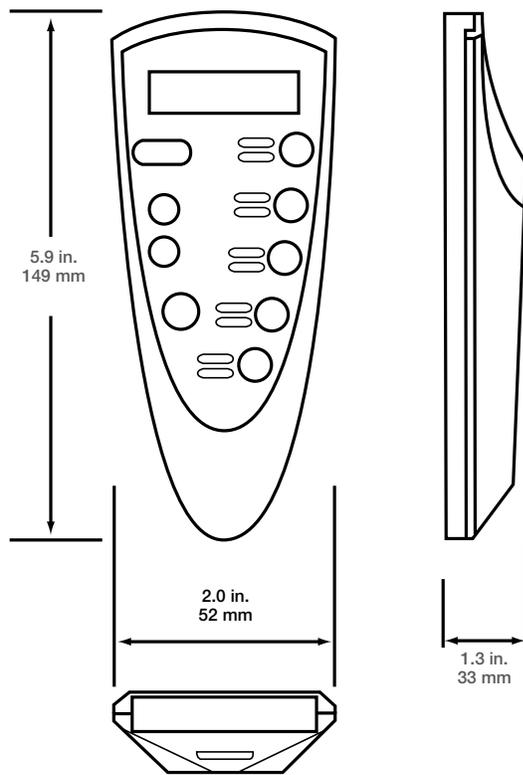
Dimensions for the RF Remote Holder

5.9 in.
149 mm

2.0 in.
52 mm

1.3 in.
33 mm

2.2 in.
55 mm

4.3 in.
108 mm

1.3 in.
33 mm

C-Bus™ RF Wireless Controls
Wireless Gateway

4.10 in.
105 mm

5.9 in.
149 mm

Front view of Gateway

Side view of Gateway

1.0 in.
26 mm
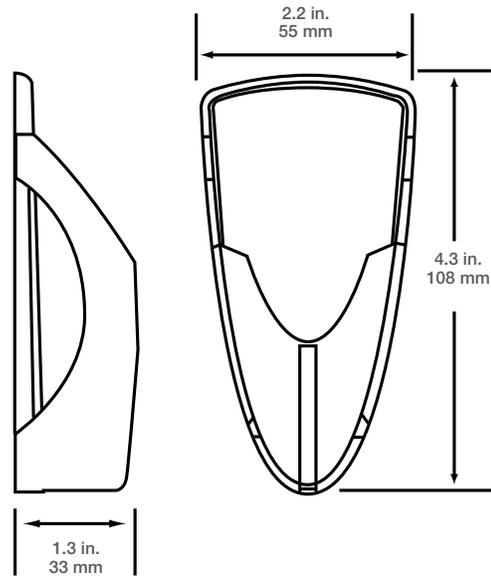
Top view of Gateway
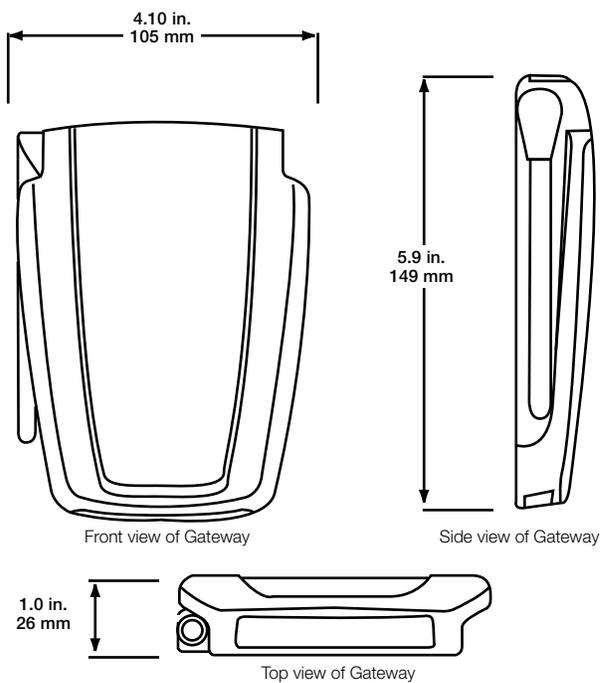
C-Bus™ Software

Introduction to
C-Bus™ Software

Residential Control:
The C-BusTM HomeGate Software provides residential application PC control of a C-Bus Control System. HomeGate can be accessed from a local PC or remotely via an Internet connection with a standard web browser. The HomeGate graphical user interface is designed for simplicity of use and provides easy to use Menu and Tab based options. The interface allows set-up of multiple user pages and provides a way to easily navigate between the pages.

Commercial Control:
The C-BusTM Schedule Plus Software provides a powerful and simple to use interface to a C-Bus control system. Schedule Plus provides control and monitoring of a commercial or industrial C-Bus system from a PC running the Microsoft (R) Windows (R) operating system. Access is obtained from a local PC or remotely via an Internet connection with a standard Web Browser.

C-Bus™ Software
HomeGate

The C-Bus™ HomeGate Software provides residential application PC control of a C-Bus Control System.

HomeGate can be accessed from a local PC or remotely via an Internet connection with a standard web browser. The HomeGate graphical user interface is designed for simplicity of use and provides easy to use Menu and Tab based options. The interface allows set-up of multiple user pages and provides a way to easily navigate between the pages. The user also has the ability to password protect individual pages, as required.

HomeGate displays graphical items on user pages to perform a C-Bus function when pressed. Examples of these items include: buttons, sliders, indicators, real-time clocks and downloaded JPEG or Bitmap Images. Objects can be placed and sized as a user requires and can be displayed in full color. HomeGate also reports the state of the C-Bus group addresses on a network in real-time, with group addresses represented by text or icons that change condition depending on status. Custom icons can be generated to represent the various control states; alternatively icons from the icon library provided with the package can be used.

As well as manual control and monitoring of a C-Bus system via a PC, HomeGate can also be used to create and edit complete C-Bus scenes and initiate real-time based schedules of events. The software supports a project editing mode for customizing the user interface and an operation mode, where clicking components on the screen will execute the programmed actions.

HomeGate Application Software USB

Example of a Customized HomeGate Screen Using Downloaded Image and Buttons

Technical Information

Platform	Windows 95, 98, 2000, NT, ME, Vista and XP
Server Technology	C-Bus C-Gate
Connections	Ethernet, RS-232
Graphical Objects	Text, buttons, sliders, shapes, images, real time clock, C-Bus timer, percentage indicator, light level, temperature, C-Bus network voltage
Component Properties	C-Bus network parameters, position, size, font style and color, text and image alignments, borders, stroke, background color/shading
Graphical Associations	C-Bus command (on/off/ramp), scene activation, scene activation via C-Bus scene controllers, page links, back one page, operation over remote applications, exit simulation page
Scheduled Events	Create, display edit and print. Daily, weekly, weekdays, weekends, monthly and once off
Event Properties	Send C-Bus command (on/off/ramp & ramp rate), send pulsed C-Bus commands, set scenes, time of event, cycle of event
Password Protection	Yes
Modes	(2) Normal/Project Editing
Project Summary	Yes
Event Log	Yes
Page Templates	Yes (included)
Image Library	Yes (included)
Sound	.WAV file capable

Product Features
- Supports Microsoft Platforms (Vista compatible)
- Support for 128 bit encrypted secure Internet connectivity
- Connection to C-Bus via Ethernet or RS-232
- Single and Five Network software license options
- Fully functional logic engine
- Graphical components used to illustrate actions
- Scheduled events can be created, displayed, edited, printed and scheduled daily, weekly, weekdays, weekends and monthly
- Sound Files (WAV) capability
- Page templates and image library
- Event log
- Two modes, Normal Operation or Project Editing Modes
- Individual pages can be password protected
- Application support for HVAC and Security

Catalog Number   Description

Catalog Number	Description
SLC5000SDHG24	HomeGate license key for 2 networks
SLC5000SDHG104	HomeGate license key for 10 networks
SLC5000SDINST1	HomeGate installer Key*

* Installer key allows installers to create/commission projects using HomeGate software. This code key is time restricted and allows the software to operate in 'normal' mode for anywhere between 48 to 72 hours per use (the software then returns to evaluation/demo mode).

NOTE: The installer code key will also be compatible with future software releases

C-Bus™ Software
Schedule Plus

The C-Bus™ Schedule Plus Software provides a powerful and simple to use interface to a C-Bus control system. Schedule Plus provides control and monitoring of a commercial or industrial C-Bus system from a PC running the Microsoft® Windows® operating system. Access is obtained from a local PC or remotely via an Internet connection with a standard Web Browser.

Schedule Plus displays graphical items on user pages with simple Menu and Tab based options. Graphic items can be programmed to perform C-Bus functions when pressed. Examples of the type of items that can appear on Schedule Plus pages include buttons, sliders, indicators, real-time clocks JPEG Images and Bitmap Images. These can be placed and sized as a user requires and can be displayed in full color. Schedule Plus also reports the state of the C-Bus group addresses on a network in real-time, with group addresses represented by text or icons that change condition depending on status. Custom icons can be generated to represent the various control states; alternatively icons from the icon library provided with the package can be used.

As well as manual control and monitoring of a C-Bus system, Schedule Plus can also be used to create and edit complete C-Bus scenes and initiate real-time based schedules of events. The software supports a project editing mode for customizing the user interface and an operation mode, where clicking components on the screen will execute the programmed actions. Enhanced scheduling includes support for monitoring load run times, load power and energy consumed.

Schedule Plus Application Software USB
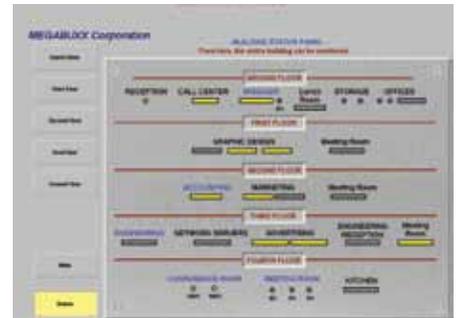
Example of a Schedule Plus Software Display Screen

Technical Information

Platform	Windows 95, 98, 2000, NT, ME, Vista and XP
Server Technology	C-Bus C-Gate
Connections	Ethernet, RS-232
Graphical Objects	Text, buttons, sliders, shapes, images, real time clock, C-Bus timer, percentage indicator, light level, temperature, C-Bus network voltage
Component Properties	C-Bus network parameters, position, size, font style and color, text and image alignments, borders, stroke, background color/shading
Graphical Associations	C-Bus command (on/off/ramp), scene activation, scene activation via C-Bus scene controllers, page links, back one page, operation over remote applications, exit simulation page
Scheduled Events	Create, display edit and print. Daily, weekly, weekdays, weekends, monthly and once off
Event Properties	Send C-Bus command (on/off/ramp & ramp rate), send pulsed C-Bus commands, set scenes, time of event, cycle of event
Password Protection	Yes
Modes	(2) Normal/Project Editing
Project Summary	Yes
Event Log	Yes
Page Templates	Yes (included)
Image Library	Yes (included)
Sound	.WAV file capable

Product Features
- Supports Microsoft Platforms (Vista compatible)
- Supports 128 bit encrypted internet connectivity
- Automatic project error checking and reporting
- Connection to C-Bus via Ethernet or RS-232
- Two, ten and unlimited network software licence key options
- Fully functional logic engine
- Graphical components used to illustrate actions
- Scheduled events can be created, displayed, edited, printed and scheduled daily, weekly, weekdays, weekends and monthly
- Monitoring of load run times, load power and energy consumed
- Page templates and image library
- Event log
- Two modes, Normal Operation or Project Editing Modes
- Individual pages can be password protected
- Application support for HVAC and Security

Catalog Number	Description
SLC5000SDSP24	Schedule Plus license key for 2 networks
SLC5000SDSP104	Schedule Plus license key for 10 networks
SLC5000SDSPU4	Schedule Plus license key for unlimited networks
SLC5000SDSP24	Schedule Plus installer Key*

* Installer key allows installers to create/commission projects using HomeGate software. This code key is time restricted and allows the software to operate in 'normal' mode for anywhere between 48 to 72 hours per use (the software then returns to evaluation/demo mode).
NOTE: The installer code key will also be compatible with future software releases

Design guide

Design guide contents

Contents

Introduction

Lighting Control from Schneider Electric employs C-Bus™ network control for commercial lighting. Compared to conventional control systems, C-Bus network controls reduce installation time, simplify lighting control circuits, save energy and achieve greater functionality. The C-Bus network is a distributed intelligence network control system, incorporating microprocessor-based control. Each C-Bus device features an integral microcontroller to achieve a robust and reliable distributed control system. Once installed, the installer programs the operating variables and control relationships between C-Bus devices on the network. The C-Bus network may be scaled to fit any size project from a single conference room up to a very large building.

Objective

This guide provides lighting control designers with guidance needed to design and plan C-Bus network control systems. Additional support is available through the Schneider Electric Lighting Control Technical Support Team at 1-888-SQUARED.

Dimming

Dimming is a critical part of today's lighting control needs. In the past, manual dimming controls were used in offices, conference rooms, and classrooms to allow occupants to adjust light levels to meet the occupant needs or preferences. Now, more sophisticated lighting control systems employ dimming to provide multi-scene control, daylighting control and multi-level control in a variety of spaces and building types, from schools and offices to retail environments and warehouses, to save energy and provide more occupant-friendly control. C-Bus includes a variety of units to achieve continuous or stepped dimming of fluorescent, incandescent and even HID lighting.
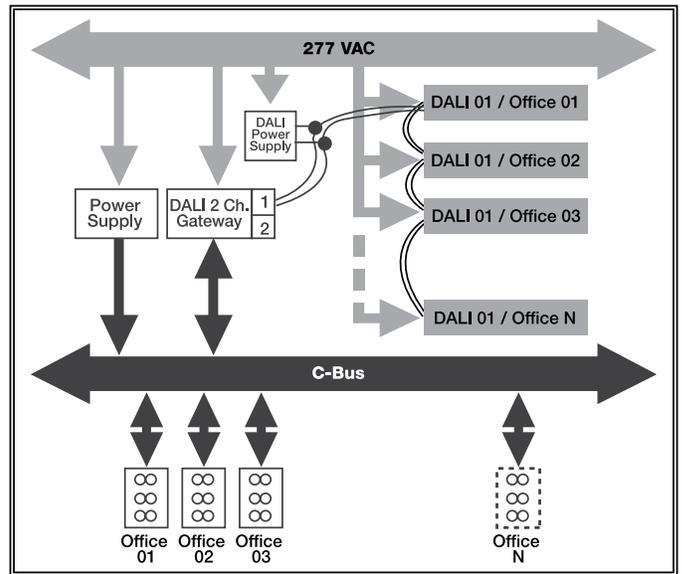
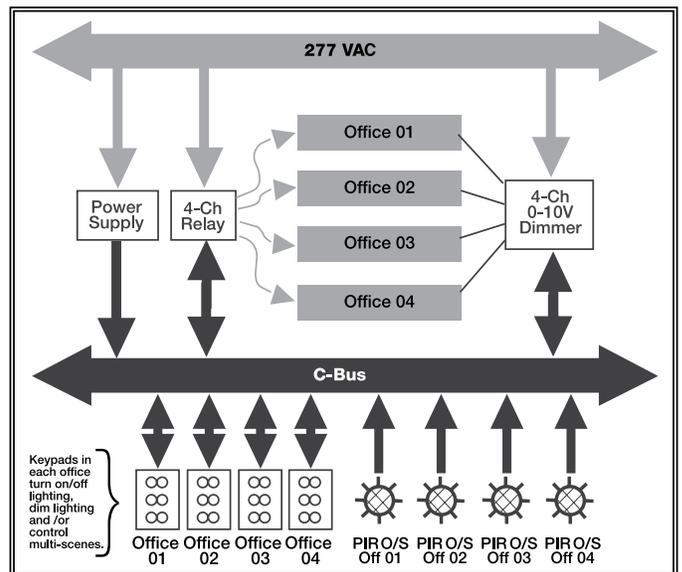

Illustration of DALI Network Control
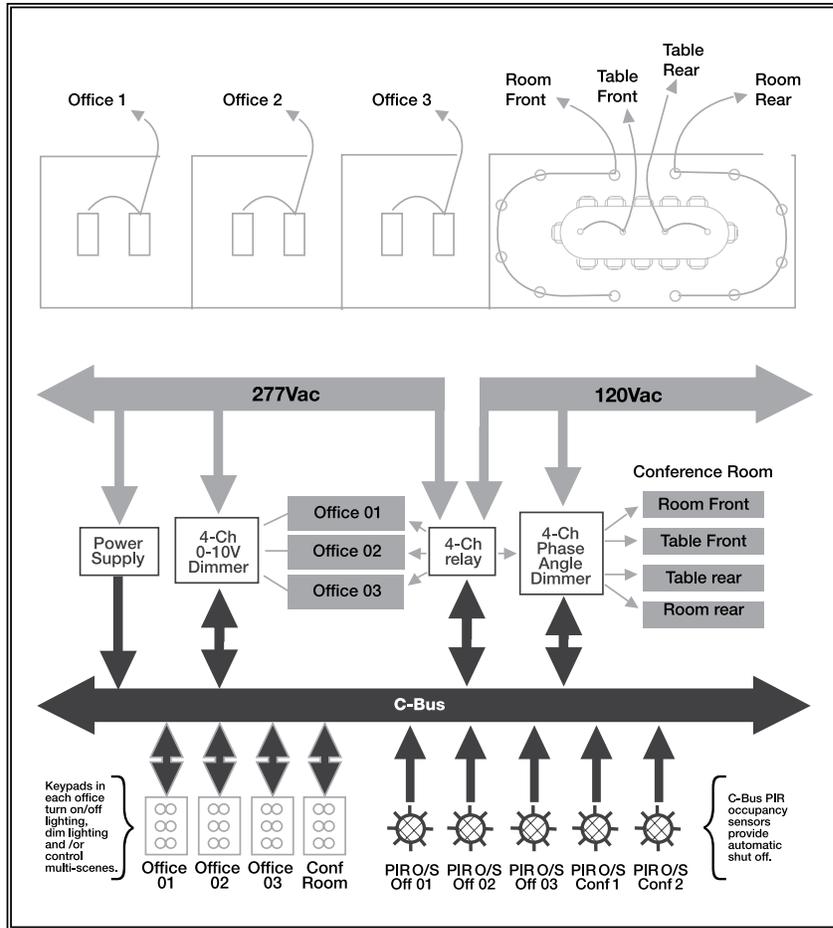

Illustration of 0-10V Dimming

Illustration of Phase Angle
Control in Conference Room

Multi-Scene Control

The press of one button may control many individual loads. Loads may be turned on, off, or dimmed to a predetermined level. Depending on how a space is used, it may be necessary to have certain lights set to various levels for different functions. For example, a conference room may have multiple groups of lighting where one group illuminates the table, another group illuminates the perimeter in the back of the room and another group illuminates the perimeter in the front of the room. During a meeting, it may be desirable to have the lighting over the table set to 100% and have the lighting around the perimeter set to 50%. This could be accomplished with a single button press to create the "meeting" scene. For presentations, perimeter lighting in the front of the room may be turned off, lighting over the table set at 50%, and perimeter lighting in the back of the room set at 50%.
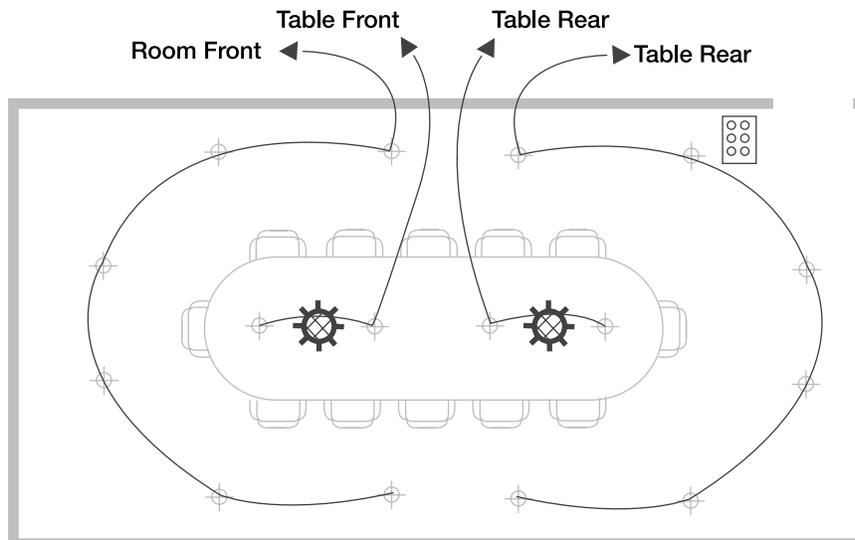
Multi-Scene Control
Presentation (scene 1)
  Room Front = Off
  Room Rear = 50%
  Table Front = 50%
  Table Rear = 50%

Meeting (scene 2)
  Room Front = 0%
  Room Rear = 50%
  Table Front = 100%
  Table Rear = 100%

Up to (8) scenes with
8-button keypad or DLT

Daylighting Control

Daylighting control may be used to reduce artificial lighting of interior spaces when those spaces receive adequate natural light from windows or skylights. Daylighting controls are commonly installed in California, where the state's building code, Title 24, requires the use of daylighting controls in daylit spaces. Daylighting control may be used to save energy in schools, offices, warehouses, and even retail spaces. More and more buildings, especially big box retail and schools, are taking advantage of natural sunlight to illuminate interior spaces. C-Bus light level sensors are easily configured to provide daylighting control utilizing relays for stepped dimming function or dimmer units for continuous dimming.
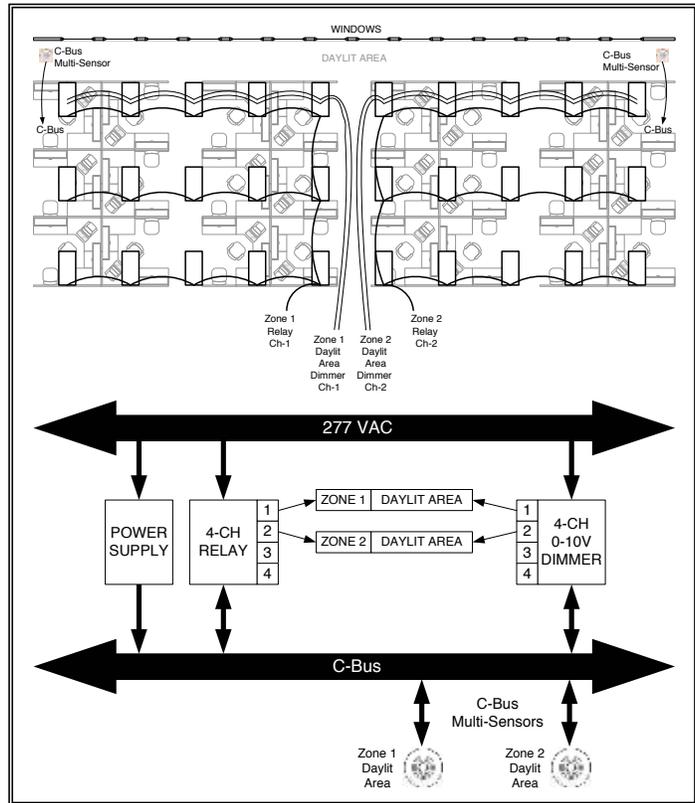

Illustration of Daylighting Control

C-Bus™ with Powerlink®

C-Bus networks may be connected to Powerlink G3 intelligent lighting control panels utilizing the Powerlink Device Router and the Powerlink 3000G3C controller. Two-way communications between the C-Bus network and the Powerlink panel allows C-Bus inputs to control branch circuits at the Powerlink panel or override the Powerlink schedule, and the Powerlink panel may provide scheduled shutoff of C-Bus controlled lighting. In the Daylighting System illustrated no shut off was provided. To shut off lighting on a schedule, connect the C-Bus network to Powerlink 3000G3C controller via Powerlink Device Router. The Device Router includes a C-Bus PCI and Power Supply, and is connected to the Powerlink panel using a serial cable between the RS-232 port on the PCI and the 3000G3C controller.
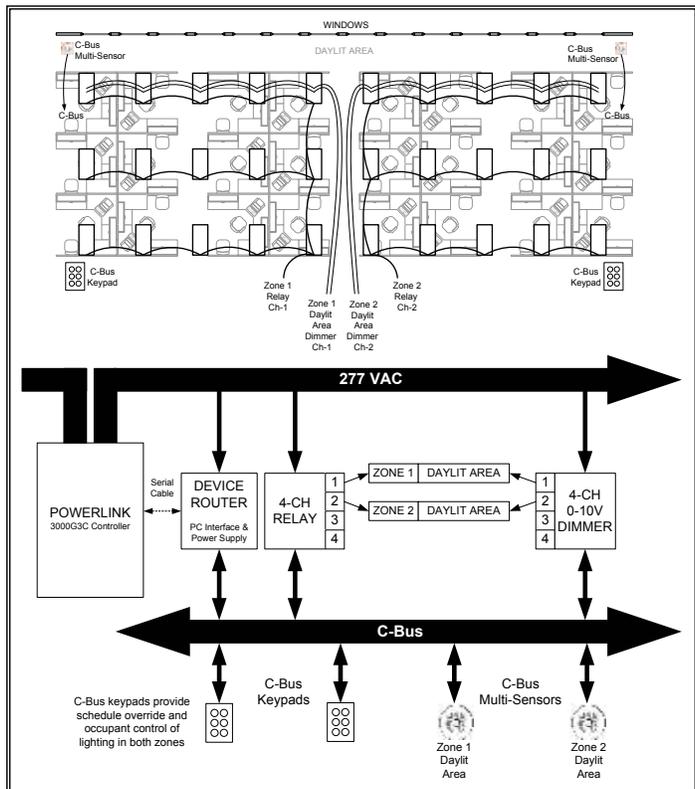

Illustration of C-Bus Connected to Powerlink G3 Panel

144

Specifications

Programming Principles

All C-Bus™ devices require programming, with the exception of power supplies. Programming is achieved with proprietary software using a PC. Unit programming is performed to achieve the following objectives:

• Create and define units on the C-Bus network
• Identify each unit using the C-Bus addressing convention
• Create, define and edit control relationships between inputs and outputs
• Edit unit operating parameters
The operating parameters vary from unit to unit, depending on its type.

　　　　Keypad Functions
　　　　Timer Functions
　　　　Dimming Functions
　　　　Toggle (on/off) Control
　　　　Preset Levels
　　　　Custom / Other Functions
　　　　Scenes - Multiple location control
• Output Switching Logic Assignments
• Power Outage Recovery Status
• Power Up Sequences
• Dimming Rates
• Indicator Options
• Sensor Switching Conditions
• Override Controls (Enable/Disable)
• Error Status Options

C-Bus Installation Software version 2.0		
Parameter	**Format**	**Example**
PROJECT NAME	8 alphanumeric characters	OFFICE01
NETWORK	20 alphanumeric characters	Office Network
UNIT	Three digit decimal number (000-255)	016, 067, . . . 145
	OR	OR
	Two digit hexadecimal number (00-FF)	0A, 1A, . . . 5B
PART NAME	8 alphanumeric characters	RELAY01
APPLICATION	20 alphanumeric characters	Lighting (*)
AREA	20 alphanumeric characters	First Floor Offices
GROUP	20 alphanumeric characters	Conference Rm Lights

Addressing Conventions

Once a preliminary list of hardware requirements has been created, planning of the programming requirements may begin. The C-Bus network uses a simple addressing scheme to identify units, groups, areas and networks. The purpose of each parameter will be discussed in the next section.

Alphanumeric Characters

Legal Alphanumeric Character Set: 0-9, a-z, A-Z, ' ', '_'
All descriptive addresses accept the above legal characters. Other characters may be accepted, but are not recommended.
Project Names and Part Names will force capital letters.

Illustration of Group Addressing

Hexadecimal Symbols

Hexadecimal Symbol Set:　0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F
At a physical level, the programming information downloaded to C-Bus™ Units consists of a two digit hexadecimal number, represented be a combination of the above 16 symbols. Valid addresses include 12, AB, FE, 5E. The descriptive addressing is not downloaded. This information is stored in a database on your PC. A programmed C-Bus network can be scanned using the C-Bus Installation Software. If a Version 7.1 Project Database has not been defined by the user, the software will use the hexadecimal addressing uploaded to represent all unknown addressing. Users should note that these hexadecimal addresses are automatically assigned. The Project and Topology Managers may be used to reference or manipulate hexadecimal address as required.

Group Addressing

The Group Address is usually related to the load physically connected to the terminal of the output unit. Therefore, the group address should accurately describe the load being controlled. Typically, numerical designators are used to describe lighting circuits. Up to 255 group addresses may be defined on a single network less any defined area addresses.Valid groups include: Office Lights, Hall Lights, L4-2B, A4-2L-3 The default group is "unused."
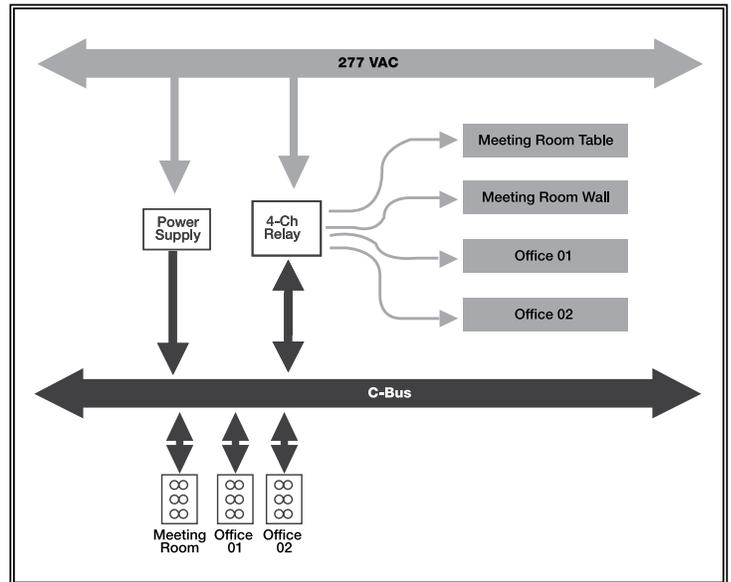
Area Addressing

The area address is a convenient method of addressing multiple output channels collectively. Large areas consisting of many C-Bus™ output units may be controlled from a single point on the C-Bus network. The area address is used in the group address field to achieve control.
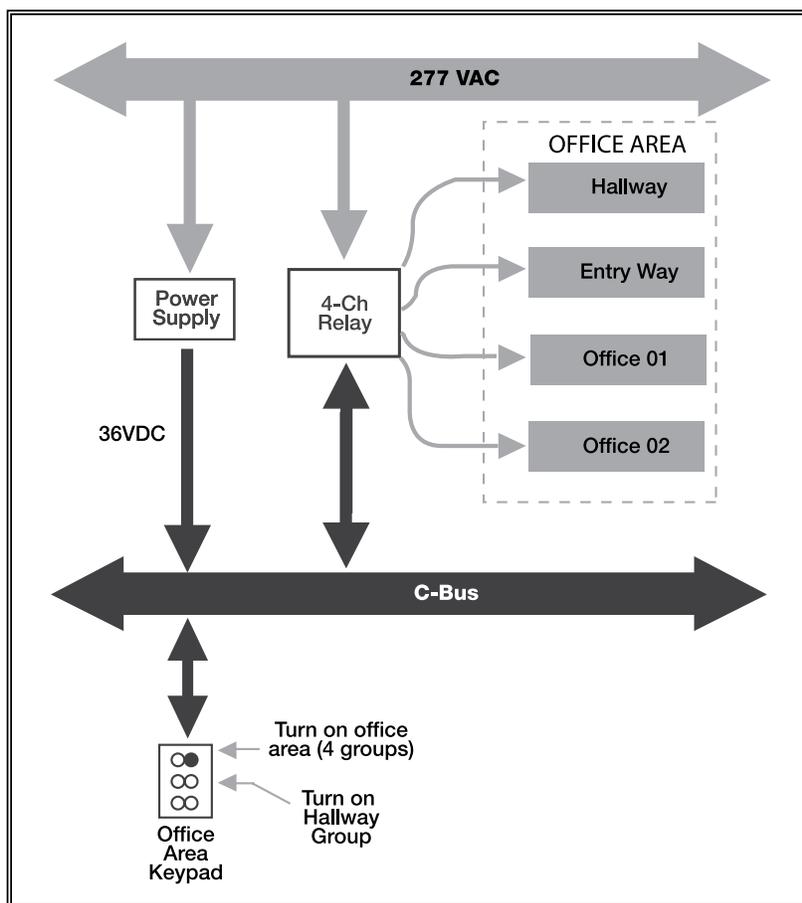

Illustration of Area Addressing

Each C-Bus input and output device in a control area must be assigned the same area address. The area address must be unique and must not be repeated as a group address in that C-Bus network. Up to 255 areas may be defined less the number of defined groups.

Application Addressing

Applications are used to divide the C-Bus network into independent functional systems. All group addresses in any unit are associated with that unit's applications, and commands issued by a C-Bus input device will affect only output devices with matching applications and group addresses. Up to 255 application addresses may be used on a single C-Bus network. By default, five applications are defined: Enable Control, Heating (Legacy), Lighting, Telephony and Trigger Control. Other applications may be defined as needed. For example, in a multi-storied building it may be desirable to have a separate application for each floor to satisfy the need to have more than 255 group addresses on the network, or to allow the same group addresses to be used over and over (e.g. OFFICE01, MENS01, CONF01, etc.). In this case, defined applications might be Lighting01, Lighting02, etc.
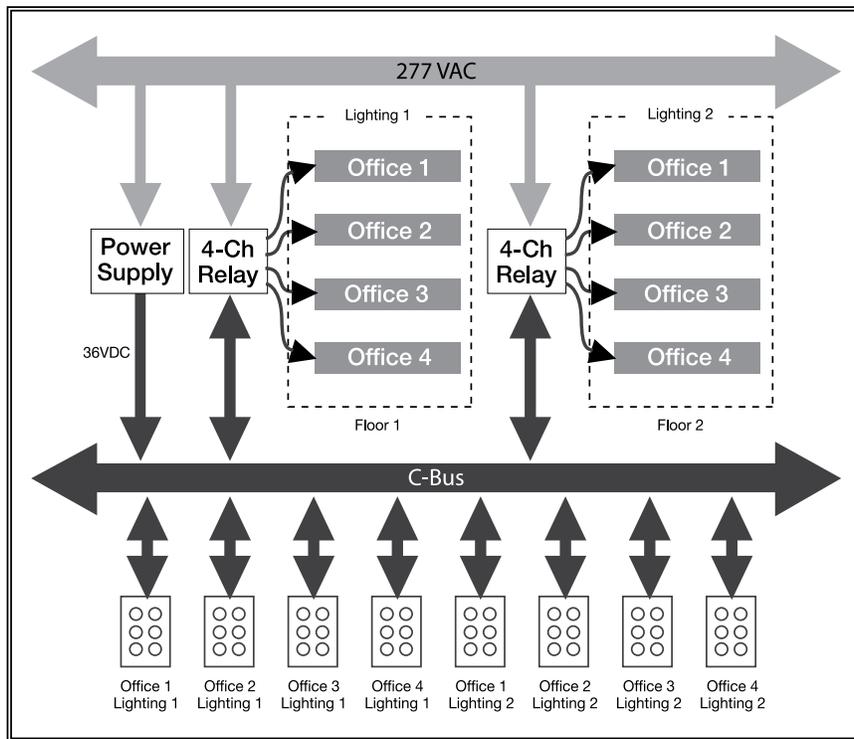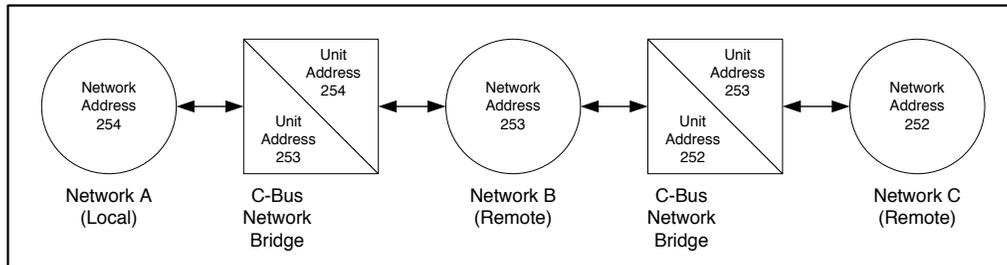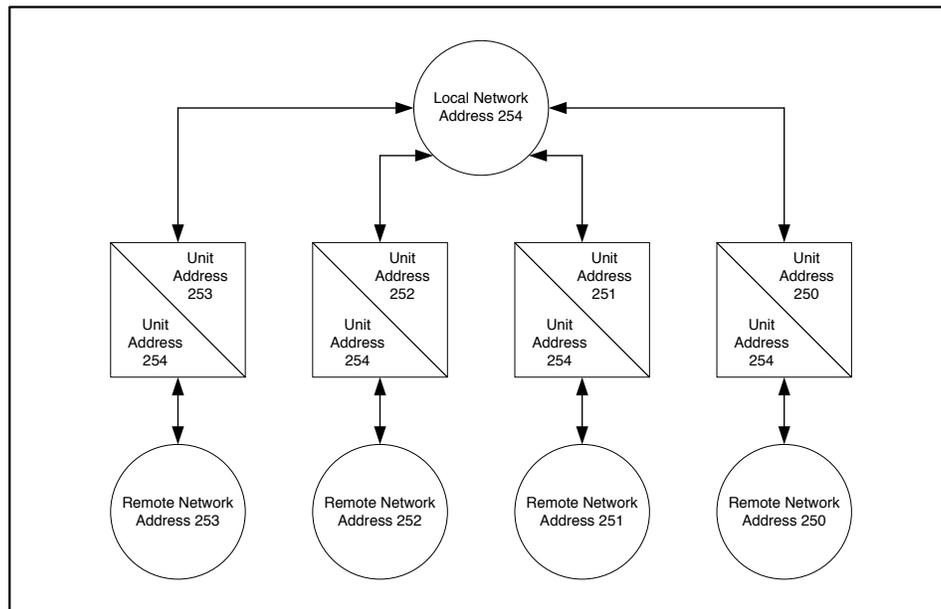

Illustration of Application Addressing;

Where Lighting 1 and Lighting 2 are Separate Applications

Network Addressing

The network address is used to identify networks in a multi-network system. Each C-Bus™ network may be connected to other C-Bus networks using a C-Bus Network Bridge. The C-Bus Network Bridge facilitates communications across networks, allowing device on one C-Bus network to issue commands to devices on another C-Bus network.

Network Address 254 — Network A (Local)

C-Bus Network Bridge: Unit Address 254 / Unit Address 253

Network Address 253 — Network B (Remote)

C-Bus Network Bridge: Unit Address 253 / Unit Address 252

Network Address 252 — Network C (Remote)

Multiple C-Bus networks connected in series using C-Bus Network Bridges

Local Network Address 254

Unit Address 253 / Unit Address 254 — Remote Network Address 253

Unit Address 252 / Unit Address 254 — Remote Network Address 252

Unit Address 251 / Unit Address 254 — Remote Network Address 251

Unit Address 250 / Unit Address 254 — Remote Network Address 250

Multiple remote C-Bus networks connected to local network using star topology.

Examples of valid network names are "First Floor", "My House", "Movie Theatre" or "Building 12A." Up to 255 unique networks may be connected together using C-Bus Network Bridges as shown.

For large installations where real time response is required from a central control, a C-Bus Ethernet Network Interface may be used to connect multiple C-Bus networks together using a common Ethernet backbone. The C-Bus Ethernet Network Interface is a 10 Base T Ethernet compliant device.

C-Bus™ Wiring Rules

Schneider Electric C-Bus incorporates a distributed intelligence lighting control system that employs a low voltage network of intelligent input, output and network communication units to control line rated loads. C-Bus network communications is achieved using proprietary C-Bus protocol over an unshielded twisted pair LAN cable (Cat-5 UTP). Some simple rules should be observed when specifying or designing a Schneider Electric C-Bus lighting control system.

Network Topology

Schneider Electric C-Bus lighting control system is comprised of C-Bus devices interconnected using Cat-5 UTP cable to achieve a topology-free C-Bus network. The lighting control system may incorporate a single network or multiple networks to overcome the following C-Bus network limitations:

- Maximum cable length
- Addressing limitations
- Maximum 2A/36VDC per network
- Reduce network response time (reduce local communications traffic)
- Accommodate physical layout and building structure (network/floor)
  When connecting multiple networks together, the following guidelines should be observed:
- Minimize the depth of the network topology for faster, more efficient communications.
- Distribute C-Bus Units on separate networks proportionally to avoid communications and power supply problems. For example if 120 C-Bus Units are required, split into two networks of 60 Units each, rather than 100 Units on the first network and 20 Units on the second.

Network Size

The maximum number of C-Bus units on any network shall not exceed 100 units. If the lighting control system requires more than 100 units, an additional network may be connected to the first network through a C-Bus Network Bridge to allow communications between networks.

- Maximum of 100 C-Bus units per network
- Maximum of 255 networks per system
- No more than 50 DLT keypads on one network because of advanced operations

Network Cable

Maximum cable length is determined by the impedance of the cable used. The resistive and capacitive impedance of network cable varies based on type. For Cat-5 UTP, the maximum length for reliable communications is 3280 ft.

- Maximum 3280 ft. of Cat-5 UTP cable per network
- C-Bus Network Bridges should be used to split a network into two or more networks when the total cable length required exceeds 3280 ft.

Power Supplies

The C-Bus Power Supply and Output units with integral power supply provide low voltage power to C-Bus devices on the network (36VDC). Current required to operate C-Bus devices varies, depending on the device. Refer to installation instructions for specific C-Bus devices to determine current requirements. Each C-Bus Power Supply supplies up to 350mA and C-Bus Output units with integral power supply will supply up to 200mA. Additional C-Bus Power Supplies may be added to maintain optimum network voltage of 15-36VDC. Distribute power supplies evenly on the network to evenly distribute voltage drop. All power supplies on a C-Bus network evenly share the network load. Typically, no more than (5) Power Supplies should be connected to a single network. When utilizing Output Units with an integral power supply rated at 200mA, a maximum of (10) power supplies is allowed. In no case shall the total available power exceed 2A at 36VDC.
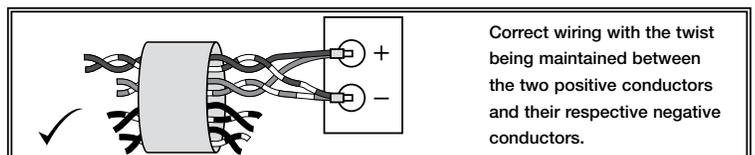
Network Burden

A Network Burden must be connected to a C-Bus network to achieve reliable network communications. The Network Burden is comprised of a capacitor in series with a resistor. One hardware Network Burden is included with each PC Interface (PCI) and two hardware Network Burdens are included with each Network Bridge. The Network Burden may be software enabled on most other DIN rail mounted C-Bus units. One, and only one, Network Burden is required for each C-Bus network. If more than one PCI or Network Bridge is used in a network, all but one Network Burden should be disabled. For systems with multiple networks connected together via Network Bridges, each network within the system should have only one Network Burden connected or enabled.

System Clock

The C-Bus network requires one system clock source to operate. This is not a real time clock; however, network communications are synchronized to this source. The PCI and Network Bridge units may be used to provide the system clock. If more than one of these units is present on a network, the network automatically determines which is active. A maximum of 3 network clocks should be enabled on a C-Bus network.

Connecting to the C-Bus Network

The C-Bus network is designed to operate at 36VDC. The C-Bus network is optically and/or galvanically isolated from line voltage rated circuits. When installing C-Bus devices the installer should always follow applicable NEC requirements for Class 2 wiring. Operating at a low voltage of 36VDC allows electrical work to be performed on the C-Bus side of the system while the system is powered on. Before working on C-Bus network wiring or devices located in enclosures where Class 1 wiring is present, turn off power to Class 1 circuits. The C-Bus network is short circuit protected to prevent damage to C-Bus devices if a short occurs. The C-Bus network will not work as long as the network is shorted. C-Bus devices are connected in parallel on the network. Whether the devices are connected using a daisy-chain topology, a star topology, or a combination of both topologies, the devices are always connected to the network in parallel to achieve a topology-free network. Homeruns are not recommended for C-Bus networks. When connecting C-Bus devices to the network cable (typically Cat-5 UTP), care should be taken to observe polarity requirements clearly marked on each device. It is recommended that installers use a Cat-5 UTP cable with a distinguishable color, such as pink, to distinguish C-Bus network cable from other network cable which may be present. This simplifies later servicing of the system by allowing service personnel to quickly identify C-Bus network cables.

Correct wiring with the twist being maintained between the two positive conductors and their respective negative conductors.

Planning & Design

The most important phase of any Schneider Electric C-Bus™ lighting control project is the planning and design phase. A complete plan starts with a good understanding of the lighting control requirements. To determine what is required, start by asking the right questions.

1. Where is lighting control required?

For example, a school may have both exterior and interior lighting that requires control. Define the exterior and interior lighting that requires control, and segregate lighting by space.

2. How is each space used?

Private offices within a building may share the same lighting control needs. Meeting and training rooms may have the same lighting control needs, regardless of where these spaces fall within in a building. Functionally, a classroom differs from a restroom, so the entire site, including interior and exterior spaces, should be segregated based on the way the space is used. Similarly used spaces may share basic lighting control needs.

3. How will occupants want to control lighting to best utilize the space?

Consider the needs of the occupant. For example, multi-scene control may be used in classrooms, conference rooms and training rooms. Restrooms, employee break rooms, copier/mail rooms and utility closets may only require occupancy-based control. Exterior parking lot and pathway lighting that is only needed at night may turn on and off based on time of day or sunrise and sunset. Private offices may require multi-scene of dimming controls, while open office areas may turn on and off with time of day schedule. While lighting control should save money, it should also enhance the functionality of the space.

4. What type of lighting is to be controlled?

If dimming is required, the type of lighting must be considered when selecting a dimmer.

5. When is lighting used?

This is important. During working hours, lighting may be used differently than during cleaning hours, for example. Consider the lighting use on weekends and after hours. Lighting may not be used during holidays, so it is important to define when lighting control will be needed giving consideration to holidays, inventory, shutdown and other events that may occur only once per year.

6. Is occupancy predictable?

If an area has predictable days and hours of occupancy, it may be best to use a time of day schedule to control lighting in this area. For areas with less predictable occupancy patterns, occupancy-based control may be required, or a combination of control schemes may best meet the functional needs of occupants and the energy efficiency needs of building owner. Having a clear understanding of the occupancy patterns of the building will help the designer develop a lighting control system that is convenient for occupants and achieves energy efficiency.

7. What are the energy code requirements?

Depending on the energy codes governing a particular building, based on its use, its location, and size, there may be specific requirements for lighting control. Understanding the functional requirements as defined by the governing energy code is essential in the planning and design phase. Oversights at this point could result in costly changes later to bring lighting and lighting control systems into compliance with building codes. In most energy codes, lighting and lighting control requirements are intermingled, with some codes providing prescriptive lighting control requirements to bring otherwise non-complying lighting systems into compliance.

8. What are the functional lighting control requirements for each space?

At this point in the planning process, start defining the functional lighting control needs for each space. This will aid the designer in the product selection process. Keep in mind that spaces that are used in similar ways may have similar or identical lighting control needs. Grouping spaces based on use may simplify this process. Lighting functions to consider are:

- Dimming or switching
- Manual or automatic
- Schedule-based shutoff or occupancy-based shutoff
- Mutli-scene or manual dimming control
- Manual or automatic daylighting control
- Zones or groups

9. Finally, what control functions are needed that include more than one space, zone, area or lighting group?

Will the occupant want a single switch to turn on and off all lighting in the building? Will the cleaning crew require special lighting controls to turn on multiple groups or zones? What type of automatic shutoff shall be used to turn off lighting in the building when the building is unoccupied?

The planning phase usually involves mapping the system requirements, and determining the hardware needs of the system. Thought should be given to placement and packaging of hardware, programming and cabling requirements. As planning transitions into designing, documentation of the system layout and functionality becomes more critical.

Design Project
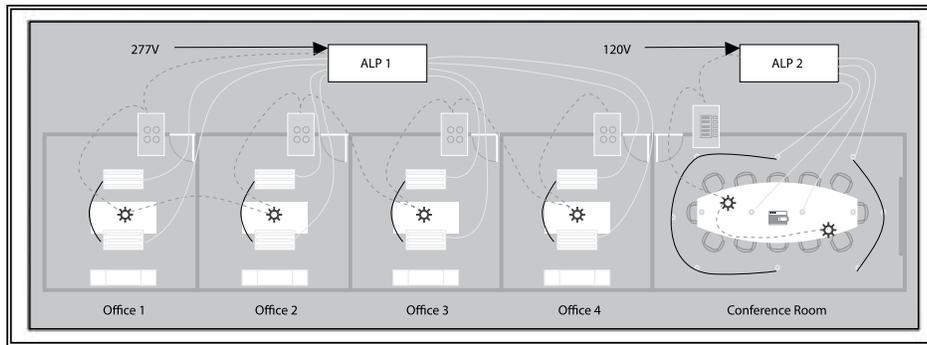
Office & Conference Room Design Project

Space Lighting
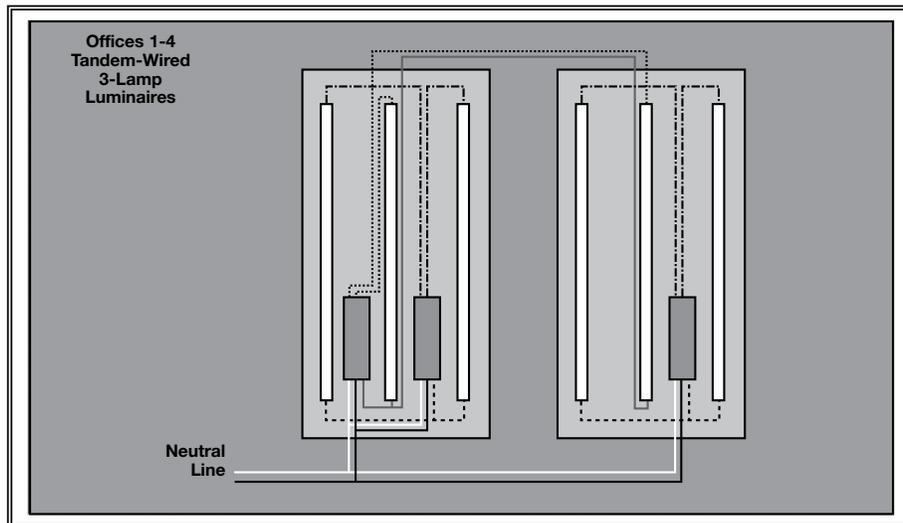
Offices 1-4: Tandem wired 3-lamp fluorescent luminaires (32W T8)
            Lighting power density of 192W/225SF= .853 W/SF
Conf Room: Recessed 32W compact fluorescent luminaires
            120V phase angle dimming ballast per luminaire

Space control

Offices 1-4: Multi-level control (0, 33%, 67%, 100%)
            4-button keypad (all on, A on/off, B on/off, all off)
            Occupancy sensor shutoff
Conf Room: Multi-Scene control with dimming control
            Dynamic Labeling Technology keypad (4-buttons x 2 pages)
            (6) preset scenes (all on, meeting, presentation, lecture, dining, all off)
            Dim up/down table lights
            Dim up/down room lights
            Occupancy sensor shutoff

Equipment Selection by Space

Offices 1-4: (1) C-Bus™ PIR 360° occupancy sensor per office
            (1) 4-Button Neo™ Keypad per office
            (2) 20A relay outputs per office
Conf Room: (2) C-Bus PIR 360° occupancy sensors
            (1) DLTTMh Neo keypad
            (4) 4A Phase angle dimmer outputs (1 per group)

C-Bus Input Unit Placement

Offices 1-4: - Place keypad in wall box adjacent to entry
            - Place occupancy sensor in ceiling over desk for best coverage
Conf Room: - Place DLT keypad in wall box adjacent to entry
            - Place (2) occupancy sensors over table for best coverage

151

Conf Room: (2) C-Bus™ PIR 360° occupancy sensors
          (1) DLTTMh Neo™ keypad
          (4) 4A Phase angle dimmer outputs (1 per group)

C-Bus Input Unit Placement

Offices 1-4: - Place keypad in wall box adjacent to entry
          - Place occupancy sensor in ceiling over desk for best
           coverage
Conf Room: - Place DLT keypad in wall box adjacent to entry
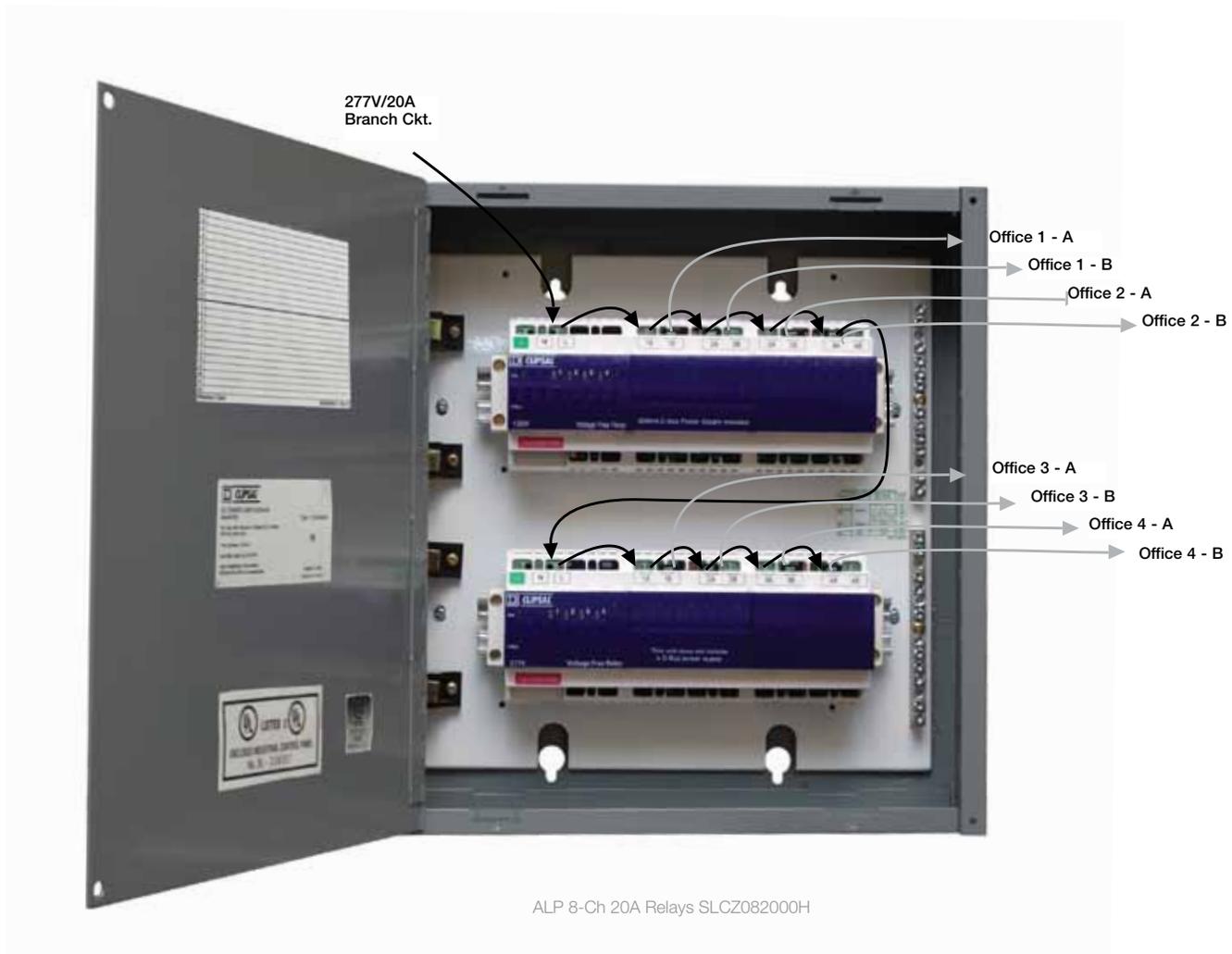   - Place (2) occupancy sensors over table for best coverage

Packaging of Output Units

Offices 1-4: In total, offices require (2) 4-Ch 20A relay units.
          Prepackaged Area Lighting Panel (ALP) SLCZ082000H

ALP 8-Ch 20A Relays SLCZ082000H

Conf. Room: In total, requires (1) 4-Ch Phase Angle Dimmer unit and (1) 4-Ch 20A relay unit. Custom packaged Area Lighting Panel in 24M enclosure.
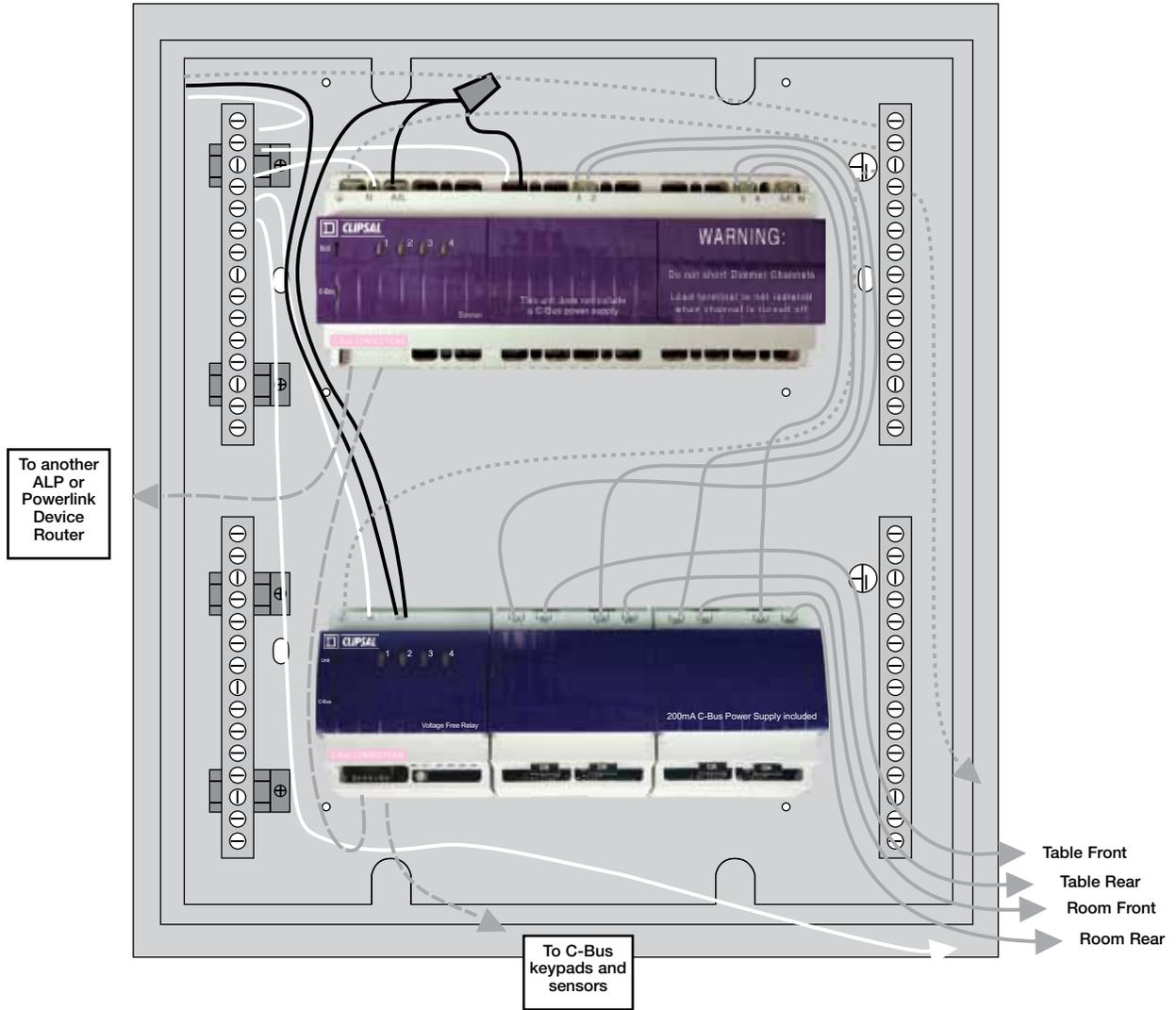
ALP with 4x20A Relay & 4x4A Phase Angle Dimmer

Bill of Material

Catalog #	Description	Qty
SLC5753L	C-Bus™ 360° PIR Occupancy Sensor	6
SLC2042004DT	C-Bus 4x20A Relay 120V No P/S	1
SLC2042004DT	SQDTM C-Bus 24M Enclosure	1
SLCZ082000H	SQD C-Bus ALP 8x20A Relay 277V with P/S	1
SLC2042004DT	C-Bus 4x4A Phase Angle Dimmer with P/S	1
SLC5084NL(WE)	C-Bus 4-Button Saturn™ Keypad White	4
SLC5085DL(WE)	C-Bus DLT Saturn Keypad White	1

Finished Design
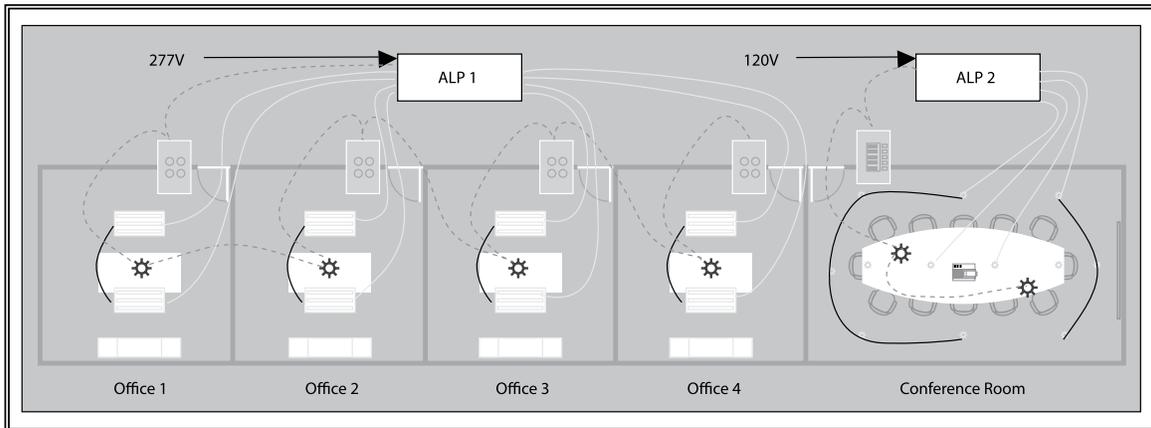
Completed Project Layout

Illustration of Design Project Controls

Installation

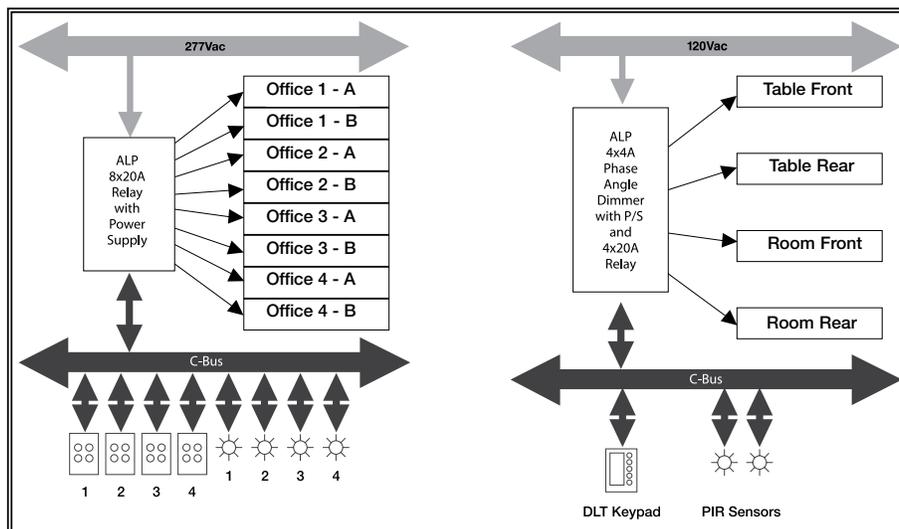Once the design phase is complete, installation may begin. Several simple steps are typically followed to achieve a fast and accurate installation of the C-Bus™ network control system.

1. Implementing programming requirements of the design on a PC. Build a database using C-Bus software that includes all the C-Bus units used in the lighting control system. Each unit is assigned a unit address.
2. Using the PC and a PC Interface, initialize and program each C-Bus device one at a time. Each device is assigned a unit address.
3. Packaging, cabling and electrical installation of the hardware.
4. Finalization and additional programming of C-Bus devices as required.

Commissioning

Verify compliance with the specification and commission the system. A design review may be performed at this point in the process. Modifications or design changes seldom require installation of additional hardware, typically requiring only programming changes.

One-line Diagram

Schneider Electric occupancy sensors, Powerlink® and C-Bus™ control systems can be used independently or combined to provide the optimal lighting control solution.

Device Router

PC Web Browser

Ethernet

Powerlink Lighting Control Panelboard

Input Units

C-Bus Remote Control

Neo Keypad

Saturn Keypad

DLT Keypad

Output Units

Multi Channel Relays

Network Units

Power Supply

PC Interface
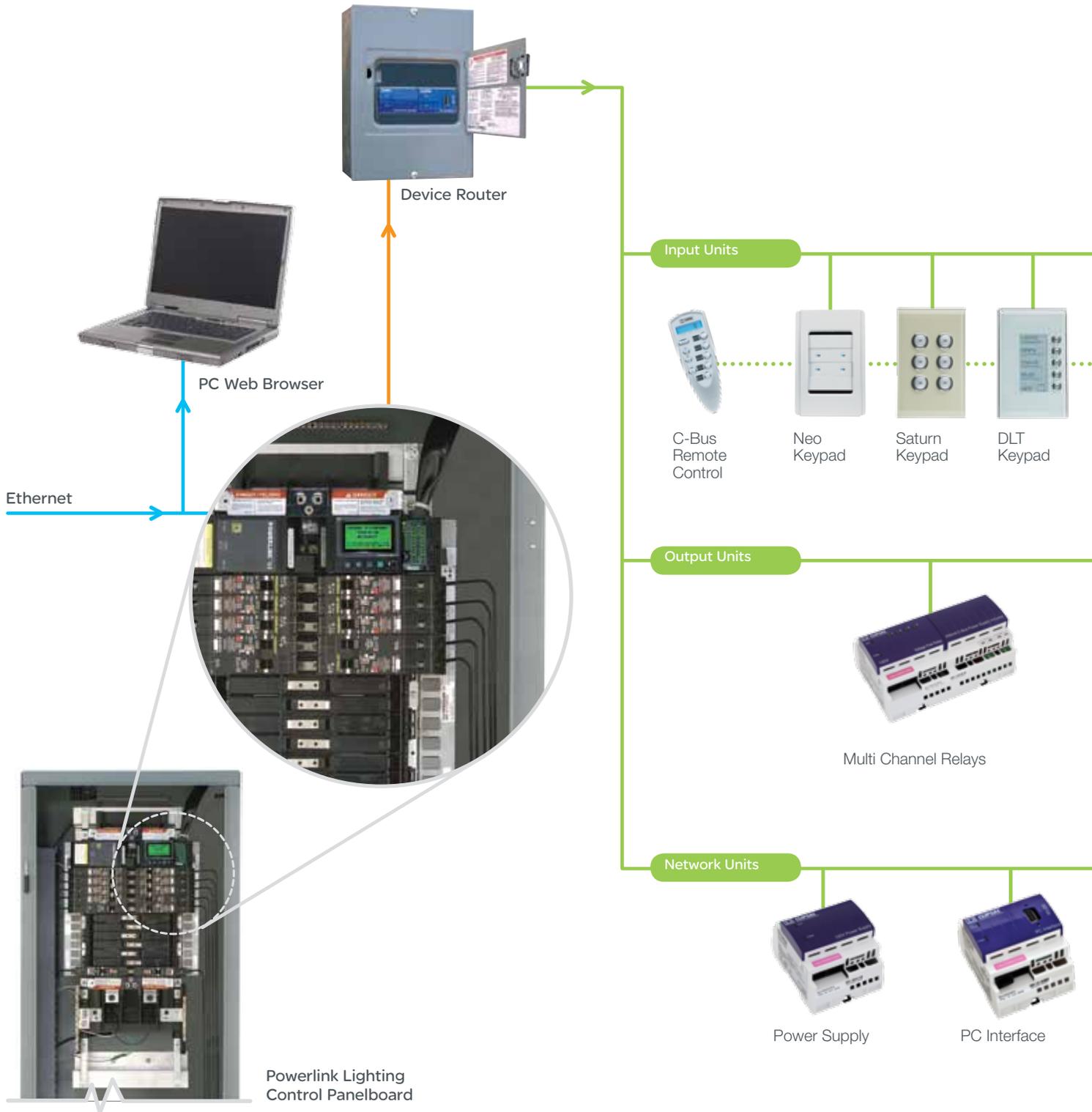
Schneider Electric Occupancy Sensors

Occupancy sensors from Schneider Electric are the perfect solution for applications needing simple occupancy-based controls. Low-voltage ceiling- and wall-mounted occupancy sensors can be tied into C-Bus network using simple dry contact input.

Wall Switch   Ceiling Mount   Wall Mount   Fixture Mount

Touch Screen

Sensor
(PIR/IR/Light Level)

Bus Coupler
(Dry Contact Connections)

Auxiliary Input Unit

General Input Unit

Phase Angle Dimmer

Professional
Series Dimmer

0-10 V
Dimming Unit
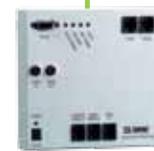
Changeover Relay Unit

Network Bridge

Ethernet Gateway

DALI Gateway

Pascal Automation
Controller

Telephone
Interface Unit

One-line Diagram

C-Bus™ home control solutions provide the utmost in capabilities,
lower commissioning cost and greater customer appeal.

Load Center ▼

C-Bus Din Rail Enclosure ▼

Professional Series Dimmer

Model Shown: 60M
Variety of Sizes Available

Wiser Home Controller

User Interface

Web Tablet

Mobile Phone

TV Screen

Personal Computer

Color Touch Screen

Door Entry System

C-Bus DIN Rail Units

Input Units

Auxiliary Input

General Input

C-Bus DIN Rail Mounted Units provide a vast array of capabilities, scalable for virtually any size job, from a single room to an entire home. Dimmers, relays, timers, controllers and interface connections are all contained within C-Bus enclosures.

Output Units

Multi Channel Relays

Phase Angle Dimmer

0-10 V Dimming

Changeover Relay

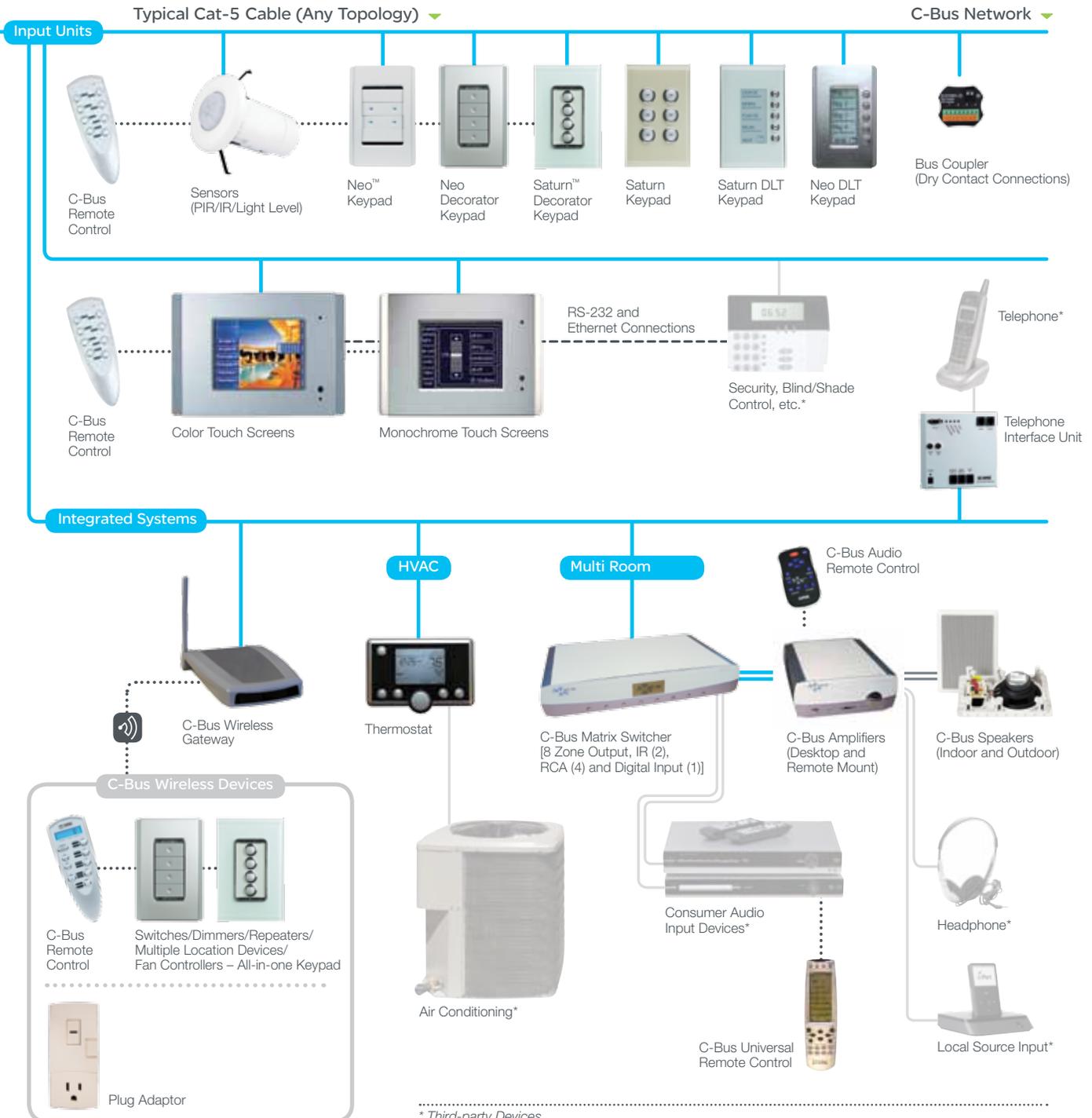### Network Units

Power Supply

PC Interface

Network Bridge

Ethernet Gateway

DALI Gateway

Pascal Automation Controller

Typical Cat-5 Cable (Any Topology) ▾   **C-Bus Network** ▾

Input Units

C-Bus
Remote
Control

Sensors
(PIR/IR/Light Level)

Neo™
Keypad

Neo
Decorator
Keypad

Saturn™
Decorator
Keypad

Saturn
Keypad

Saturn DLT
Keypad

Neo DLT
Keypad

Bus Coupler
(Dry Contact Connections)

C-Bus
Remote
Control

Color Touch Screens

Monochrome Touch Screens

RS-232 and
Ethernet Connections

Security, Blind/Shade
Control, etc.*

Telephone*

Telephone
Interface Unit

Integrated Systems

HVAC

Multi Room

C-Bus Audio
Remote Control

C-Bus Wireless
Gateway

Thermostat

C-Bus Matrix Switcher
[8 Zone Output, IR (2),
RCA (4) and Digital Input (1)]

C-Bus Amplifiers
(Desktop and
Remote Mount)

C-Bus Speakers
(Indoor and Outdoor)

C-Bus Wireless Devices

C-Bus
Remote
Control

Switches/Dimmers/Repeaters/
Multiple Location Devices/
Fan Controllers – All-in-one Keypad

Air Conditioning*

Consumer Audio
Input Devices*

C-Bus Universal
Remote Control

Headphone*

Local Source Input*

Plug Adaptor

Third-party Devices

158

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Products Guide - Lighting Control and Integrated Home Systems

ABOUT THIS ADDENDUM

This bulletin appends selection and technical information and catalog numbers appearing in 1200CT0701R09/09 "Products Guide – Lighting Control and Integrated Home Systems".

REVISIONS BY PAGE NUMBER

The information below references corresponding page number in the Products Guide.

Page 7: Commercial Grade Occupancy Sensor – Ultrasonic Single Circuit Wall Switch

Catalog number	Color
SLSUWS1277UI	Ivory
SLSUWS1277UW	White
SLSUWS1277UL	Light Almond
SLSUWS1277UG	Gray
SLSUWS1277UB	Black

Page 8: Commercial Grade Occupancy Sensor – Ultrasonic Dual Circuit Wall Switch

Catalog Number	Color
SLSUWD1277UI	Ivory
SLSUWD1277UW	White
SLSUWD1277UL	Light Almond
SLSUWD1277UG	Gray
SLSUWD1277UB	Black

Page 9: Commercial Grade Occupancy Sensor – Dual Technology Single Circuit Wall Switch

Catalog Number	Color
SLSDWS1277UI	Ivory
SLSDWS1277UW	White
SLSDWS1277UL	Light Almond
SLSDWS1277UG	Gray
SLSDWS1277UB	Black

Page 10: Commercial Grade Occupancy Sensor – Dual Technology Dual Circuit Wall Switch

Catalog Number	Color
SLSDWD1277UI	Ivory
SLSDWD1277UW	White
SLSDWD1277UL	Light Almond
SLSDWD1277UG	Gray
SLSDWD1277UB	Black

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Page 14: Wall Mount Occupancy Sensor – Passive Infrared (PIR)

Catalog Number	Color
SLSWPS1500	White

Page 25: Enclosure Cabinet Dimensions – Track Limiting Panels

Enclosure	Cabinet Dimensions (H x W x D)
12M	9 x 14.25 x 3.75 in. (229 x 362 x 95mm)
21M	17.92 x 14.25 x 3.75 in. (455 x 362 x 95mm)
42M	33.78 x 14.25 x 3.75 in. (858 x 362 x 95mm)

Page 50: C-Bus™ Neo DLT Keypad – List of Available Colors

The Neo DLT™ keypad is also available in Black (BK).

Page 60: C-Bus PCI-USB – Revised Product Features

The Data cable for connecting PCI and personal computer does not include DB9 connectors.

Page 89: 12M Enclosure – Revised Dimensions

12.78 in. (W) x 9.09 in. (L) x 4.0 in. (D) [325 mm (W) x 231 mm (L) x 102 mm (D)]

Page 90: 24M Enclosure – Revised Dimensions

14.50 in. (W) x 14.94 in. (L) x 4.0 in. (D) [368 mm (W) x 379 mm (L) x 102 mm (D)]

Page 92: 36MS Enclosure – Revised Dimensions

22.12 in. (L) x 15.44 in. (W) x 3.9 in. (D) [562 mm (L) x 392 mm (W) x 99 mm (D)]

Page 117: C-Bus IR Reader – IR Transmitter Revised Description

Catalog Number	Description
SLC5034NIRT	IR Transmitter

Page 129: C-Bus RF Wireless Controls/RF Switch and Scene Controllers

Catalog Number	Description
SLC5854NLM(xx)*	Neo Decorator Style RF Scene Controller (4 button only)
SLC5884NLM(xx)*	Saturn Decorator Style RF Scene Controller (4 button only)

NOTE: * Wallplate Sold Separately. Refer to individual product manual for order information.

Page 138: C-Bus Software/Schedule Plus

Catalog Number	Description
SLC5000SDINST1	Schedule Plus installer Key*

* Installer key allows installers to create/commission projects using HomeGate software. This code key is time restricted and allows the software to operate in 'normal' mode for anywhere between 48 to 72 hours per use (the software then returns to evaluation/demo mode).

NOTE: The installer code key will also be compatible with future software releases.

Contact the Customer Information Center for technical support by phone at 1-888-778-2733 or e-mail at lightingcontrol.support@us.schneider-electric.com.

You may also find helpful information on our web site at www.Schneider-Electric.us.

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