



# THE SUPPLY LINE

2017





# TABLE OF CONTENTS

Page 7.....	3M	Page 43.....	LAPP Group
Page 8.....	ABB	Page 44.....	Legrand - On-Q
Page 9.....	ACTi	Page 45.....	Legrand - Pass & Seymour
Page 10.....	Acuity Controls	Page 46.....	Legrand - Wiremold
Page 11.....	Arlington	Pages 47-48.....	Leviton
Page 12.....	Broan NuTone	Page 49.....	Lithonia Lighting
Page 13.....	Burndy	Page 50.....	Lutron
Page 14.....	Cree	Page 51.....	Milbank
Page 15.....	Datalogic	Page 52.....	Milwaukee
Page 16.....	Dottie	Page 53.....	Brad Woodhead Molex
Page 17.....	Eaton - Automation & Control	Page 54.....	NSI Industries
Page 18.....	Eaton B-Line series	Page 55.....	Omron STI
Page 19.....	Eaton Bussmann series	Page 56.....	Panasonic
Page 20.....	Eaton Crouse-Hinds series	Pages 57-58.....	Pepperl + Fuchs
Page 21.....	Eaton - Power Distribution	Page 59.....	Philips
Pages 22-23.....	Eaton Lighting solutions	Page 60.....	Phoenix Contact
Page 24.....	Erico/Pentair/Caddy	Page 61.....	Pro-face
Page 25.....	FLIR	Page 62.....	RAB Lighting
Page 26.....	General Cable	Page 63.....	RedLion
Page 27.....	GE Automation & Controls	Page 64.....	Rittal
Page 28.....	GE Industrial Solutions	Page 65.....	Schneider Electric
Page 29.....	GE Lighting	Page 66.....	Siemens
Page 30.....	Grace Engineered Products, Inc	Page 67.....	Signamax
Page 31.....	Greenlee	Page 68.....	SolarWorld
Page 32-33.....	HellermannTyton	Page 69.....	Square D
Page 34.....	Hitachi	Page 70.....	Sylvania
Page 35.....	Hoffman	Page 71.....	Thomas & Betts
Page 36.....	Hubbell Killark	Page 72.....	Universal Lighting Technologies
Page 37.....	Hubbell Lighting		
Page 38.....	Hubbell Wiring Device-Kellems		
Page 39.....	Ideal		
Page 40.....	Juno Lighting Group		
Page 41.....	Key Digital		
Page 42.....	Klein Tools		





# Powered for Success

With the evolution of lighting, power management and alternative energy, the energy market is a growing demand in today's economy. That's why Crescent Electric provides a trained staff of Energy and Lighting Specialists and premier product lines for all aspects of energy efficiency.



## Our Services

- Lighting Solutions/Retrofits
- Power Management
- Energy Savings
- Alternative Energy
- Product Recommendations
- ROI Analysis
- No-obligation Energy Audits
- Fixture and Lamp Recycling Programs
- Rebate Assistance
- Project Financing



# Industrial Ingenuity

Succeeding in the complex industrial segment requires a partner that is always on the lookout for ways to increase quality, safety and productivity; while at the same time find ways to reduce energy consumption and machine downtime. Crescent Electric is uniquely qualified to assist our clients in these areas with a local team of experienced Industrial Specialists and Certified Application Engineers.

## Our Services

- Process improvements and machine throughput
- Inspection, sensing and data logging
- Control and automation solutions, products and training
- Machine & Power Safety Assessments and Remediation
- Comprehensive Energy Analysis, Solutions & Rebate assistance
- Complete solutions for power quality, monitoring and maintenance
- Local inventory and daily deliveries

**Technical Support Center Hotline**  
(866) 432-9581 or [techsupport@cesco.com](mailto:techsupport@cesco.com)







# Datacomm Mix

In the low-voltage market it's essential for you to have the latest products and resources. That's why Crescent provides you with Datacomm Sales Managers, Account Managers, and an Inside Support Team to help you find the right products from our premier product lines for all aspects of low-voltage installations.

## OurLine

◆ STRUCTURED WIRING	◆ SECURITY	◆ AUDIO	◆ VIDEO	◆ METAL	◆ AUTOMATION
<ul style="list-style-type: none"> <li>▪ Category 5e • 6 • 6A</li> <li>▪ MM / SM Fiber Optics</li> <li>▪ Coaxial Connectors</li> <li>▪ Jacks and Wall plates</li> <li>▪ Patch Panels</li> <li>▪ Category Cables</li> <li>▪ Fiber Interconnect Boxes</li> <li>▪ Passive Optical LAN (POL)</li> </ul>	<ul style="list-style-type: none"> <li>▪ CCTV</li> <li>▪ Intrusion Detection</li> <li>▪ Access Control</li> <li>▪ Fire Alarm</li> </ul>	<ul style="list-style-type: none"> <li>▪ Surround Sound</li> <li>▪ Distributed Audio</li> <li>▪ Audio Cable</li> <li>▪ Passive Audio</li> <li>▪ Paging Systems</li> <li>▪ Auditorium / Theater</li> </ul>	<ul style="list-style-type: none"> <li>▪ Projectors</li> <li>▪ TV / Monitor</li> <li>▪ Distributed Video</li> <li>▪ Baluns</li> <li>▪ Matrix</li> <li>▪ Extenders</li> <li>▪ Splitter</li> <li>▪ Video Cable</li> </ul>	<ul style="list-style-type: none"> <li>▪ Racking</li> <li>▪ Cabinets</li> <li>▪ Basket Tray</li> <li>▪ Ladder Tray</li> <li>▪ Cable Management</li> <li>▪ J-Hooks</li> <li>▪ Tools/Testing</li> <li>▪ Labeling</li> <li>▪ Floor Boxes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lighting</li> <li>▪ Entertainment</li> <li>▪ Security</li> <li>▪ Temperature Control</li> <li>▪ Remote Access</li> </ul>

# CrescentOnline

## cesco.com

CESCO.com is your 24/7 tool to research and purchase electrical products from Crescent Electric Supply Company. Shop local inventory on 200,000 products and place your order for will call, Crescent truck or FedEx delivery. Log on today to see the most advanced e-commerce platform in the industry

- View - extensive product content
- Compare - products side by side
- Check - local inventory
- Shop - using account pricing
- Upload - an Excel parts list via the quick order pad
- Shop - pre-built lists using your own part numbers
- Order - on account or with a credit card
- Check - open orders
- Get - tracking info
- Print - invoices
- Review - billing summary
- Pay - statements via secure bill pay



Need help getting online?  
Questions? Email us at:  
[onlinesupport@cesco.com](mailto:onlinesupport@cesco.com)

# Crescent Integrated Supply

Crescent Electric Supply Company has been a pioneer of inventory management for nearly 100 years. Our expertise can assist you with MRO stockroom management, raw material in an OEM environment, labor solutions, mobile inventory solutions and warehouse logistics.



## StockroomFeatures

- Integrated bar-code scanner enables quick product entry and ordering
- Optional Bluetooth scanner facilitates entry
- Cycle counting tracks and updates on-hand quantities
- Supports Crescent's Consignment Billing and auto-transfer processes
- Work online or off-line during inventory counts and ordering
- Manage multiple orders simultaneously



### 3M™ Hard Hat 70 Lumen Task Light

- Lightweight
- 70 Lumens
- IPX-4 Water resistant
- 4 modes
- LED
- 3 AAA batteries included
- Comes with 3M™ Dual Lock fasteners eliminating the need for a headband that could interfere with earmuffs and other attachments



### 3M™ Fire Barrier Blocks, Plugs and Planks

- Fire protection for large rectangular protection and small circular openings
- Plugs: No tools, Insert plug and done, Two sizes available: 2" and 4" diameter plugs
- Blocks and Planks: No wire mesh. Stack, Seal, and Done
- Tested to meet ASTM E814. Used for openings as large as 36"x36" and can be trimmed on the spot

### 3M™ Comfort Grip and 3M™ Gripping Material Work Gloves

- 3M™ COMFORT GRIP GENERAL USE GLOVES: Provide excellent grip, even in wet or oily conditions
- 3M™ COMFORT GRIP WINTER GLOVES: The comfort and dexterity of 3M General Use Gloves, but with added warmth for cold weather applications
- 3M™ COMFORT GRIP CUT RESISTANT GLOVES: The same features and comfort as the 3M General Use Gloves with even greater cut, puncture and tear resistance
- 3M™ GRIPPING MATERIAL WORK GLOVES: Comprised of thousands of micro fingers to provide excellent grip, even in dirty, wet or oily conditions



### 3M™ Performance Plus™ Wire Connectors

- Three connectors replace eight standard connectors: Saves time on the job and reduces inventory, offering a broad wire taking range and requiring fewer sizes to get the job done
- Flexible skirt: Covers overstripped wires, providing increased protection
- UL listed: 600V for building wire and 1000V for signs, fixtures or luminaires



### 3M™ DT series Duct Tape

- This trio can handle the full range of duct tape strengths needed to tackle any job
- Multilingual, individually wrapped rolls are color-coded by performance level, and hand tearable for ease of use
- 3M™ All Purpose Duct Tape DT 8 Holds to smooth metal, glass, plastic, sealed concrete and more. 8 mil thickness
- 3M™ Heavy Duty Duct Tape DT 11 The go-to tape for holding, seaming, sealing, repairing and packaging. Ideal for sticking to plastic. 11 mil thickness
- 3M™ Super Duty Duct Tape DT 17 Super thick for super tough jobs including repairing, seaming, and protecting metal parts and surfaces. 17 mil thickness



### 3M™ Terminal Kits

- 3M™ Scotchlok™ Heat Shrink Terminal Kit (SHSTK-1): 120 assorted pieces; A selection of our premier line of terminals, connectors and disconnects offering moisture protection, corrosion resistance and durability
- 3M™ Highland™ Terminal Kit (HTK-1): 180 assorted pieces; A selection of our most popular vinyl insulated ring, fork, butt splice and disconnect terminals
- UL Listed and CSA Certified



### 3M™ Scotch® Rubber Splicing Tape 130C and 23

- Insulate bus bars, motor leads and electrical connections up to 69 kV
- Self-fusing material helps weatherproof and moisture seal low- and medium- voltage connections
- Available with liner for a cleaner installation and without liner for faster installation

### 3M™ Cable Ties

- 3M™ Cable Ties are designed to secure wire bundles and harness components quickly, without slipping
- Featuring a self-locking head, most are designed to handle temperatures from -40°F (-40°C) to 185°F (85°C)
- Majority are made in the USA



### 3M™ Heat Shrink Tubing

- Full thin wall and heavy wall product line
- From a manufacturer known for high quality insulation materials and tapes
- Made in USA



### 3M™ SecureFit™ Protective Eyewear(200 and 400 Series)

- The 400 Series features 3M™ Pressure Diffusion Temple Technology, soft adjustable nose pads, dual-injected temples and foam gasket
- Removable foam-lined gasket helps keep debris out of your eyes while providing comfort and cushioning
- With the 200 Series feel the difference as soon as you put them on. Temples automatically self-adjust to provide a secure, comfortable fit each time.
- Contemporary and lightweight, weighs less than 1 ounce

### Pluto Safety PLC and Gateways

- Pluto is a full-featured Safety PLC with advanced hot-swappable technology that allows you to replace the PLC and reprogram in less than a minute
- Network up to 32 Pluto Safety PLCs; standalone versions are available also
- Highest safety rating PLe (EN/ISO 13849-1) and SIL3 (EN IEC 62061)
- Programming software and support are included at no charge
- Capable of using Dual Channel and Dynamic Pulse technologies
- Dynamic Pulse allows you to put 150 devices on the smallest Safety PLC



### Orion Safety Light Curtains and Grids

- Base and Extended function versions in 14 and 30mm resolution available
- Base version is designed to cover about 85% of safety light curtain applications and can work with the Pluto Safety PLC for muting applications
- Push-button programming with Orion Extended versions — no more difficult-to-use dip switches
- Enhanced Diagnostics and LED Alignment Aids
- Safety Category 4, Type 4, SIL 3, PLe



### ABB Jokab Safety Quick Guard Fencing Systems

- The Quick Guard system installs more easily than other systems
- ABB Jokab Safety distributors work with Quick Guard Partners to provide local engineering and support for your safety fencing needs
- Quick Guard Fencing projects are typically provided with drawings generated by ABB Jokab Safety SafeGuard Fencing software
- If you want to build your own Quick Guard fencing solution, you can also order directly through your ABB Jokab Safety distributor

### ABB Jokab Safety Mats, Edges and Bumpers

- Safety Mats stop the machine when someone steps on the mat; they feature heavy-duty molded construction with internal strain relief for wiring and are available with integrated rubber trim or blunt edges with aluminum trim
- Safety Edges are used on many machines with automatically closing guards to sense an obstruction and stop the motion
- Safety Bumpers are used to stop motion on automatically guided vehicles, articulated stages and machines such as scissor lifts



### Eden Coded Safety Sensor, OSSD (Dual Channel) and Dynamic Pulse versions

- Non-contact, non-magnetic, IP69K rated, PLe Safety Sensor
- Both the OSSD and Dynamic Pulse versions can have 30 devices in series and still achieve PLe
- Advanced Diagnostics allow you to find a problem quickly and easily to keep your machine running
- General coded and uniquely coded versions available to comply with current safety standards
- Eden OSSD is ideal for retrofitting existing dual channel systems



### Dual Channel Safety Relays and Vital Dynamic Pulse Safety Controller

- Full range of Dual Channel Safety Relays such as Universal, Timed Delay and Two Hand Control
- Full line of Dual Channel safety devices, including Mechanical, Non-Contact Magnetic, and Locking Safety Switches — many of these available in stainless steel and explosion-proof versions
- JSBR4 two-hand control safety relay can be used with the ABB Jokab Safety Safeball, a two-hand control button that is both ergonomic and third-party safety approved
- Vital Safety Controller can manage 30 Dynamic Safety devices, such as Eden Sensors and Smile Estops, and Dual Channel Devices can be adapted with the Tina Dynamic Pulse Adapter
- Hot-swappable technology allows you to quickly change Safety Relays or Vital Safety Controller to keep your machine running



### ABB Jokab Safety Rope Switches

- Features heavy-duty die-cast (IP67) or stainless steel (IP69K) construction for harsh environments
- Easily wired with up to four entry points for conduit
- Ranges from 50 to 250m
- Can be ordered with LED indicator lights or an easily added estop button
- Easy-to-use tensioners make cable adjustments simple
- Flexible Roller Eyebolts make going around corners easy and manageable

### ABB Jokab Safety Devices

- ABB Jokab Safety provides the broadest offering of machine safety products
- Knox Safety Door Lock
- Enabling Devices
- EStrong Stainless Steel Heavy-Duty Estop
- Smile Estop in Dual Channel and Dynamic Pulse versions







### Surveillance Cameras/PTZ and Speed Domes

- Active Surveillance requires more than just digitally zooming into an image. Cameras with Pan/Tilt/Zoom allow operators to lock onto events and follow them with the best possible resolution.
- Mini PTZ's in 1.3MP, 2MP, 3MP, 4MP and 5MP models with 10x Zoom
- Full size PTZ's in 1.3MP and 2MP models with 30x or 33x Optical Zoom
- Auto-Tracking and Observe/Zoom/Track (OZT) on some models
- Almost all models support PoE, or PoE+ for ease of installation/retrofit



### Surveillance Cameras Zoom/Auto Focus Box/Bullet/Dome

- For the sharpest picture, ease of installation, and changes to environment or operational requirements.
- Speed Installation time with Auto Focus and Remote Zoom control
- 1.3MP, 2MP, 3MP, 4MP, 5MP and 10MP models
- Outdoor Models feature IP66-68 (varies by model) Weather Resistance, and IK10 Vandal Resistant
- Adaptive IR with range up to 40m/120 feet (varies by model)
- Zoom Lenses from 3x (3-9mm), through 30x (4.9-127mm) versions



### Panoramic/Hemispheric Cameras

- Overview with a single fixed camera providing Panoramic views of 180° or Ceiling views of 360°
- Fisheye Models - affordable units up to 10MP, utilizing Client Side Dewarp for forensic detail
- Internal Dewarp models to provide the sharpest images
- Models with Superior Low Light System and/or Superior Wide Dynamic Range processing
- Indoor or Outdoor applications in Mini, Mobile, or Full Size models



### Surveillance Cameras/Covert

- For projects where low profile and unobtrusive surveillance is required.
- 2MP, and 5MP models
- Models include Straight Pinhole, L Pinhole, Wide Angle, and Fisheye Lenses
- I/O Box features SDXC Micro support for On-Camera Backup Recording for local Video Storage, two way Audio support, Digital Input/Output, and Serial Data channel.
- I/O Box is Din Rail Mountable (short rail included)
- Camera Mount Adapters include Surface, Flush, Corner, Height Strip, and more.

### nLight® AIR

- Easier installation with fixture embedded smart sensor
- Wireless battery-powered wall switch with 10 year life expectancy
- Up to 30% additional energy savings with occupancy and daylight sensing
- Industry leading 5-tier wireless security architecture



### Push-Button SwitchPod (sPODM)

- Bi-level lighting control that meet strict energy and building codes without having to source special sensors or power packs
- Enables Standard Occupancy Sensors to be used for Manual On Operation
- Alternative Usage as Override Switch for Auto-On Applications
- Single Gang Decorator Style w/ either 1 or 2 On/Off Switches



### Fixture Mount Sensor (LSXR)

- Four interchangeable lenses - high mount 360°, low mount 360°, high mount aisle way, and small motion 360°
- Integrated mounting bracket drops lens down 3" from chase nipple - no bracket accessory required
- 100% passive infrared (PIR) detection



### 0-10V Dimmer & Occupancy Sensor (WSX D)

- 0 - 10V Dimming
- Occupancy sensing
- Integrated photocontrol
- eLDOLED compatibility for advanced dimming control reliable
- Performance digital passive infrared detection
- Passive Dual Technology (PDT) with Microphonics™



### Standard Range 360° Sensor (CM PDT 9)

- Dual Technology (PDT) utilizes PIR/ Microphonics detection (patented)
- 360° Coverage pattern
- Push-button programmable
- Adjustable time delays
- No field calibration or sensitivity adjustments required
- 100 Hr. Lamp burn-in timer
- Ideal for open area office lighting control



Acuity Controls is advanced lighting controls technology, service and support from a single expert source. Our product solutions include occupancy and photosensors, panels, switches, fixture-level and wireless controls that simply work. nLight® is a networked digital lighting control system that provides both energy savings and increased user configurability. Sensor Switch® offers one of the industry's broadest selections of occupancy sensors and photocell devices. Acuity Controls are not just smarter - they're easier.

### Wireless Dual Technology Sensor

- Wireless sensor operation with up to 10-year battery life
- RDT™ Wireless (902 MHz) compliant
- 100% digital PIR detection and optional dual technology (PIR / Microphonics™) detection
- Compatible with LED, electronic & magnetic ballasts, CFL and incandescent loads
- Simple push-button pairing



### Standard Range 360° Sensor (CMRB PDT 9)

- 100% Digital PIR detection - excellent RF immunity
- 360° Coverage pattern
- Patented dual technology with PIR/ Microphonics detection
- Pendant-mounted or surface-mounted through 1/2" knockouts
- Self-contained relay, no power pack needed



### Wall Switch Sensor (WSD PDT)

- Dual Technology (PDT) utilizes PIR/Microphonics detection (patented)
- Self-grounding mounting strap
- Device accommodates powering over ground or neutral connection (patent pending)
- Line power and load wires are interchangeable - impossible to wire backwards (patented)



### Mini Power Pack (MP20)

- Dual Voltage Transformer- transforms 120, 240 or 277 Volts to Class II 15 VDC to power the remote sensors
- Self-Contained Relay
- Powers up to 14 sensors
- Size : (1/2" inch chase nipple not included) MP-20 & MSP-20: 21/4" x 3" x 17/8"



### Power Pack (PP20)

- Powers Low Voltage Sensors (PP20/PP20 2P only)
- Transforms 120, 240 or 277 Volts to Class II 15 VDC to power the remote sensors
- Self-Contained Relay(s) Switch
- Utilizing our Patented Relay Circuit Protection the PP20 switches the lighting load On and Off







**Snap on Snap2It® Connectors-Perfect for MC-PCS Cable (4010AST, 5010AST, 505010AST, 4110ST, 414110ST)**

- Easiest to insert snap-on connectors
- Handles widest variety of cables - including new MC-PCS cable with lighting and low voltage circuits in same cable
- Snap2It connectors save at least 17 seconds per connector



**Steel TV BOX™**

- Recessed power/low voltage combo boxes deliver flush to the wall mounting of flat screen TVs
- For use with metal raceways in new or retrofit work
- Plugs, connectors stay inside box without extending past the wall
- Two-, three- and four-gang (TVBS505, TVBS507, TVBS613)
- c UL us Listed

**IN/OUT BOX™ Adjustable Plastic Outlet Box**

- Set for 1/2" wall thickness - Adjusts up to 1 1/2"
- Ideal for use when final wall thickness is unknown
- No set back boxes - Depth adjustment screw is always accessible
- Secure mounting on wood or steel studs in new construction
- Single gang, two-, three-, four-gang styles (FA101-FA104)
- UL/CSA Listed



**RAINBOX™ Non-Metallic Fan/Fixture Box For Outdoor Use**

- Raintight Listed assembly for wet or damp areas like pool screen enclosures or open porches
- Saves time - no field revisions
- Completely sealed installation - no exposed wiring
- 21.8 cu. inch box handles canopies up to 7" diameter, and fans/fixtures up to 70 lbs
- UL/CSA Listed



**Two-gang Box Extender with Larger Flange**

- Extend set back electrical boxes up to 1 1/2 inches
- Larger flange covers miscut openings, fits midi and maxi plates - trimmable for use with standard plates
- Cost the same as Arlington's 'regular' flange box extenders
- 2-hour fire rating
- Single and two-gang (BE1X, BE2X)
- UL/CSA Listed



**Adjustable Floor Boxes (FLBA and FLBAR101)**

- Flush-to-the-floor receptacle installations
- Adjustable to finished floor height up to 2"
- Designed for new or retrofit work
- Non-metallic box with non-metallic or metal covers
- Threaded plugs or flip lids to protect unused box



**ONE BOX™ Plastic Outlet Box**

- For new work or retrofit
- Secure mounting to wood or steel studs - No wobble
- 2-hour fire rating
- Single gang, two-, three-, four-gang styles (F101-F104)
- UL Listed



**Steel Pan Box for Fan/Fixture Installation (FBR40712R)**

- Adjustable mounting bracket allows positioning of box anywhere along bracket
- Fits between wood I-joists or rafters set 12" on center in retrofit work
- One piece design, captive installation screws
- UL rated: 35 lb fan, 50 lb fixture

**Liquid-tight, Concrete-tight Fittings for MC Jacketed Cable**

- One fitting fits multiple MC jacketed cable sizes
- Reduces inventory - saves the cost of stocking several different fittings
- Ideal for parking decks and high rise residential construction
- Three sizes (LTMC50, LTMC507, LTMC75)
- UL Listed



**Grounding Bridge**

- Provides reliable intersystem bonding between power and communication system
- Four termination points for multiple hookups of telephone, cable, satellite
- Zinc and bronze, with or without conduit adapter
- Meets 2014 NEC ground requirements
- Use indoors or outside
- Easy access for inspections





- ZB80/ZB110 ULTRA GREEN™**
- Multi-Speed Fan rated for intermittent and continuous ventilation
  - ENERGY STAR® certified. HVI certified at <0.3 Sones, ULTRA Silent™ Sound technology provides the quietest sound rating obtainable
  - ULTRA Quick™ Installation Technology saves time with the fastest, easiest, most universal installation. Fits 2" x 8" ceiling construction



- AE80/AE110 InVent™**
- New Construction and Retro-Fit Fan. FoldAway™ mounting ears allow for installation on both
  - ENERGY STAR® certified and TrueSeal™ damper technology has a tighter seal, reducing backdraft
  - EzDuct™ Connector allows room-side installation with no attic access required
  - Effective ventilation clears humidity and odors with 4" duct

**744 Recessed Fan/Light**

- High efficiency 70 CFM centrifugal fan operates at a quiet 1.5 sones, you'd never know it was a fan, and that's the point!
- Uses a standard A19 base, 75 watt maximum (R30 or BR30 for standard applications) and UL listed for use over bathtub or shower when connected to a GFCI protected branch circuit. Requires a PAR30L or PAR30LN type bulb (not included)

**SSQTXE110 SmartSense® Ventilation Fan**

- Programmable to operate your Fans to ventilate your home around the clock to meet ASHRAE 62.2 standard
- Provides solution for whole-house and Spot ventilation requirements
- Coordinates ventilation fans in various locations to introduce fresher, healthier air

**82W Humidity Sensing Control**

- Sensaire® technology responds to humidity up to 70% faster than competitive models; set-point mode satisfies CA requirements
- Programmable to operate in continuous ventilation mode helps to meet ASHRAE 62.2 standard
- 120V, 4 AMP. Compatible with any existing fan within electrical ratings

**ZB110ML/ZB110HL ULTRA GREEN**

- Multi-Speed Fan rated for intermittent and continuous ventilation. ULTRA Fan/Fan Lights have Sensaire humidity sensing technology to detect a rapid rise in humidity at the ceiling level - or motion sensing capability to turn on fan or light when someone enters the room
- Feature 6" ducting and the ZB80 includes an optional 6" to 4" duct reducer



**AE80L/AE110L InVent**

- New Construction and Retro-Fit Fan. FoldAway™ mounting ears allow for installation on both
- LED Fan/Light with 11 watt, 800 Lumens, 3000K, 80 CRI integrated module. Up to 25,000 hours
- ENERGY STAR® certified and TrueSeal™ damper technology has a tighter seal, reducing backdraft
- EzDuct™ Connector allows room-side installation with no attic access required



**HAVEN™**

*Each fixture repels mosquitoes for 110 square feet. Odorless, silent, invisible during use and won't harm children, pets or plants.*

**HAVEN Lighted Mosquito Repellent Fixture - HVLFABL (black) and HVLFABR (bronze)**

- One 24ml Haven repellent cartridge and adaptor cap included
- 16 integrated LEDs provide 40 lumens at 2900K, last for 30,000 hours
- Powder-coated, cast aluminum housing with UV stabilized polycarbonate lens
- 18" stem and 10" plastic ground stake included
- 18" leads of 18-gauge cable, with tinned ends for easy insertion into cable connector



**HAVEN Mosquito Repellent Fixture - HVRFABL (black) and HVRFABR (bronze)**

- One 24ml Haven repellent cartridge and adaptor cap included
- Powder-coated, cast aluminum housing
- 12" stem and 10" plastic ground stake included
- 18" leads of 18-gauge cable, with tinned ends for easy insertion into cable connector
- Works with 12v and 15v AC transformer
- Child resistant fixture opens with screwdriver for easy repellent cartridge replacement
- 3-year limited warranty



**HAVEN Accessories**

- Deck Mounting Flange - HVPFBL (black) and HVPFBR (bronze)
- Powder-coated, cast aluminum flange fits both types of Haven fixtures
- Repellent Cartridge - HVRC1 (single pack) or HVRC4 (four pack)
- 24ml of repellent provides 216 hours of protection. Hours of repellency vary on climate
- Timer/Control - HVDCT
- Programmable - two circuits for operation - repellent & lighting







**Compression Connectors**

- HYDENT™ connectors (#10 to 2500 kcmil)
- UL listed 90° C
- Up to 35kV
- Terminals, splices, reducers
- Lugs for code, flex, metric, OEM
- Copper, aluminum, long & short barrel
- 45° & 90° bends, battery terminal posts



**Application Tooling**

- PATRIOT® lithium ion or Ni/Mh battery crimp tools
- Hydraulic hand held, mechanical ratchet, pneumatic, mechanical and hand tools
- Battery, hydraulic & mechanical cutting tools



**Mechanical Connectors**

- SERVIT™ split bolts, parallel clamps, power distribution blocks, lay-in lugs, diverse assortment of products for a variety of applications.
- *For mechanical connections to be UL Listed they must be torqued to their specific required value!*



**Grounding Products**

- Mechanical
- Compression (HYGROUND™)
- Exothermic (thermOweld™)
- Lightning protection products
- Bus bars



**UNITAP™ Insulated Taps, Splices, Direct Burial Products**

- Taps and splices that are UL486B listed rated AL9CU both code & flex <sup>(2015)</sup>
- Products available for use in wet and damp locations
- Products available for direct burial applications
- Most available in both clear and black



**UNIRAP™ Cable Ties**

- Cable ties in a multitude of varieties: stainless steel, coated stainless steel, partially-coated stainless steel, stainless steel barb, releasable
- Mil spec, halar, tefzel, universal grade



**NEW - ZR FD Series available with matte housing, 130 LPW and 80+CRI ZR Series - LED Commercial Spec Troffers**

- One-for-one replacement of existing fluorescent troffers
- Input power: 21 to 44 watts
- Efficacy of up to 130 LPW
- 90 CRI or 80+CRI
- 3200 to 5000 lumen options

Available in 1x4, 2x2 & 2x4 options



**DR Series LED Downlights**

- Replaces 50-Watt, 65-Watt, or 100-Watt incandescent
- Input power: 8 to 16 watts
- Standard 90 CRI with Cree TrueWhite® Technology
- CCT: 2700K, 5000K
- 575, 650 or 1100 lumens
- Available in 4" and 6" sizes
- Dimmable to 5% with most incandescent dimmers
- UL wet listed



**RUL Series - LED Rural Utility Luminaire**

- Replaces high pressure sodium 100W and mercury vapor 175W fixtures
- Input power: 50 watts
- Minimum 70 CRI
- CCT: 4000K
- UL wet listed
- Significant energy and maintenance savings
- Easy installation

RUL luminaire shown with reflector/refractor included with ES-K2 option



**CXB Series - LED High-Bay/Low-Bay**

- One-for-one replacement of 250W and 400W HID luminaires and multi-lamp fluorescent low-bay and high-bay fixtures
- Input power: 160 or 240 watts
- 18,000 and 24,000 median lumens
- Up to 113 LPW
- CCT: 4000K, 5000K
- 80 CRI
- Universal mount



**NEW IG Series - LED Parking Structure Luminaire**

- Replaces metal halide fixtures
- Input power : 33 or 66 watts
- Efficacy: 118 or 114 LPW
- Minimum 80 CRI
- CCT: 4000K (+/- 300K), 5700K (+/- 500K)
- Initial Delivered Lumens: 3910 or 7500 lumens
- Utilizes Cree WaveMax™ Technology
- Precise low-glare optics

CREE  WAVEMAX™ TECHNOLOGY

**NEW - Essentia® by Cree LED Surface Wrap**

- Replaces linear fluorescent strips and wraps
- Input power: 18 to 36 watts
- Efficacy up to 115 LPW
- Standard 80 CRI
- CCT: 3000K, 3500K or 4000K
- (2') 2,000 and (4') 4,000 lumens
- 0-10V dimming to 5%
- Surface or suspended mounting
- Limited warranty: 5 years
- Applications: Hospitality, retail, industrial and commercial



ESSENTIA by CREE 

**LS Series - LED Surface Ambient Luminaire**

- Replaces linear fluorescent lamp systems, strips, wraps and more
- Input power: 44 or 88 watts
- 90+ CRI, Utilizes Cree TrueWhite® Technology
- CCT: 3500K, 4000K or 5000K; 0-10V dimming to 5%
- 2500, 4000 and 5000 lumens for 4' size; 8000 and 10,000 lumens for 8' size
- Solid and apertured (6% uplight) reflectors available
- Applications: Industrial, manufacturing, grocery and retail spaces



Suspended mount with optional reflectors

CREE  TRUE WHITE TECHNOLOGY

**NEW - HXB Series - LED High-Bay**

- Replaces 500-Watt and 1,000-Watt HID luminaires
- Input power: 268-273W (35L), 495 (70L)
- 35,000 and 70,000 median lumens
- Up to 140 LPW
- CCT: 4000K, 5000K
- 80 CRI (35L), 70 CRI (70L)
- 0-10V dimming standard
- Universal mount: hook/cord with 6ft whip, adaptor plate for J-box/pendant
- Operating Temperature: -40°C to +65°C



**NEW LN Series - LED Suspended Ambient**

- Replaces linear fluorescent lamp systems, strips, wraps and more
- Input power: 32 watts
- 90+ CRI
- High efficacy of 115 LPW
- CCT: 3500K or 4000K
- 3400 - 3700 lumens
- 0-10V dimming to 5% or Cree SmartCast® Technology
- Limited warranty: 10 years
- Applications: Office settings



CREE  SMARTCAST TECHNOLOGY CREE  WAVEMAX™ TECHNOLOGY

CREE  TRUE WHITE TECHNOLOGY



## Vision Solutions



### P-Series Smart Cameras

- Ultra-compact cost effective smart camera offering advanced machine vision functionalities in a fully embedded stand-alone device
- Right-angle IP67 rated enclosure with rotating connectors
- VGA (640x480) or 1.3 MP (1280x1024) grey-scale imagers
- Embedded interchangeable lenses and illuminators



### A and T Series Smart Cameras

- Stand-alone, general purpose and cost effective Smart Camera
- 1.1 GHz processor
- Equipped with three different camera resolutions
- Right-angle IP67 rated enclosure
- VGA (640x480) grey-scale imager
- Built-in digital I/Os and Serial interface



### MX Series Vision Processors

- Provide the highest performance "in image processing with even more flexibility through multi-camera support.
- Three models allow you to choose the correct level of performance based on your application needs.
- Complete IMPACT software suite included for ultimate programming flexibility - addresses any inspection and user interface needs.



### IMPACT Machine Vision Software

- With over 120 inspection tools and 50 user interface controls, IMPACT software allows users to create unique inspection programs and develop user interfaces quickly and easily.
- IMPACT offers two environments: Vision Program Manager for image processing and analysis functions and Control Panel Manager for operator interfaces and on-the-fly adjustments.



### 2K Series of Laser Scanners

- The DS2100N and DS2400N are short range lasers that feature onboard PROFINET, EtherNet/IP, and Ethernet TCP/IP communications in two or three rotating connector block configurations
- Bar code reading solutions for automatic warehousing, storage and retrieval and manufacturing applications

## Laser Marking Solutions

### Arex Fiber Laser Marking Solution

- Ultra-compact fiber laser marker for Direct Part Marking and direct engraving on metal parts and components
- 10W, 20W, 30W, and 50W Fiber Laser
- NEW AREX 20MW laser marker based on MOPA fiber laser technology
- Advanced Lighter 6.0 ease-of-use software platform



### EOX CO2 Laser Marking Solution

- EOX family offers high quality permanent marking on the widest range of material, with two wavelengths, 10W and 30W available
- The EOX offers permanent coding and marking for a variety of paper, cardboard and other organic material applications



## Sensor and Safety Solutions

### Sensor and Safety Solutions SL2/SL4 Safety Light Curtain

- SLIM safety light curtain is the perfect solution to protect machines where space saving and simplicity of use are paramount
- No dead zone
- Cascadable up to 3 units, pigtail cable with 5-pole M12 connectors
- 14, 24 and 34 mm resolution
- 34 different protection lengths, with 30 mm modularity



### High Performance Fork Sensors

- SR21 2mm high-resolution fork sensors for labeling and packaging. Detection of labels (SR21-IR) or print register mark on transparent films (SR21-RG). 4 wire NPN and PNP output.
- SRX3 ultrasonic fork sensor for transparent label detection. Slot size 3mm. Dynamic or static teach models, High resolution up to 2 mm label gap.

## Identification Solutions

### Matrix Family of 2D Imagers

- Offer superior performance for the most challenging bar code reading applications, including direct part marked codes
- The Matrix family includes the Matrix 210, Matrix 410, Matrix 300, Matrix 450 and the NEW Matrix 120 fixed industrial imagers
- The NEW Matrix 120 is the most compact industrial 2D imager in the market and fits any integration space.



**WDK8 #8 Anchor Kit Wall Driller (Zinc)**



- Wall board anchor kit
- Deep threads
- Easy to spot
- Reusable
- Includes Phillips driver bit
- 50 Phillips/slotted sheet metal screws

**HN38 Zinc Plated Steel Hex Nut**



- Zinc Plated - general use
- Available in standard, sleeve, master, and tuff packs



**CH1212 #12 Single Jack Chain**

- Bright, galvanized
- Used for suspending fixtures
- Available in boxes, pails and reels
- Easy pull box
- 29 lbs. working load



**GP650 7 1/2" Ground Pigtails 12ga with Hex Combo Ground Screw**

- Used for grounding receptacles to steel boxes
- Multi-drive screw with hex/slotted/Phillips/square
- Green #12 Ga. solid copper wire
- Green zinc plated ground screw
- UL Listed wire



**FENW14114 1/4 x 1/4" Fender Washers**

- Zinc plated
- Provide large load bearing surface
- Distributes tension on soft and thin materials
- Zinc plated steel
- Available in: Invincibox and tuff pack

**DRC50 1/2" Non Metallic Cable Connector**

- Easily installed/no tools required, snap in, you're done
- Easy to remove from knockouts and easy removal of Romex® from connectors
- Single cable: 14/2 - 10/3
- Two cables: 14/2, 12/2, 14/3
- 60 pound test pull
- Thermoplastic
- UL/CSA Listed



**TY164 Steel Tie Wire**

- 16 1/2 Gauge
- 400 Feet (3-1/2#)
- Black Annealed
- Available in Standard and Master Packs

**DT260 2" X 60 Yards Duct Tape**

- Silver, industrial grade
- Provides superior mechanical strength and conforms well to irregular surfaces
- Excellent for bundling, patching and sealing
- Tears straight and is curl resistant
- 9 mil - cloth backing
- Temperature rating of 200° F
- Individual cello wrap



**411 1 1/2" X 2 3/4" Safety Plates**

- 16 gauge steel (100 pack)
- Prevent nails from penetrating into hidden live wires or plumbing
- Nail sharp points
- Easy to install
- Available in boxes or pails

**HPTK1 12 Ton Hydraulic Punch Kit**

- 13 pcs kit 1/2" to 2 1/2"
- Aluminum tool features 12 ton fully articulating head - 360° capability
- Only ONE tool required for all dies
- Laser etched markings on die cups for precise location
- Dies require 50% less torque than competitive dies
- 3 point die design - slugs cannot bind - they just fall out!





## Automation & Control



### M22M Modular Metal Pushbuttons

- Attractive chrome metal bezel that will enhance appeal to your 22-mm pushbutton applications
- Most pushbutton operators and contact blocks exceed 5 million mechanical operations
- Field-convertible functions and customized laser engraving capabilities
- LED indicators offer 100,000 hours of life in high-vibration environments; lenses specifically designed for LED illumination
- All components feature an IP66 rating, and some carry IP67 and IP69K for wash down environments



### XV Series HMI-PLCs

- Built-in SmartWire-DT master for 99 nodes
- Brilliant image display with 65,536 colors
- High resolution resistive touch TFT displays
- 3.5", 5.7" or 7" widescreen displays in robust plastic housings and bezels, or 5.7", 8.4" or 10.4" displays in high-end aluminum front bezels and metal housings. Ethernet and RS485 serial ports on all models
- PROFIBUS-DP or CANopen master on all models larger than 3.5"
- Programmable with IEC 61131-3-compliant XSoft-CoDeSys software
- Easy connection direct to motor control components or I/O modules on the SmartWire-DT flat cable



### S611 Series Solid-State Soft Starter

- Innovative, economical soft starter combining advanced functionality, unsurpassed configuration flexibility, and an extremely comprehensive user interface
- Available in both open and enclosed control configurations to meet the needs of the commercial construction and OEM segment
- Control voltage: 120V AC
- Load voltage: 600V AC, 156 amp, 78 - 156 FLA, non-combination, standard duty, 300% current or 15seconds, 115% continuous
- HP ratings: 50 @ 208V, 60 @ 240V, 125 @ 480V, 150 @ 600V
- Includes: overload protection, bypass, serial Modbus communication



### XT Series Electronic Manual Motor Protection

- "Fingerproof" terminals with screwdriver guide holes are located in the vertical plane for safe, convenient front access and ease of wiring
- Undervoltage release module trips manual starter to "off" during loss of power to ensure starter is turned on manually for added safety
- Group motor installations eliminate the need for individual branch short circuit protective devices for each motor circuit, reducing panel space, installation & wiring time, and costs
- Self-protected combination starters provide continuous service after a fault and eliminate the need for a single branch circuit protective device (BCPD), reducing panel space and additional cost
- Manual Motor Controllers feature a rotary ON/OFF manual disconnect, Class 10 adjustable bimetallic overload relay, and fixed magnetic short circuit trip capability in one compact unit



### PowerXL DG1 Variable Frequency Drive

- Ease of use: Startup Wizard, PC Tool software, four built-in applications, diagnostics, local/remote button, removable keypad with copy/paste functionality
- Space-saving design: compact size, open Type 12 option, on-board communication and I/O
- Efficiency: active energy control algorithm, 5% DC choke, input surge protection, EMI/RFI filter built-in
- Rugged and reliable: high overload (CT) and low overload (VT) rated, conformal coated boards, brake chopper circuit, durable metal power section, 50°C rating (60°C de-rating), removable keypad rated IP54
- Global acceptance: UL®, CE, cUL®, RoHS, C-Tick

### 4Dimension™ Strut System

- Multi-sided functionality
- Up to 50% reduction in installation time for trapeze applications
- Up to 55% reduction in material cost in many applications
- Ideal for new and retrofit applications
- Functional replacement for back to back strut system, with considerable cost and material savings

### Seismic Engineering Solutions

- Eaton can provide assistance in the layout and design of your system to comply with seismic requirements of all building codes
- Our Seismic department can help you in every step of the process
- Project take-offs
- Job-site support

### CoSPEC Specifier Center

- Packed with features like the new CAD/BIM/PDMS/Submittal catalog which offers the ability to select and view B-Line series products in 2D and 3D
- Download design content in one of nearly 100 different CAD, BIM, PDMS, and graphics formats
- Select - Pick products you need to download to the unit level

### KwikSplice™ Cable Tray System

- Light-weight, cost effective, aluminum design
- Patent pending splice retention groove minimizes splicing hardware up to 50%
- Stocked in multiple locations across US and Canada.
- Universal Fitting has ability to make a horizontal bend, tee, or cross

### BB8 Series Bracket

- Rapid Ring Self Adjusting Pre-Fab Ring speeds installation
- Helps take the guesswork out of installation by utilizing a pre-measured floor stand
- Compatible with 1-Gang and 2 -Gang Rapid Ring™ Self-Adjusting Pre-Fab Ring
- Cable containment bracket (BBCC) and floor stand (BBFS)

### Telescoping Box Mounting Bracket

- Increased rigidity through center groove design
- For 1½" and 2½" box depths only two screws required to mount to stud
- Flange ends can be cut and bent to mount multi-gang, 5" square, masonry, and speaker/strobe boxes
- Tool-less box mounting clip attaches electrical box to bracket without hardware

### BB70/ BB70E

- Interlocking wrap-around design provides extra rigidity
- Adjustable for varying stud depths from 2½" to 6"
- Supports most U.S. and Canadian, standard 1-gang and 2-gang boxes and/or plaster rings on either side of the stud
- Integral mounting tabs to attach plaster ring

### TrayCAD™ Cable Tray Software

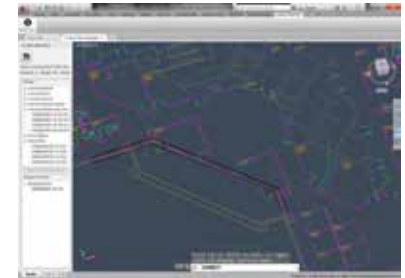
- Utilizes accurate 3D models of B-Line series cable tray components
- Quickly construct a cable tray system in seconds
- Develop a full cable tray bill of materials (BOM)
- Easily export BOM to spreadsheet format
- Compatible with the latest versions of AutoCAD®(2014 and 2015)

### BB7-16/24

- Unique design that allows for modification to fit non-standard stud centers
- Supports most standard U.S. boxes and plaster rings
- Multi-gang electrical boxes
- Compatible with Rapid Ring™ self-adjusting pre-fab ring and adjustable plaster rings

### Modified Enclosures

- Thousands of sizes available
- Various materials and finishes
- Standard and special paint options
- Options for push button holes, cut outs, tapped holes, louvers and more
- Accessories including window kits, thermal devices, panels, lights, and more
- Visit [cooperblines.com/modified](http://cooperblines.com/modified) for more information





### Quik-Spec™ Coordination Panelboard (QSCP) and Power Module

- Bussmann™ series QSCP is a compact fusible distribution panel that makes selective coordination easy with the same width as traditional circuit breaker panelboards
- Bussmann series Quik-Spec Power Module is an all-in-one elevator disconnect switch available in configurations to meet any single elevator shutdown and disconnect requirement.



### Power Distribution Fuse Blocks

- Save up to 65% panel space while reducing installation time and costs by combining two components into one
- Available for Class J ferrule and knifeblade fuses as well as Class H(K) and R ferrule fuses; all with DIN-Rail and panel mount versatility
- A 200 kA withstand rating helps achieve higher assembly short-circuit current rating (SCCR)



### Fuses Made Simple™

#### UL branch circuit:

- Three tiers of protection help speed up selection; ultimate protection, advanced protection and basic protection
- Color coded by family

#### UL supplemental control circuit:

- Find the Bussmann series control circuit fuse you need in three simple steps: type, voltage, interrupting rating



### Medium Voltage Fuses

- Expanded Bussmann series portfolio of current-limiting E-Rated, R-Rated and PT medium voltage fuses to protect motors, switchgear, transformers, small power and control transformers, and feeder circuits
- All E-Rated and R-Rated medium voltage fuses include open fuse indication with available microswitch for remote indication to speed troubleshooting



### Modular Ferrule and Knifeblade Fuse Blocks

- Modular, snap-together design provides tool-less assembly of multiple pole blocks to save inventory and reduce assembly time. Optional see-through covers enhance safety with IP20 finger-safe protection, lockout/tagout capability and open circuit indication.
- Modular ferrule blocks for Class CC, H(K), J and R fuses
- Modular knifeblade blocks for Class H(K), J and R fuses



### Compact Circuit Protector (CCP) Disconnect Switches

- Revolutionary CCP is designed as a fused branch circuit rated disconnect with a footprint 2/3 the space required by a traditional fusible switch
- 200 kA SCCR with Bussmann series Low-Peak™ Class CF CUBEFuse and Class CC fuses helps provide high equipment SCCR
- Finger-safe construction and lockout/tagout capability for added workplace safety



### Power Distribution Blocks

- UL Listed finger-safe DIN-Rail or panel mount modular power distribution blocks in ratings up to 760 amps. Single-poles dovetail together for the desired number of poles.
- UL Listed power distribution blocks available in 1- to 3-pole versions with ratings up to 310 amps and 200 kA SCCR
- UL Recognized power distribution blocks available in 1- to 3-pole versions with ratings up to 1520 amps



### High Speed Fuses

- Better Protection: 5% lower I<sup>2</sup>t energy let-through on average than competitive fuses to better protect sensitive semiconductors
- More Energy Efficient: 13% lower watts loss on average than competitive fuses
- Faster Lead-Time: 21-day or less lead-time with QuikShip Made to Order service on more than 400 most popular square body high speed fuses



### Modular DIN-Rail Fuse Holders

- Easy application color coding: yellow for PV (1000 Vdc), red for IEC (690 V), and black for UL (600 V)
- 1-, 2-, 3- and 4-pole versions
- Finger-safe, high SCCR rated, Class CC, J, midget, and 10x38 IEC size fuses
- Available PLC remote open fuse indication with the CH-PLC module
- Complete line of 1- and 3-phase finger-safe comb busbars and power feed lugs



# Crouse-Hinds series



### Champ® VMV Series LED Luminaires

- Hazardous rated and ordinary location models ranging from 3,000 to 25,000 lumens for a wide variety of mid-bay and high-bay applications
- 60,000 hours rated life and up to 200,000 hours of economic life eliminates maintenance
- Up to 64% energy savings over HID fixtures



### Champ® FMV LED Floodlight Luminaires

- 25% smaller footprint and 10 lbs (4.5 kg) less weight than previous FMV model
- Up to 75% reduction in energy costs compared to equivalent HID floodlights
- Globally certified floodlight
- -40°C to +65°C operating temperature range (NEC only; IFC -40°C to 55°C)



### Pro-Series Industrial LEDs

- Extensive portfolio covering high bay, mid bay, floodlighting and targeted lighting applications
- Seven years of maintenance-free performance: 50,000 hours of rated life at 65°C ambient
- Fixtures constructed to withstand extreme temperature, vibration, water and dust
- Compliant with a wide range of global certifications



### Linear LEDs for Harsh and Hazardous Applications

- Full portfolio of linear LEDs cover hazardous and harsh industrial applications
- New APEX and Summit LEDs designed specifically for food and beverage and medium duty industrial applications
- Designed to replace up to 6-lamp T5HO, T8 and T12 fluorescent lighting fixtures



### EBMX Clamped NEMA 7 Enclosures

- Built for safety and speed, EBMX enclosures utilize patented clamping technology to reduce downtime, increase safety and lower maintenance costs.
- Reduced failure opportunities from missing, stripped or broken bolts
- Eliminates enclosure bolts for significantly decreased time to enter enclosure
- Available with Breakers, Disconnect, Starter, Combo-Starter
- -50C to +60C extreme temperature rating; 65kAIC enclosure rating

### Terminator™ II TMCX Cable Glands

- Available in sizes ½" to 4" NPT; M12 to M110 (metric)
- Chico® LiquidSeal compound with fast gel and cure times, reduces return to service times
- Nickel-plated brass and stainless steel increase corrosion resistance



### Liquidtight Fittings

- Provides protection in wet locations
- Available in various configurations in various trade sizes and materials
- Hex surface on gland nut and body
- Thermoplastic elastomer sealing gasket effectively seals out water, oil, dust and dirt
- Locknut bites into box



### V-Spring™ Safety Light Pole

- Increases safety and decreases labor costs associated with lighting installation and routine maintenance
- Spring-assistance allows luminaire to be lowered safely and easily
- Allows for all work to safely take place on the platform or walkway, eliminating the need for portable ladders and fall protection equipment



### Myers Hubs

- Available in sizes ¾" to 6" in a variety of materials
- Expanded operating temperature of -15°C to +120°C
- Expanded and updated certifications to current applicable standards
- Vibration-proof
- Grounding screw for added safety
- Captive o-ring gasket



### Form 7 Condulet Conduit Bodies

- Conduit bodies are compact with a round back design for neat, efficient installations
- Exclusive wedgenut or snaptight covers with integral gaskets simplify installation and removal
- Manufactured in 11 different configurations for maximum flexibility, including our new Type U, which delivers enhanced pulling speed, greater internal capacity over a standard Condulet, and a 4-to-1 SKU reduction .
- Available pre-assembled with body, cover and gasket for ordering and receiving convenience





## Power Distribution



### Low Voltage Motor Control Center (MCC) Replacement Buckets

- Extensive competitive bucket offering including GE, Allen-Bradley and the Square D Model 4 (available Q1 2017)
- Anti-counterfeiting features to ensure customers that the product is new and genuine from the factory
- UL845 labeled allowing compliance for MCCs intended to be employed in accordance with the NEC(R) and NFPA 70

### Class 1 Reconditioning Services

- Class 1 Reconditioning is a unique process that incorporates specific steps to ensure the highest level of reliability and performance for power circuit breakers
- Incoming Inspection, Test and Data Collection
- Complete Disassembly
- Component Specific Cleaning



### CH Plug-on Neutral

- Time savings up to 25% per AFCI and GFCI installation
- Improved wireway access
- More gutter space and easier troubleshooting
- Eliminates unwanted tripping due to loose pigtail connections
- Industry-exclusive “trip to OFF” feature clearly identifies which breaker has tripped and allows for simple one-step reset



### Series G—Global Molded Case Circuit breakers

- Increased performance in less space than standard circuit breakers or comparable fusible devices
- The “G” signifies global applications: marked with UL, CSA, CE, and IEC listings



### Eaton's Pow-R-Stock<sup>Plus</sup> Program

- This stocking program is intended to meet numerous light commercial key drivers and encompasses products that are typically used in this space

### Combo AF/GF Breakers

- Provides one device for both AFCI and GFCI protection, allowing for a single point of reset
- Offers complete protection from arc and ground faults for the entire circuit, including home-runs
- Integral LED indicates seven different trip causes, reducing troubleshooting time



### Shunt Trip switch

- Industry's first and only safety switch with remote open capabilities
- Enhance personnel safety and protect equipment in commercial and industrial applications with visible means of disconnect when coupled with window option



### Satellite Solution Centers

- 17 Regional Manufacturing facilities specializing in Switchboard, Panelboard and Motor Control Center design and assembly
- Direct distributor access to assembly plants with market knowledge and in-depth technical skills
- Emergency response and quick-ship schedules available



### Cleveland and Juarez Flex Centers

- Provide direct distributor access to safety switch and transformer design centers
- Provide engineering and design support for non-standard and custom product solutions
- Able to set up custom designs for repetitive customer ordering



### Eaton's EESS Start-up & Commissioning Services

- A detailed and comprehensive approach to commissioning that can be tailored to meet customer needs.
- During this commissioning process, several building systems are reviewed, including:
  - Mechanical
  - All HVAC equipment
  - Building automation system and hardwired controls
  - Communication
  - Electrical
  - Plus many more...





### Halo RL, RA and SLD Recessed Downlight LED Modules

- Residential and lite commercial - New and retrofit applications
- 4", 5" or 6" downlight, surface mount or adjustable
- LED drivers offer dimming capability
- Installs into housings or SLD JBOX models available
- ENERGY STAR® certified, Title-24/ Title-20 certified



### Halo Recessed Downlighting E26 Housings and Trims

- Residential and lite commercial - New and retrofit applications
- 4", 5" or 6" housings and trims
- Complies with E26 screw base lamps for LED, CFL and halogen
- Trim: baffle, cone, gimbal and eyeball



### Metalux Cruze LED Series

- Commercial applications 1'x4', 2'x2', 2'x4'
- Center lens troffer LED fixture, >50% energy savings
- Standard 0-10V continuous dimming driver
- Shallow 3.25" housing with hinged door access
- Retrofit kit installs in less than 5 minutes without ceiling entry



### Metalux FR LED Series

- Commercial applications 2'x2' and 2'x4'
- Wide lens troffer LED fixture, >50% energy savings
- Improved aesthetic over fluorescent prismatic troffers
- Standard or high performance models
- Ease of driver access with hinged door assembly



### Metalux LED SLSTP Striplight and CWPLD Wraparound

- Residential and commercial applications
- Frost, white linear lens for even uniform illumination
- Standard universal dimming driver
- Models available with ceiling, wall, or suspension mounting
- SLSTP is ideal for continuous and standard row mounting



### Sure-Lites AP Series LED Emergency Lighting & Exit Signage

- Commercial applications. Meets UL924 life safety code
- LEDs provide uniform diffused illumination
- Sealed long-life battery, universal J-box mounting pattern
- Combo units can operate two additional remote head
- Edge-Lit models include mirror background and chevrons



### Lumark Crosstour LED Wall Pack, Flood and Area/Site Series

- Commercial and industrial applications
- Outdoor rated, patented, slim, low-profile LED design
- Wall, surface, bollard and floodlight mounting
- Die-cast aluminum, hinged, removable door and back box
- Full cutoff and refractive lens models
- Secure lock-hinge and single-point closure



### All-Pro Revolve and MST18R Floodlights

- Residential and lite commercial applications
- Sleek designs optimized for low profile outdoor security
- Maintenance-free LED, up to 270° motion coverage
- Tool-less adjustments, mounts to recessed junction box



### Lumark Night Falcon LED Floodlight Series

- Commercial and industrial applications
- Models replace up to 1000W metal halide
- Die-cast aluminum construction to fit small, medium and large sites
- Trunion, knuckle or slipfitter mount
- NEMA twist lock photocontrol models available



### Lumark Prevail LED Area/Site Luminaire

- Commercial and industrial applications - Replaces up to 400W metal halide
- Up to 15,500 lumens in one housing size
- Rugged die cast aluminum to withstand outdoor elements
- Versatile mounting arm for easy retrofit installation
- Optional photocontrol or integrated sensor for dimming





**Greengate Multi-Load WBSD Dimmer Switch**

- Residential and commercial applications
- Integrated slide, toggle or decorator control for easy, precise operation
- Models available in linear and 0-10V dimming
- Adjustable low-level trim setting for optimal lamp compatibility
- Compatible with any decorator or screwless wallplate



**Greengate OSW Single Level/PIR Wall Switch Sensor**

- Residential and commercial applications
- Motion sensing lighting and control all-in-one switch
- Replaces single or multi-pole switches
- Integral daylight sensor
- Ideal for LED, fluorescent, incandescent lighting



**Greengate MicroSet OAC-DT Dual Tech Sensor**

- Commercial applications
- Energy saving motion sensing lighting control
- MicroSet® self-adjusting time delay, sensitivity and daylight level sensor
- 2000 sq. ft. (360°) single or dual relay
- Available in single or two separate loads



**Greengate MicroSet OAWC-TD Dual Tech Wall or Corner Occupancy Sensor**

- Commercial applications
- Energy saving motion sensing lighting control
- MicroSet® self-adjusting time delay and sensitivity
- Occupancy or vacancy selections



**Greengate High Bay OEF Occupancy Sensor**

- Commercial and industrial applications
- Energy saving motion sensing lighting control
- MicroSet® self-adjusting time delay, sensitivity and daylight level sensor
- 2000 sq. ft. (360°) single or dual relay
- Available in single or two separate loads



**Greengate Room Controller System**

- Commercial applications
- Click & go ready, RJ45 connections
- Preconfigured for automatic functionality upon power-up
- Integrated demand response with preconfigured energy reduction
- Guaranteed compatible with Eaton lighting LED and fluorescent fixtures
- Networkable for larger open areas



**CADDY SHOT FIRE SOLUTIONS**

- Quickly and easily attaches to concrete, steel or composite metal decking
- Integrated pin installs easily using powder-actuated or single-shot gas-actuated tools
- Works with most standard CADDY spring steel fasteners designed for rod attachments
- Rod is rigid and does not require secondary attachment to ceiling grid per NEC 300.11
- Specialized packaging simplifies material handling and minimizes sorting
- Rods are ready to install out of the box



**CADDY® Telescoping Strut Replacement**

- Captive threaded nuts enable fastening to threaded rod supports without loose parts
- Telescopes to the desired length and is locked in place by snapping closed a spring retainer clip
- Standard strut profile runs the entire length of the part, allowing most standard fittings to be placed anywhere between the rods
- Integrated ruler displays space between hanger rods in inches and centimeters
- Supports up to six 2" (50 DN) conduits, six 2" (50 DN) water filled pipes at 10' (3 m) spacing, or up to 18" (450 mm) cable tray
- Conduit can be supported on the top and bottom, eliminating the need for double sided strut
- Conduit and pipe can be placed directly on the strut profile, saving vertical space in buildings with limited room for installation

**CADDY® ALL-IN-ONE Electrical Assemblies**

- Complete assembly that is ready to use right out of the box and installs with just two screws
- Open-back design offers faster and easier access to install conduit connectors or wiring
- Box remains fixed in place when mud ring is removed (on applicable models)
- Rigid back plate functions as a far-side support and is resistant to bending
- Stocked inventory - available when you need it
- Made in the USA



**ERICO CADWELD PLUS**

- Designed for use in all standard ERICO CADWELD molds, including ERICO CADWELD MULTI
- Self-contained materials package includes welding metal, disk, and ignition source
- Once placed in ERICO CADWELD mold, welding material is electronically ignited using a simple battery controlled unit with a six-foot lead
- Permanent, molecular bond that will not loosen or corrode, resulting in a connection with a lifetime equal to that of the installation
- Current carrying capacity equal to or greater than that of the conductor
- Withstand repeated fault currents without failing during operation
- No external power or heat source required



**ERICO SES40P Series of Surge Protective Devices (SPD)**

- Economical protection against damaging transients and surge events
- Primary applications are service entrance, branch, commercial, industrial and residential. Other applications include OEM panels, solar combiner boxes, UL 96A lightning protection installations and light pole applications
- Housing is constructed of UV-stabilized thermoplastic and meets the UL 50 Type 4x rating, making it ideal for both indoor and outdoor applications.
- These Type 1 devices are UL® Listed to UL 1449 Edition 4 and cUL® Listed to CAN/CSA C233.1
- All models have 20 kA nominal discharge current rating, the highest level recognized under UL 1449 Edition 4 standard

**ERICO MBJ Grounding and Bonding Braids**

- Reliable and convenient grounding solution for applications that require flexibility and durability
- Complete range of earth/ground flexible connections from 6 - 100 mm<sup>2</sup> cross section and from 100 - 500 mm (3.937" - 19.685") length
- Integral palm, without tin or crimped lugs for superior electrical contact and tensile strength resistance
- Resistant to vibration and fatigue, reducing maintenance
- Provides weight savings, material savings and lower impedance when compared to similar lugged cables with insulation
- Ready to use out of the box, eliminates need for cutting, stripping, crimping and punching
- GOST and RoHS compliant







#### TG165 Imaging IR Thermometer

- TG165 lets you see the heat so you know where to reliably measure it
- True Thermal Detection – FLIR Lepton delivers best image quality in its class
- Portable, ergonomic design – balanced, contoured grip
- Tripod mount/lanyard connection



#### VP50 Non-Contact Voltage (NCV) Detector + Flashlight

- Designed to reliably detect voltages on the latest tamperproof outlets and electrical systems installed
- Safe CAT IV-1000V rating and toolbox tough with rubber reinforced case and buttons, and a low-profile detection tip
- Inspection light at the probe tip facilitates testing in dark areas



#### CM174 600 Amp Clamp with IGM

- Featuring infrared guide measurement (IGM) technology, the CM174 visually guides you to the precise location of a potential electrical problem.
- All-in-one tool – carry just one device and always have access to thermal imaging
- Center-point temperature to confirm hotspot



#### IM75 Insulation & DMM Combo with METERLINK

- Both an advanced multifunction digital multimeter and premier handheld insulation tester for installation, troubleshooting and maintenance professionals
- Multiple ranges of resistance insulation test levels



#### E4, E5, E6, E8 Thermal Imaging Infrared Cameras with MSX™ Enhancement

- Display: 3" color LCD
- On-board 640 x 480 digital camera
- Easy-to-use, weighs only 1.2lbs
- 2% accuracy
- File format: radiometric jpg
- Swappable li-ion battery with 4 hour life

#### T420 & T440 Thermal Imaging Infrared Cameras

- High performance infrared camera with on-board visual camera, touch screen, Wi-Fi connectivity, & interchangeable lens, plus MSX image enhancement & auto orientation
- Sharp thermal resolution at 76,800 pixels for solid accuracy from farther away



#### C2 Compact Thermal Imaging System

- The world's first full-featured, pocket-sized thermal camera designed for building industry experts and contractors
- Includes MSX® real time image enhancement, high sensitivity, a wide field of view, and fully radiometric imagery to clearly show where problems are and verify the completion of repairs



#### E-Series Compact Thermal Imaging Infrared Cameras with MSX Enhancement and Wi-Fi

- FLIR Tools Mobile Communication – Connect an E-Series camera to smartphones and tablets with our Wi-Fi app
- Onboard Digital Camera – 3.1MP resolution provides clear visible light reference pictures



#### DM284 Digital Multimeter with IGM

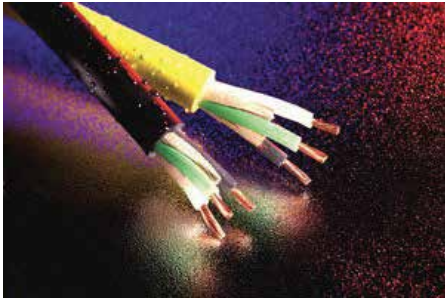
- Pinpoint problems quickly and safely with IGM
- See exactly where to measure with the 160x120-resolution FLIR thermal imager
- Troubleshoot challenging problems with ease
- 18-function DMM including VFD mode, True RMS, LoZ, and NCV
- Design and functionality vital to professionals



#### FLIRONE for iOS and Android

- Thermal camera attachment for mobile devices
- Connects to Android and iOS smartphones and tablets equipped with micro USB ports (Android) or lightning connectors (iOS)
- Simple to use
- Auto shutter eliminates need to manually reset thermal sensor
- Multiple applications
- Improve energy efficiency by pinpointing heat loss and water leaks
- Monitor pet health and safety





### General Cable Carol' Brand Rubber Cord Products Super Vu-Tron<sup>®</sup> and Carolprene<sup>®</sup> Jacketed Types

- Thermoset rubber delivers superior performance
- Flexibility and durability
- Abrasion, tear, oil, water, melt, chemical and impact resistance



### Super Vu-Tron<sup>®</sup> Supreme Types SJOOW/SOOW with GenClean™

- GenClean™ is a proprietary new cleanable jacket technology developed for rubber portable cord used in the food and beverage industry
- Smooth rubber jacket with enhanced cleanability
- High durability for longer life-cycle
- High performance in the harshest manufacturing environments
- Excellent flexibility in cold temperatures
- Resistant to oils, acids, chemicals, ozone and sunlight (UV)
- Water-resistant - suitable for immersion in water if properly sealed and terminated
- Integral Flexfill<sup>®</sup>
- Abrasion- and cut-resistant
- High heat and flame resistance
- TRU-Mark™ Sequential Footage Marking System



### Carol' Brand Industrial Cord - Super Vu-Tron<sup>®</sup> Type W, G, G-GC

- Water-, sunlight-resistant
- Withstands exposure to oil, acids, alkalis, heat, flame, moisture, chemicals and severe environmental conditions
- Meets or exceeds flame test requirements of MSHA and UL
- Suitable for immersion in water - if properly sealed and terminated
- Indent-printed for easy identification (not single conductor Type W)
- Excellent impact and abrasion resistance
- Rope lay stranding for maximum flex life
- Non-wicking rubber fillers (G-GGC)



### Copper Building Wire - PVC, Low-Voltage Power 600V Type THHN/THWN-2 Single Conductor Copper

- Low friction nylon jacket provides easy pulling for 8 AWG and larger
- 1/0 AWG and larger are rated for cable tray use
- Rated gasoline and Oil-Resistant II
- Resistant to abrasion, acids, alkalis, ozone and water
- For THHN applications, the conductor is appropriate for use in dry locations not to exceed 90°C
- For THWN-2 applications, the conductor is appropriate for wet or dry locations not to exceed 90°C
- For MTW applications, the conductor is appropriate for use in dry locations at 90°C or not to exceed 60°C in wet locations or where exposed to oil or coolants (with ampacity limited to that for 75°C conductor temperature) as outlined in NFPA79 Electrical Standards for Industrial Machinery
- Sequential foot markings every 2 feet on 8 AWG and larger for easy measuring
- Sunlight-resistant for 1/0 and larger, for black only
- Meets cold bend and cold impact tests at -25°C



### General Cable's Aluminum Alloy Building Wire - STABILOY<sup>®</sup> Brand Type XHHW-2, WIDESTRIPS HS<sup>®</sup> XHHW-2, FeederPlex HS<sup>®</sup> XHHW-2

- Easy to pull insulation reduces pull force by 42% compared to the installation of regular XHHW-2 with pulling lubricant
- Sunlight resistant with a maximum operating temperature of 90°C in dry and wet locations
- Black cross-linked polyethylene (XLPE) insulation with a higher short-circuit temperature rating than THHN/THWN-2 insulation
- Available with a specially designed black cross-linked polyethylene (LPE) insulation upon request
- Conductor insulation is free of harmful heavy metals in compliance with RoHS, Directive 2002/95/ED
- Meets the requirements of Underwriters Laboratories Inc., Standard #44 for Type XHHW-2
- Approved for use in raceways as service, feeder or branch circuits in accordance with the recommendations of the National Electrical Code<sup>®</sup>
- Recognized by ASTM B 800, B 801 and B 836
- Can be used in cable trays (with "CT USE" marking) and messenger supported wiring applications (Available upon request)





### NEW Field Agent Technology™

- Use Field Agent Technology to connect to nearly any industrial asset and leverage Predix™, GE's Industrial Internet software platform, to securely collect data, analyze trends and uncover insights that improve asset performance.
- GE's Secure Gateway Solution
- Access remote data securely
- Enable advanced analytics
- Troubleshoot & update your assets remotely
- Predix\* enabled

### NEW PAC Systems HART Pass-through

- Simple to install and operate; use existing 4-20mA wire to pass both control and HART data
- Seamless, secure compatibility with GE and 3rd party HART instrumentation and software
- Full integration with PLC system over a monitored network for secure, reliable data transfer
- Reduces the need for intermediary devices



### QuickPanel\*

- Control capability with GE and third-party I/O
- Easy installation and configuration
- Fully integrated view, control and data historian
- Multi-touch for optimum responsiveness
- Vivid images for more complete process visualization
- Fully functional web browser with multimedia capability
- Email and text alerts based on user-defined settings
- Custom, web-enabled reports and graphs
- Remote diagnostics and security
- Powerful scripting options
- Object-based programming functionality
- Compatibility with third-party components
- QP+ available in 7", 10", 12" and 15"



### RXi Industrial PCs

- Fully customizable
- High performance in harsh conditions
- Compact form factor
- Choice of Dual Core or Quad Core processors
- Multiple storage options
- Scalable and upgradable modular COM Express architecture
- Superior resistance to shock and vibration
- Fanless cooling technology for extreme temperature operation (-40°C to +85°C)
- Available preconfigured with HMI/SCADA and Historian software
- Communication options for real-time remote control and monitoring
- Achilles tested, GE ITSC approved
- Marine certified



### NEW RX3i CPE400

- World's first outcome optimizing controller
- Embedded Field Agent technology allows for real-time feedback loops that deliver external intelligence such as market analysis, fleet and enterprise data and asset/process lifecycle
- Use Predix Edge Apps to dynamically adapt processes to accommodate changing business objectives



### PNS Profinet Scanner Module for Rx3i

- The PACSystems\* RX3i PROFINET Scanner (PNS) module, connects a remote universal RX3i I/O rack of Series 90-30 or RX3i modules to a PROFINET IO-Controller
- The PROFINET Scanner scans the modules in its rack, retrieving input data and providing output data, and exchanges that data on the PROFINET IO LAN at the configured production rate
- The PNS manages PROFINET communication and module configuration between an IO-Controller and modules in the remote rack. If network communications are lost, the PNS manages IO states according to the individual module configurations.
- Part Number: IC695PNS001



### RSTi-EP I/O

- High Speed, High Density, performance I/O
- Compact, modular slice I/O for local and distributed control applications
- Web diagnosis for quicker fault detection and firmware upgrades



### RXi SLIM IPC

- The new slim IPC platform is based off of the same flexible COM Express technology as the rest of the GE family of Industrial PCs, but it's slotless, providing even more application versatility
- Slim IPC has the same rugged, high performance computing engine but has a low profile form factor that makes it easy to mount in bookshelf orientation on a DIN rail



**DOE Spec HI-RES Transformers**

- Low-voltage, dry-type distribution transformers
- (1-Phase 15-333kVA & 3-Phase 15-1000kVA)
- Required by the US Department of Energy
- (DOE) to become more energy efficient
- The new law applies to transformers manufactured in the USA or imported into the USA

**AfterMarket Products**

- LV Breaker Retrofits – Entelguard Retrofit
- MV Breaker Retrofits
- Trip Units – Entelguard G
- Opportunity – Industrial and Large Commercial- Parts and Service Opportunity

**GE AFCI**

- Neutral load lug for alternate, more convenient wiring
- Save on labor and installation costs
- Ignores mixed and shared neutrals in existing installations for easy retrofit applications
- Join two 1-pole AFCI breakers with handle tie to create shared neutral and save installation costs
- Entire AFCI circuit is protected regardless of home run length

**GuardEon Molded Case Breakers**

- Smart*
- New Global Breaker Platform
  - Rotating Faceplates and Hinged Terminal Covers
  - Standardized Accessories
- Reliable*
- On Board Diagnostics
  - Reduced Internal Parts Count
  - Designed for Automated Assembly
- Secure*
- Arc Watch™ Enabled
  - Premeon G Trip Units
  - Remote Monitoring
  - Opportunity – New OEM and Industrial

**A Series Pro-Stock Panel Boards**

- Field configurable (Boxes, Interiors, Covers)
- Main Lug or Main Breaker
- Reversible Interior
- Capability of Sub-Feed Breakers and Feed Thru Lugs
- Opportunity – Customer Flexibility, Immediate availability for customers thru Crescent Stock

**EntellEon Power Panel**

- Pro-Stock program available up to 1200A
- One catalog number for all breaker kits
- Top and bottom feed reversible in the field
- Hinged wire gutter doors come standard
- Copper 150A-1200A main bus
- 200% rated neutrals available
- Horizontal or vertical mounted main circuit breaker options

**ElfaPlus Global Modular DIN-rail Devices with UL Approval**

- Complete range of UL489 and UL1077
- Miniature Circuit Breakers up to 63A
- Standard rating of 10kA at 480Y/277 Vac and 240/120Vac
- Reduction of nuisance tripping\*
- Complete range of SPDs adapted to NEMA electrical nets and new UL Photovoltaic
- SPDs range

**SecoGear**

- GE's Medium Voltage Switchgear designed and tested to current IEEE C37.20.2 and ANSI C37.55 standards
- 5kV – 15kV, 1200A – 2000A, 31.5kA – 40kA
- Nema-1, Non Arc-Resistant
- SecoVac Vacuum Circuit Breaker with embedded pole technology and modular operation mechanism
- Available to order now

**SecoVac R Retrofit**

- Direct roll-in medium voltage retrofit solution for existing vacuum circuit breakers
- 5kV – 15kV, 1200A – 2000A, 31.5kA – 40kA
- Vacuum Circuit Breaker with embedded pole technology and modular operation mechanism
- Available to order now

**SecoBloc OEM Modules**

- Design specifically for use by OEM switchgear manufacturers building IEEE metalclad designs
- 5kV – 15kV, 1200A – 3000A, 31.5kA – 40kA
- SecoVac Vacuum Circuit Breaker with embedded pole technology and modular operation mechanism
- Available to order now







#### LED Replacement Lamps

- Replace inefficient incandescent light sources
- Multiple shapes and designs: A-Line, BR30/40, PAR's, MR16's, Decorative and Enclosed rated
- Life rating up to 50,000 hours (L70)
- Standard & ENERGY STAR Certified options
- Dimmable
- Indoor/outdoor applicability



#### LED Plug-in 2 & 4 Pin CFL Replacement Lamp

- Replaces inefficient CFL 4-pin and 2-pin (G24q-3, GX24-q-3, GX23, G24d, and 2G11)
- Horizontal and vertical configuration
- Advance optics eliminate wasted light deliver targeted beam requiring fewer lumens
- No tools required - Simply plug the replacement lamp into the existing ballast



#### T-8 LED Integrated Tubes Linear Fluorescent Lamp Replacement Glass or Plastic

- Type A direct lamp replacement plug & play simply replaces existing linear lamp
- Type A T-8 offering 2', 3', 4' and U bend
- Type C requires a remote driver
- Type C T-8 offering 2', 3', 4', 8' and U-Bend
- Type C T-5 offering 2' and 4'



#### LED HID Open or Enclosed Rated Replacement Lamps

- Replaces existing 400 watt, 250 watt and 175 watt Metal Halide Lamps
- 400 replacement lamp operates on M59, M135, and M155 ballast only 130 watts
- 250 replacement lamp operates on M58, M138, and M153 ballast only 80 watts



#### LED Bright Stik

- Replaces existing 40 to 100 watt incandescent, halogen, and CFL lamps
- Life rating 15,000 hrs (L70)
- Last 50% longer than CFL (10,000hrs)
- Last 15X longer than incandescent/halogen (1,000hrs)
- Uses 80% less energy than incandescent and 20% less energy than CFL

#### LED RS Trim Can

- No Wiring required
- Plug & Play, installs in just minutes
- Lumen Range: 700 to 1,000
- Up to 75 lumens per watt
- ENERGY STAR® Certified - Utility Rebate Eligible
- Color temperatures ranging from 2700 & 3000
- Can size: 4" & 6" E26 or GU24 case
- Dimmable 120 volt



#### LED LRX Downlight Can CFL or CMH RETROFIT

- Ideal RETROFIT solutions for traditional 1 or 2 lamp CFL downlights
- Installs in just minutes
- 6" and 8" Trims up to 3000 Lumens
- 0-10V dimmable and Wet Rated
- Life rating 50,000 hours (L70)
- Color temperatures: 3000, 3500K, 4000
- ENERGY STAR® Certified and Universal Voltage



#### LED RC Recessed Can CFL or HID Retrofit

- New quick connect power supply enables TOOL - FREE install
- Installs from below the ceiling in just minutes
- Semi-hyperbolic reflector design with transition flange helps to achieve superior light distribution
- Up to 6000 lumens out put
- Can sizes: 6", 8", 10" and 12"



#### LED Highbay & Lowbay Albeo ABH2, ABHG, ABV, ABR, ALV

- Replaces existing HID Fixtures, 4 to 8 lamp T-5/T-8 fixtures, or 4' or 8' Linear fixtures
- Mounting options: surface, pendant, suspended, aircraft cable or threaded rod
- Advance optics eliminate wasted light delivering targeted beam requiring fewer lumens



#### LED Recessed Troffer Fixtures LVT

- Fits perfectly in existing drop ceilings or new construction
- Uniform light distribution along the face of the luminaire with no hot spots or banding
- Models in 2x2; 2x4; 1x4 sizes
- Color temperatures: 3500, 4000, and 5000
- Wattages: 28 to 70
- Life rating 50,000 hours @L70
- Lumen Range: 1,500 to 7,200
- Dimmable capability





**GracePort® Programming Ports**

- Thru-door programming ports to access control cabinets from outside the door
- Minimize the risk of electrical arc flash and shock hazards
- Increased productivity while performing equipment maintenance
- Reduced Personal Protective Equipment (PPE)
- UL Recognized with fully customizable components, power options and custom logo options
- Available in UL Type 1, 4, 4X, 12 and 3R
- Available in 304 and 316 stainless steel, surface mount and hazardous location housings
- Most products ship within 2-3 business days



**GracePort+®**

- Large housings that protect Human Machine Interfaces (HMIs) and other valuable electrical components
- Protects high value components from dust, dirt, UV, oil and water
- Rugged polycarbonate design with formed-in-place gasket and stainless steel hardware
- Padlockable latches that restrict access only to the authorized personnel
- Ability to add custom GracePort® & SafeSide® PESDs



**SafeSide® Permanent Electrical Safety Devices (PESDs)**

- Voltage indicators, voltage portals, Safe-Test Point™ and Voltage Test Stations (VTS)
- Minimizes the risk of electrical arc flash and shock hazards
- Enhances mechanical and electrical Lockout / Tagout (LOTO) productivity
- Visual verification of voltage with voltage indicators and meter test with safe-test points
- cUL listed, Cat III & IV rated, AC & DC applications
- Exceeds the requirements of NFPA 70E and OSHA energy isolation principles



**SafeSide® Flex-Mount Voltage Indicator**

- A PESD that is easy to install on any electrical equipment with an M20 or 3/4" conduit knockout
- Verifies the presence of voltage from outside the enclosure
- Assists maintenance personnel in mechanical and electrical LOTO
- AC & DC applications
- Available in 4 wire and 5 wire configurations
- Optimal LED visibility with the ability of directional mounting





### Carbide Cutters

- Complete solutions for ½-2" conduit; ⅝" to 3" hole sizes
- Fast, accurate holes in stainless steel, mild steel, iron, copper, brass, aluminum, fiberglass and plastic sheet
- Longer tool life, less friction, torque and heat
- Split point cobalt-steel pilot drill eliminates walking and penetrates quickly
- Available in quick change and single piece design in individual sizes and various kits



### Cable Stripping

- No matter what type of material or cable you are stripping, Greenlee has the product for you
- C3 AutoWhip MC cable cutter for cutting and notching ends on AC (BX), MC & FMC cable ½-1" OD for aluminum or steel. Fully automated and programmable system to feed in cable set length and tail measurements all through a touch screen interface or USB upload
- Greenlee offers a variety of options to strip all types of cable from THHN to Semi-Con - G2090, Saber™ Cable Strippers, P2095/P2096



### Step Bits

- Made in USA
- Unique split-tip design penetrates through steel faster
- Resists walking or skidding, even on round surfaces
- Balanced, "double-flute" construction requires less pressure, does the work for you
- Now available for use in mild and stainless steel applications



### Drill Taps

- Complete hole drilling, tapping and deburring/countersinking in one operation with power drill saves labor and time
- Back tapered beyond tap to prevent thread damage from over-drilling
- Taps holes up to 4x faster than traditional methods
- Available in individual sizes and new longer lengths for ½" material



### Bi-Metal Hole Saws (830)

- Made in USA with global components
- Cut through steel, tin, aluminum, fiberglass, wood and plastic
- Deep 1 ⅝" cutting depth allows for cutting through 2x4" wood studs
- Extra-tough bi-metal blade made from highest grade of tool steel
- Available in various individual and kit sizes

### Intelli-PUNCH™ Knockout Driver

- Auto-Retract Technology: detects punch completion and automatically retracts the ram, preventing damage to knockout parts
- 360° rotating head punches at any angle
- Powerful 11-Ton punching force: Punch up to 6" in 14 GA mild steel or 4" in 10 GA stainless steel
- Compatible with all Greenlee knockouts designed for use with a hydraulic tool



### Electric Bender (854DX)

- Single shoe solution bends ½" to 2" EMT, IMC & rigid conduit
- Solid-state system eliminates arcing and prevents damage from temporary power loss
- Absolute encoder stops bending at precise angle
- Digital pendant sets angle and monitors progress
- Steel rollers for increased durability



### Next Generation Gator® Battery Tools

- Crimping tools available in 4 & 6-ton incline as well as 6, 12 & 15-ton pistol grip versions
- All crimpers are UL certified with use of key lug manufacturers (see product literature for complete listing)
- New features include Bluetooth® technology and LED display to show real-time communication details of battery charge, pressure level, and cycle information



### Knockouts

- Greenlee offers the widest range of fast, reliable knockouts for mild and stainless steel applications. Whether you are using a battery-powered tool, manual or hydraulic driver, Greenlee has the right product for the application to punch holes up to 6" in mild steel and 4" in stainless steel. Specialty application punches are also available. All Made in the USA.



### 10.8V Micro Cutters and Crimpers

- 350° Rotating head, and Auto Retract Technology (ES32ML, ES32FML, EEBS12ML)
- 3x faster when compared to manual ratcheting tools (EK50ML)
- 10.8V Li-Ion battery with battery level indicator to monitor charge
- Cuts and crimps in less than 8 seconds
- Ergonomic design to reduce injuries and ease of use with one trigger operation





### HelaGuard Non-Metallic Conduits & Fittings

- A complete line of industrial-quality conduits and fittings available in a range of styles, sizes and materials that are easy to install and resistant to sunlight, UV rays and most chemicals
- Snap-on nylon fittings with NPT threads deliver liquid-tight installations from IP65 to IP68 classifications



### Braided Sleeving

- Sleeving that provides abrasion and damage protection against chemicals, salts, solvents, de-icing fluids and petroleum products
- Specialty sleeving options provide defense against flames, fraying, heat/high temperatures, and electromagnetic interference



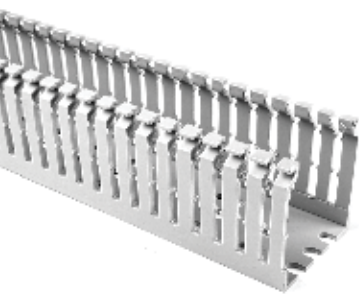
### Heat Shrink Tubing

- Shrinkable tubing that delivers superior insulation for wires and cable, providing abrasion resistance and environmental sealing protection
- Available in different shrink ratios, a selection of diameters, temperature ranges, color choices, materials, lengths, as well as packaging and adhesive-lined options



### Helawrap

- Protective tubing for bundling and shielding cables, wires and hoses which need a high level of mechanical protection
- Manufactured from Halogen-free flame retardant PA6
- Flame inhibiting properties make it an ideal choice when fire safety is a consideration



### Wiring Duct

- Manufactured from high-impact, rigid PVC, the Pro-Duct line includes solid, slotted and high-density slotted styles
- Comes in standard colors of white, gray and black in 6' lengths. Blue and other colors available as well
- Features smooth edges to safeguard wires as well as the installer from abrasion

### Electrical Safety Labels

- A collection of electrical warning and safety labels to alert of hazards and to mark electrical and automation equipment
- Pre-printed header labels meet code requirements for text and color usage
- TagPrint Pro 3.0 label design software along with thermal transfer labels and printer support creation of custom safety labels



### Releasable Ties (Q Ties, Speedy Tie, Grip Ties)

- Cable tie options that secure wires like traditional ties but with the ability to be adjustable, releasable and reusable
- Q Tie features an innovative open-style head and is ideal for use while working with gloves or in areas of limited visibility



### Industrial/Ratchet P Clamp

- Ratchet P Clamp is an innovative wire bundling solution
- Adjustable ratchet clamp mechanism
- Offered in four sizes and multiple mounting configurations
- Enables for reduction of parts and inventory costs
- Cuts the installation time required for wire harness and cable installation and maintenance
- Engineered for heavy equipment manufacturing, it also solves wire bundling challenges in OEM, automotive and solar installations



### Cable Ties, Mounts, Clips, Clamps & Bundle Separators

- Hundreds of bundling and securing options from standard cable ties to application-specific fasteners; available in different lengths, materials, colors and tensile strengths
- Clips and clamps in a variety of material options that are highly weatherable and impact resistant, ideal for demanding environments



### Special Purpose Cable Ties

- An industry-leading assortment of ties manufactured from materials that resist environmental stresses such as chemicals, radiation, UV, and extreme temperature environments
- Special Materials: PA66, PA66HS, PA66HIRHSUV, PA11, PA12, PA66VO, PP, ETFE, PA66HL, stainless steel, and others





## Pre-terminated Solutions/ RapidNet®

- Patented, pre-tested, connect-and-go systems
- Offer high performance in copper and fiber solutions within the same footprint
- Requires no on-site termination or certification testing - speeds installation time
- Meets "green" initiatives in its ability to reduce waste materials and enable cleaner job-site installations

## HelaNet Copper Solutions

- Fully structured cabling solutions that include Category 5e, Category 6 and Category 6A product lines for quality engineered installations
- Exceed TIA requirements for structured cabling systems
- Line includes patch panels, patch cords and jacks

## HelaNet Fiber Solutions

- Fully structured cabling solutions that meet the growing demands for high-speed Ethernet
- Meet all ANSI/TIA/EIA specifications for fiber-optic performance
- Line includes a full array of enclosures, adapter panels, trunks, fiber jumpers, and connectors

## Surface Raceway

- Securely hide and route communications wires with non-metallic surface raceway
- Available in low voltage and power rated options
- Low Voltage Raceway allows cables to be laid in rather than pulled through

## HelaGuard Non-Metallic Conduit

- Extremely flexible, lightweight, and durable cable protection
- UV resistant
- Excellent impact strength; recovers quickly if crushed
- Options of single or double slit opening construction for easy access during installation and maintenance
- Available in a choice of PA 6 and PA12

## Solar Ties

- Engineered for extreme environments
- Manufactured of environmentally-matched materials to suit different regions and varying conditions
- Offered in a variety of materials, styles, tensile strengths and bundle diameters

## Solar E-Clips

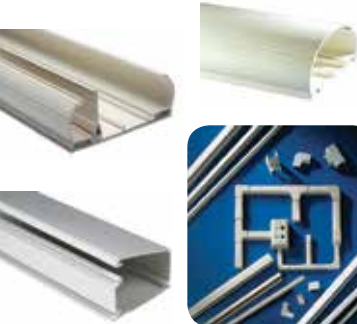
- Wide selection to accommodate any frame rail or application preference, with or without pre-drilled holes
- Engineered from specialized UV stabilized materials
- Offer low insertion force for ease of placement and removal along with a reduction in installation fatigue and speed

## Pre-printed Solar Labels

- A line of the most commonly used regulatory identification labels
- For use on large utility and scaled PV installations
- Meet NEC and IFC standards for printed text, character height, color, and outdoor UV stability

## Software and Printer Systems

- TagPrint Pro 3.0 label-creation software for simplifying the process of creating and printing code-compliant custom labels
- TagPrint Pro 3.0 comes loaded with a wide range of pre-saved label designs for the most common DANGER, WARNING, CAUTION, and other labels required by industry codes and standards
- Desktop printers for handling medium-to-large label volumes



NETWORK LABELING AT A TAP

## TagPrint XPRESS Data Center and Solar Mobile Apps

- Code standard reference and labeling tools designed specifically for the market served
- Each app provides an easy guide through labeling codes and industry regulatory requirements
- Print labels wirelessly from a mobile device



### Indoor Armored Fiber Optic Cables

- Supports 10 gigabit Ethernet up to 550 meters on OM4 multimode fibers
- Available in Plenum (OFCP) and Riser (OFCR) constructions
- Available with singlemode or multimode optical fibers
- Utilizes 900 micron tight-buffered optical fibers which allow quick and easy termination to standard fiber optic connectors
- Light-weight aluminum interlock armor offers exceptional impact and cut-through protection – steel is an available option
- Outer extruded jacket facilitates easier installation, permits a product print legend and aids visual identification
- Made in USA



### Enhanced Category 6 PLUS™

- Center spline in cable dramatically improves crosstalk performance
- Minimum ACR of 8.5 dB at 250 MHz
- Small .20" diameter for plenum cable (30025-8)
- UL Verified for electrical performance
- Sweep tested to 555 MHz
- Available in easy-to-pull Reelex boxes
- Made in USA



### Category 6A Shielded 10 Gigabit Cable

- Designed to accommodate 10 gigabit Ethernet up to 100 meters
- UL verified for electrical performance
- Single foil shield makes termination easy
- Compatible with any 6A shielded connectivity
- Shielded design adds immunity to RFI and EMI
- Available in plenum and riser rated
- Eligible for HCA Lifetime Warranty
- Made in USA



### Industrial Ethernet Cables

- Made for a variety of applications including low temp flexing (-45°F) to high temp (200°F), sunlight, chemical, oil and gas resistance
- Dozens of constructions available
- Designed for manufacturing, refining, transportation, etc.
- Category 5e & 6 available
- Support for 10/100 and gigabit Ethernet available
- Shielded and unshielded available
- Made in USA



### Indoor/Outdoor Fiber Optic Cables

- Cables transition from outdoor environments to indoor environments without having to convert to the appropriate UL rated indoor cable
- Supports 10 gigabit Ethernet up to 550 meters on OM4 multimode fibers
- Available in Plenum (OFNP) and Riser (OFNR) constructions
- Available with singlemode or multimode optical fibers
- Black outer jacket is UV resistant and permits use for aerial, duct and underground conduit applications
- Cable core is gel-free and instead uses super-absorbent polymers (SAP) to prevent water migration in cable interstices
- Made in USA





### CONCEPT™, Type 4:

- Seams continuously welded and ground smooth
- Doors are interchangeable and easily removed by pulling clip-style hinge pins
- Simple easy-to-remove and install hinge pins with built-in captivation clip
- Seamless foam-in-place gasket
- Type 304 and 316 stainless steel available for applications that require protection from chemicals and water.



### POLYPRO™, Type 4X

- Provides excellent chemical resistance to a broad range of solvents, alkalis and acids
- Resists cracking and provides excellent impact resistance
- Removable snap-hinge cover allows for easy access to cover and body for modifications
- Molded-in embosses for rear panel mounting



### SPECTRACOOL™ Indoor/Outdoor Air Conditioner

- Cleanable, reusable aluminum mesh filter protects coils for maximum cooling performance
- Galvanized sheet-metal cover for rugged factory and outdoor environments
- Active condensate management with heater strip
- Available with Remote Access Control via Ethernet/IP to monitor and control operation



### Stainless Steel Pull Box, Type 4X

- Readily available, standard models for commercial and industrial applications that require a junction box or pull box in a corrosive environment.
- Seams continuously welded and ground smooth
- Oil-resistant gasket and adhesive
- Captivated stainless steel cover screw threaded into sealed walls
- No holes or knockouts



### SF Side-Mount Filtered Fans

- Click-fit design quickly installs into enclosure wall; no tools or screws required
- Simple snap-open grille for easy filter replacement
- Enclosure side wall mounting
- Free air flow from 16 CFM (28 m3/hr.) to 571 CFM (920 m3/hr.)

### Hoffman HY-SHED - Rated to IP69K

- Manufactured from Type 304 stainless steel (available in 316L upon request)
- Sloped top design facilitates runoff of liquids
- Sanitary ¼ turn latch and Internal hinged design eliminates any catch points
- 4A dairy finish makes it easier to clean, saving valuable resources



### Type 1 Hinged Cover

- Flush slotted latch operated with a screwdriver; optional latches available
- Weldnuts provided for mounting optional panels
- Butt hinges
- Mounting holes on back of enclosure



### PROTEK™ Double-Hinged, Wall-Mount Cabinet

- Front and rear access to 19-in. rack equipment provided by three-part design: door, center section and wall section
- Premium seamless, foam-in-place gasket prevents contaminants from entering the cabinet



### ACCESSPLUS™ Double-Hinge, Wall-Mount Type 1

- Double-hinged for easy equipment access; center section provides 19-in. rack mounting per EIA universal spacing and is accessed through the front door or swing the center section away from the wall section for rear access



### Screw-Cover Pull Box, Type 1 and "Step Up" Pull Box Extender

- Available with or without knockouts. Various sizes of easy-to remove concentric knockouts on all four sides of standard boxes with knockouts.
- Optional flush-mounted door frame available
- Optional flush covers
- Pull Box Extender compatible with all pull box accessories and maintains ground between main enclosure and extender





Harsh & Hazardous

KILLARK®

**HKH Hazcon Series Control Stations**

- For Class 1 Div 2, Type 4X, Class 1 Zone 1, IP66 & Ex de IIC Harsh and Hazardous Locations at -50°C to +60°C ambient.
- Supplied in Non-metallic Glass Reinforced Polyamide and 316/316L stainless steel for cULus, IECEX/ATEX
- Contact Blocks rated for light switching up 20A @ 350V and Gold Flashed for Low Voltage Directives with HP Ratings.

**GEB-TB Series Terminal Boxes**

- Class I Groups BCD & Ex d IIC Type 4X IP66 Harsh and Hazardous Locations
- IP66 Ambient temperatures -50°C to +163°C. UL/CSA/SIRA IECEX/ATEX
- Enclosure in copper free aluminum alloy, Nitrile O-ring, powder paint coating
- 4 hub configurations, C, L, T or X. In NPT ½ through 1½" or metric M20 through M50.

**HKH Hazcon Series Light Switch**

- For Class 1 Div 2, Type 4X, Class 1 Zone 1, IP66 & Ex de IIC Harsh and Hazardous Locations at -50°C to +60°C ambient.
- Supplied in Non-metallic Glass Reinforced Polyamide and 316/316L stainless steel for cULus, IECEX/ATEX
- Contact Blocks to operate lighting circuits up to 2 poles 20A at 350VAC.

**USF & SJIC Series Terminal Boxes**

- Class I Div 2 & Ex e IIC Type 4X IP66 Harsh and Hazardous Locations
- Ambient temperatures -50°C to +90°C.
- Certified by cCSAus, SIRA, IECEX / ATEX & IEx Inmetro
- Standard in 316 stainless steel, 2mm material thickness.

**ENY/EYD/EY Series Sealing Fittings**

- Sealing fittings for use in Class I and II (Division 1 and 2) applications
- Sealing fittings minimize passage of gases, vapors, and flames through conduit system.
- Fittings are offered in copper-free aluminum (with electrostatically-applied powder coating) or Duraloy® Iron (with Tri-Coat Finish)
- Available in trade sizes ranging from ½" to 4"

**Duraloy® 5, 7, 8 and O Series Conduit Bodies**

- Provides access to conductors for pulling, splicing, and maintenance. Fittings are threaded for rigid conduit and IMC
- Offered in copper-free aluminum (with electrostatically-applied powder coating) or Duraloy® Iron (with Tri-Coat Finish)
- Available in trade sizes ranging from ½" to 4"

**Acceptor® Series Hazardous Location Blade-Style Quick-Wire Plugs and Receptacles**

- NEMA blade-type explosion-proof and dust-ignition proof assemblies allow for connecting portable and convenience equipment in temporary applications
- Exclusive Quick-Wire wiring method reduces installation time and facilitates safer installations
- Available in 20A and 15A, 125V and 250V configurations

**VM2L & VM4L Series LED Fixtures**

- Quad Listed - NEC/CEC/IECEX/ATEX
- Available 90 minute battery back-up
- NFPA 101® Life Safety Code Self-Diagnosing Emergency monitors emergency LED status, emergency LED driver circuit, battery capacity, and charger function
- Standard supplementary 20 kA / 10 kV surge protection on 120-277Vac models

**KFL & KFLH Series LED Fixtures**

- Quad Listed - NEC/CEC/IECEX/ATEX
- Standard supplementary 20 kA/10 kV surge protection on 120-277Vac models
- Wide range of lumen outputs
- 120-277Vac 50/60Hz-347-480Vac -120-250Vdc models available

**LAL Series LED Fixtures**

- Quad Listed - NEC/CEC/IECEX/ATEX
- Versatile mounting options for any mounting need
- Standard supplementary 20 kA / 10 kV surge protection on 120-277Vac models
- Clear and diffuse lens options available







**Hubbell Outdoor Litepak Family**

- The LitePak family is designed for perimeter illumination for safety, security and identity
- LNC 3 and 4 offer optional battery backup for egress applications as well as a programmable occupancy for even greater energy savings when no motion is detected
- The Litepak 3 and 4 are available in stock and MTO (see website for details)



**Hubbell Outdoor DDL Multi-purpose Dusk-to-Dawn LED Luminaire**

- Versatile mounting options include: integral bracket that adjusts to fit both 2 3/8" & 1 5/8" OD mast arms, direct wall/surface mounting
- Up to 5279 lumens with up to industry-leading 121 lumens per watt efficacy
- The DDL-9L is available in stock and Quick-Ship (see website for details)



**Hubbell Outdoor PGM Perimaliter® Series**

- Wall mount perimeter safety, security and identity applications, units provide wide coverage and excellent uniformity
- Spacing of 4 to 6 times the mounting height
- The PGM series is available in stock and MTO (see website for details)



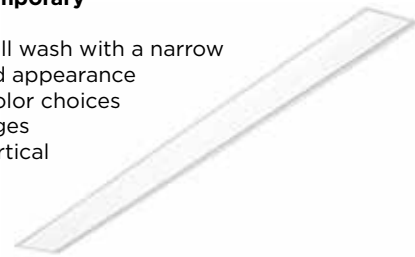
**Columbia Lighting LWS 16" x 24" LED Suspended High Bay/Low Bay**

- Powerful, compact LED high bay with aisle optics or wide distribution, simple installation and a generous range of options including an optional wrap lens
- LWS offers four LED color choices with 83 CRI and is suitable to replace 250W to 400W HID
- LWS is perfect for industrial or retail applications and utilizes TIR directional linear optics for optimal aisle lighting performance



**Columbia Lighting CWW Contemporary LED Wall Wash**

- Attractive high performance wall wash with a narrow 3" aperture and a clean, finished appearance
- CWW is available in four LED color choices at 80 CRI with six lumen packages
- Provides uniformity of 5:1 on vertical surfaces from ceiling to floor that maintains visual comfort



**Dual-Lite Life Safety EV4R- Recessed Ceiling Mount LED Emergency Light**

- Architectural recessed ceiling mount, emergency light with superior emergency lighting coverage
- Flame-rated, UV stable thermoplastic housing
- Choice of round or rectangular trim-plate in white or black finish
- 4 LEDs housed within an aluminum heat-sink and adjustable optic assembly



**Hubbell Industrial UTB- Utilibay™ LED Highbay**

- Symmetrical design for consistent installed results
- Five reflector options to meet any lighting need
- Three optional lenses to meet your shielding needs
- The Utilibay™ LED Highbay is available in a high output version (28,000 lumens) and a medium output (18,000 lumens)



**Columbia Lighting LCAT LED Contemporary Architectural Troffer**

- Architectural center lens design in 1'x2', 1'x4', 2'x2', and 2'x4'
- Special formulated, linear prisms lens for high performance without pixilation
- Up to eight lumen packages per size and up to 132 LPW



**Columbia Lighting LTGR LED Specification Grade Architectural Recessed Luminaire**

- Available in 1'x4', 2'x2', and 2'x4' with two architecturally styled lens choices
- Wide lens design reduces glare and provides low contrast ration across the face of the fixture
- Up to eight lumen packages per size and up to 133 LPW



**Prescolite LiteBox Plus+ Downlight (LBP6), Wall Wash, & Retrofit (RLBP6)**

- Up to 1500 Delivered Lumens
- Standard 90+ CRI
- Dual Voltage 120-277V
- Dual Dimming 0-10V and Triac
- ENERGY STAR Qualified





**Motor Disconnects**

- Dual rated manual motor controllers & disconnects
- 30-100 amp units available
- Variable Frequency Disconnect units available
- Sloped Top Disconnect for Food Processing Plants
- NEMA 1, 3, 3R, 4X, 4X stainless steel, & hazardous location units available



**Watertight Wiring Devices**

- Newly redesigned watertight line of devices
- NSF, UL, CSA rated
- UL TYPE 4, 4X, 6P, IP65, 66, 67
- Mates with Competition, UL witnessed
- Cone seal on back adjusts to any cable range & offers maximum strain relief



**Twist Lock Industry Standard Locking Units**

- Super tough nylon construction
- Standard, safety-shroud, & water tight units
- Dual, maximum strength cord grip
- Catalog number & current ratings printed on device
- Only Hubbell makes Twist Locks!



**Advantage Series Switch Rated Pin & Sleeve**

- Aux Contacts available
- Listed as both a Motor Disconnect & Branch Disconnect
- Mates with existing installed IEC pin & sleeve devices
- UL 4X, IP69, high pressure wash at 1000 psi
- Power indicating LED light for visual verification of power
- NSF certified
- 30 and 60 amp



**Kellems**

- Pulling Grips, Support Grips, Strain Relief Grips, Liquid Tight Grips, Fiber Optic Grips
- Enhances Plant Safety
- Cord connectors
- New Kellems Selection App



**Delivery Systems**

- **Floor Boxes:** 2" Hub available on 2-10g Recessed Boxes; Plated Covers offer durable finish for years
- **Poke Throughs:** Lowest Flange Height available on Recessed Poke Throughs; Plated Covers offer durable finish for years
- **Basket Tray:** Made in the USA; Pre-Formed Fittings Available
- **Raceway:** Boxes have Handi-Screw standoffs for easy installation; Boxes rounded corners eliminate sharp edges
- **Duct:** Trench Duct, Wall Duct; Underfloor Duct, Casino Duct



USB Type - C



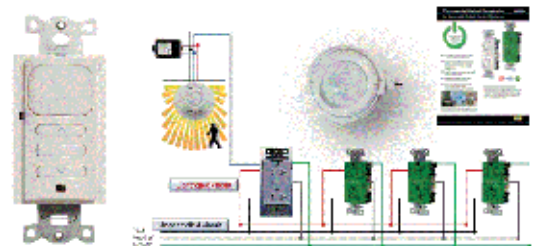
USB Type - Combo A & C



USB A

**USB**

- 5a for fast charging
- Type A & Type C units available
- 4 port units available



**Plug Load Controls**

ASHRAE 90.1-2010 & CEC Title 24 Compliant Controls  
At least 50% of 15 & 20 amp receptacles must be controlled by an automatic device such as occupancy sensor in:

- Private offices
- Open offices
- Computer classrooms

Several solutions for ease of installation

- Wired communication
- Wireless Communication from wired sensor
- Completely wireless systems

Works with both occupancy and vacancy sensors

No software, remotes, or computers required for set up!



### IDEAL Insulated Hand Tools

- IDEAL insulated hand tools are double insulated, 1000V certified and comply with OSHA 1910.335 regulations and NFPA standards.
- Textured plier handles provide a sure grip and resistant to perspiration, water, oil and chemicals.
- Pliers and wire strippers feature a UL classification and certification.
- Insulated screwdrivers and nutdrivers feature precision-ground tips to provide secure fit reducing spin out.



### IDEAL Ballast Disconnects

- The IDEAL PowerPlug® Luminaire Disconnect fully meets the current National Electric Code for non-residential fluorescent luminaires.
- Advanced push-in technology provides fast, efficient ballast connections resulting in reduced installation time and improved labor savings.
- PowerPlug® reduces electrical shock hazard during ballast installation and replacement by safely disconnecting a hot neutral ballast wiring.



### IDEAL Wire Termination Products

- IDEAL has the most extensive line up of wire termination products meeting the needs of any job.
- All IDEAL wire termination products are UL listed and ensure compliance with NEC standards.
- Available in a wide variety of packaging configurations to meet the needs of any job and price point including boxes, jars, re-sealable bags and bulk configurations.



### IDEAL Hand Tools and Totes

- Complete line-up of specialized hand tools designed to meet the needs of the professional electrician.
- Extensive selection of IDEAL Wireman™ forged hand tools, industrial screwdriver bits and cushion grip screwdrivers are designed for performance and proudly Made in USA.



### IDEAL Grounding Products

- Products designed for grounding and bonding applications.
- Solid and stranded pigtail leads for device grounding.
- Grounding screws designed with unique thread-forming, hole-finding feature with combination 5/16 in. hex, #2 Phillips, 1/4 in. slotted and #2 Robertson head.
- Products are UL listed and ensure compliance with NEC standards.



### IDEAL Wire Installation Products & Supplies

- IDEAL offers the highest quality wire installations products designed for performance and for job performance and maximum job productivity.
- A great selection of wire pulling lubricants, conduit benders, fish tape, rope, pull line and other accessories.



### IDEAL Cutting Supplies

- IDEAL Cutting supplies and power tool accessories are specifically designed with the professional electrician in mind.
- The complete line of IDEAL reciprocating blades, drill bits, hole cutters and accessories are designed for wood, metal, drywall, stainless steel, fiberglass, ceramic tile and general purpose applications.
- Products are available individually packaged and also in convenient kits consisting of the most popular items for specific applications.



### IDEAL Lockout Tagout and Safety

- IDEAL offers a great selection of the most popular lockout/tagout devices, locks, tags and warning signs plus a complementary line up of testers, insulated tools, non-conductive fish tapes and other specialty safety products.
- All safety products from IDEAL fully comply with strict ASTM requirements and OSHA regulations.



### IDEAL Network Testers, Tools & Connectors

- IDEAL Datacomm products provide installation and testing solutions for twisted pair, coax and fiber based installations.
- Designed for the professional, IDEAL tools, testers and connectivity products offer an integrated approach to cut, strip, terminate and test a wide variety low voltage applications.



### IDEAL Test and Measurement

- IDEAL features a full line of rugged and advanced test instruments meeting most testing and trouble shooting applications at affordable prices.
- Commercial-grade circuit tracers from IDEAL provide accurate cable tracing and circuit identification on open, closed, energized and de-energized circuits.





**Juno® Retrofit LED Basics Series**

- Simple, economic way to upgrade nearly any existing 4", 5" and 6" recessed fixture to energy-efficient LED
- Up to 600 lumens of high-quality light, equivalent to 65-watt incandescent
- Requires just 11.5-watts input, providing up to 85% lighting energy savings



**Juno® 2" LED Downlights and Adjustables**

- Over 600 lumens of brilliant white light, consuming as little as 10W
- Very low-profile for flexible range of applications
- Round and square apertures, wide range of trim styles/finishes
- Approved for insulated or non-insulated ceilings



**Juno® Trac-Lites™ R600L Series Economy Track Fixtures**

- Economical 10W LED luminaires that replace 50W MR16 halogen lamps
- Integral driver to minimize footprint and interchangeable lenses
- Dimmable with qualified dimmer; over 50,000 hour operating life



**Juno® Basics Series™ 6" 900 Lumen Commercial Retrofit LED Baffle Trim**

- Upgrade virtually any existing 6", non-IC, recessed commercial open frame rough-in section to high-performance LED illumination in minutes
- All-in-one design features an advanced LED light engine mounted directly to the cast aluminum trim with integral white baffle and flange



**DanaLite FlexConnect™ Architectural Linear LED Lighting System**

- Produces up to 450 lumens per foot of brilliant white light
- CCTs of 2200K, 2700K, 3000K, 3500K and 4000K with standard CRI of 80 minimum and CRI of 95 available
- Easy to bend, shape and cut in the field for unrivaled application flexibility
- Linear runs from 1-foot to 40-feet in length are possible with no voltage drop, ensuring even illumination

**Indy™ L-Series Commercial Downlights/Retrofit Kits**

- 4", 6" & 8" LED downlight, adjustable accent and wall wash
- Choice of 18 lumen packages from 800 to 9,000 lumens
- Industry-exclusive options: Hyperbolic Trim, Lumen Depreciation Indicator
- ENERGY STAR® qualified, dimmable, 50,000 hour L70 service life



**AccuLite™ LED Parking Garage & Canopy Luminaires**

- Small footprint - 9" Square (PG1) or 14" Square (PG2)
- LED light engines producing up to 8,200 delivered lumens
- Custom designed optics ideal for 30'x30' or 30'x40' spacing
- Flexible surface, pendant or trunion mounting options



**Juno® Commercial LED Retrofit Trims - JCLR Series**

- All-in-one design - Everything you need to upgrade your existing fixture all in one box
- Lumen Options - Choice of four packages producing up to 2400 lumens typical at 27.5W
- CCT/CRI - 2700K, 3000K, 3500K or 4000K LED; 80 CRI min (1800 & 2400 lumen) or 90 CRI minimum (1500 & 2000 lumen)
- ENERGY STAR® Qualified



**Juno® Pro-Series SoftTask™ LED Undercabinet Lighting**

- Duplicates the light level of fluorescent undercabinet lighting while consuming only 45% of the energy
- Utilizes warm-white 3000K LEDs tightly binned to within a 3-step MacAdam Ellipse for industry-leading color consistency, 90 CRI minimum
- 22", 30" and 40" fixtures are available with Passive Infrared (PIR) Occupancy Sensor
- ENERGY STAR® Qualified



**AccuLite Indoor/Outdoor Sign Lighters**

- Delivers the light output of 50-watt, MR16 halogen lamps, but with only 10 watts per fixture head and while consuming only 20% of the energy
- Brilliant white light in three color temperatures - 2700K, 3000K and 4100K
- Fixtures feature single or dual head designs with 180° tilt and 360° rotation, and can be fitted with either domed or flat canopies



Please ask about our HDMI over IP Products. FREE App Included!



**KD-IP120POETX**

- HDMI over IP with POE (TX) Transmitter
- Supports HDMI Pass-through



**KD-IP120POERX**

- HDMI over IP with POE (RX) Receiver



**KD-IP120TX**

- HDMI over IP (TX) Transmitter
- Supports HDMI Pass-through



**KD-IP120RX**

- HDMI over IP (RX) Receiver



**KD-PRO4X1**

- 4 Inputs to 1 Output HDMI Switcher
- Audio De-embedding of Analog L/R Balanced/Unbalanced & Digital Coaxial Audio
- Supports Ultra HD/4K & HDCP2.2



**KD-DA1X4**

- 1 Input to 4 Outputs HDMI Distribution Amplifier
- Supports Ultra HD/4K & HDCP 2.2



**KD-DA1X2**

- 1 Input to 2 Outputs HDMI Distribution Amplifier
- Supports Ultra HD/4K & HDCP 2.2



**KD-HDFIX22**

- HDMI Extender
- Booster & Buffer of EDID with built-in Audio De-Embedder of Digital Coaxial & Analog L/R
- Supports HDCP 2.2
- TMDS, HPD, Ultra HD/4K



**KD-4X1CSK(2.2)**

- 4 Inputs to 1 Output HDMI Switcher
- Supports Ultra HD/4K and HDCP 2.2



**KD-HIF13, KD-HIF16, KD-HIF19**

- UHD/4K, HDR
- 24/25/30HZ 4:4:4/12bit or 50/60HZ 4:4:4/8bit

**Tape Measures**

- 16', 25', 30', 5m and 7.5m models
- Patent-pending markings with BOLD lines every 1/8" and extra-large BOLD numbers
- Retraction speed brake for greater control and protection
- Dual angle magnetic hooks attach to conduit and steel studs
- Blade printed Conduit Multiplier Bending Table helps calculate offsets & saddles



**6-in-1 Multi-Bit Nut Driver (Cat. No. 32800)**

- Includes interchangeable 3/16", 1/4", 5/16", 3/8", 7/16" and 9/16" sizes
- Heavy duty handle and shaft exceed the torque performance of regular nut drivers
- Wrench assist for torque when needed
- Cushion-Grip handle for maximum torque and comfort



**High-Leverage Diagonal-Cutting Pliers (Cat. No. D2000-49)**

- Cut ACSR, screws, nails and most hardened wire
- Longer handles for added leverage, reach and comfort
- High-leverage design has 67% more cutting power
- Angled head design for easy work in confined space
- Custom, US-made tool steel



**Magnetic Bubble Levels**

- Innovative patent-pending locking track keeps magnets permanently via
- Large, easy-to-read high-visibility vials
- V-Groove channel fits contours of conduit and pipe for greater stability
- Tapered noses and bodies slide easier into pockets and fit into more tight spaces



**Wireless Jobsite Speaker**

- Connects wirelessly via Bluetooth\* or a wired auxiliary input
- 10-Hour battery life
- Drop protected up to 6.6 ft
- Powerful rear magnet holds speaker to metal surfaces
- Twist-lock flange mounts to Klein's Lighted Tool Bag
- Rated IP45 waterproof/dustproof
- Able to answer calls hands-free with the built-in speakerphone
- Includes 1/8" stereo auxiliary cable and micro USB-to-standard USB charging cable



**Tradesman Pro Bags**

- **Tablet Backpack** (Cat. No. 55603) features protective covers for tablets up to 10.1"
- **Tool Pouch Apron** (Cat. No. 5244) provides plenty of pockets for tools and parts, even includes a small pencil marker pocket for convenience. Adjustable waist fits 32"-53"
- **Knife Holder** (Cat. No. 5248) holds knives up to 4.5" when closed. Magnetic flap closure; metal clip for belt or pocket

**15-in-1 Screwdrivers**

- Includes 14 different screwdriver tips plus a 1/4" nut driver
- Internal storage in the handle for screwdriver bits
- Cushion-Grip Handle for maximum torque and comfort
- Available in Classic, Tamperproof and HVAC models



**Heavy-Duty Nut Drivers**

- Through-handle, full-hollow shaft for torquing hex nuts onto threaded rod of any length
- Color coding for easy identification of different sizes
- Wrench assist for additional torque
- Rare-earth magnetic tip holds nut in place while fastening
- Available in 1/4", 5/16", 3/8", 7/16", 1/2" and 9/16" hex sizes



**400A AC Auto-Ranging Digital Clamp Meter**

- Features best-in-class high-visibility dual-line OLED display screen
- Provides all common measurements such as AC current, AC/DC voltage, continuity, resistance, capacitance, frequency, diodes and temperature.
- True RMS measurement technology
- Dual-mode display can present simultaneous measurements



**6-in-1 Ratcheting Stubby Screwdriver**

- Ratcheting mechanism allows user to work faster and with more efficiency
- Four different screwdriver bits including #1 and #2 Phillips and 1/4" and 3/16" Slotted tips
- Includes 1/4" and 5/16" nut drivers
- Cushion-Grip handle for maximum torque and comfort







#### ÖLFLEX® VFD SLIM

- UL TC-ER & cUL CIC/TC approved
- Double shielded for extra protection
- Includes a semi conductive layer made to withstand nonlinear power distortions
- Lapp Surge Guard insulation system



#### EPIC® ULTRA Housing

- Evaluated for compliance to UL50E Type 4, 4x, and 12 per UL standard 50E
- Virtually eliminates electrical interference
- Stainless steel levers and bolts
- Corrosive resistant nickel plated housings



#### ÖLFLEX TRAY II/TRAY II CY

- Oil-resistant pressure-extruded jacket improves flexibility
- Easier to pull than standard tray cables
- Lower labor costs
- UL TC-ER reduces material costs
- No conduit is needed
- Black numbered conductors for easy identification
- ÖLFLEX Tray II CY is designed with foil tape and tinned copper braid shield for improved effectiveness



#### SKINTOP® Click

- Up to 70% installation time savings due to innovative CLICK system
- Ideal for head-to-reach dual wall enclosures and limited access spaces
- Reduced inventory as no locknuts are required
- The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief
- Superior integrated locking mechanism includes an internal ratchet for vibration-proof protection



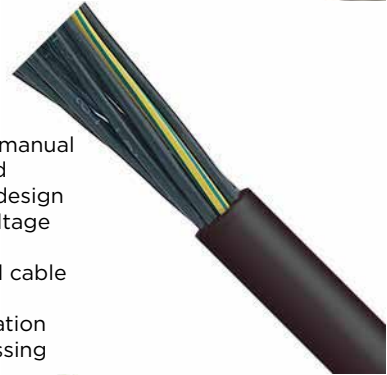
#### EPIC Pin & Sleeve

- Power connector meets IEC standard for global acceptance
- Patented click-housing for easy access
- Patented integral cable grip lock for quick and rugged strain relief
- Available in IP44 and IP67



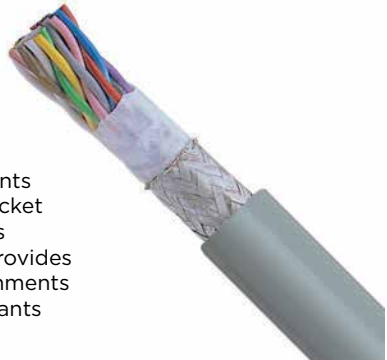
#### ÖLFLEX 190/190 CY

- Extremely oil-resistant (Oil Res I & II)
- Meets NFPA 79 machinery wiring standard
- Very flexible and number-coded for easy routing and termination
- Round jacket for optimal seal with a SKINTOP® strain relief cable gland
- ÖLFLEX® 190 CY is a shielded version for EMI and RFI protection



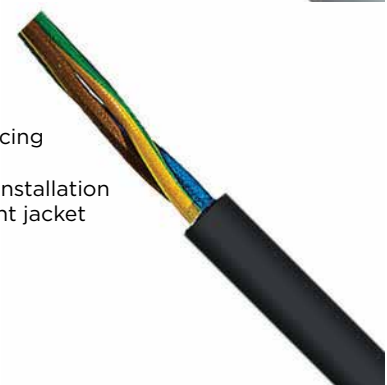
#### ÖLFLEX 409P

- Easy and safe automated as well as manual cable processing thanks to improved tear-off performance of new jacket design
- UL AWM 1000V rating for higher voltage requirements
- Abrasion and notch resistant control cable for use in harsh conditions
- Reduction of damages to core insulation
- Cost and time savings during processing



#### UNITRONIC® FD CP TP Plus

- UL/cUL CMX approved
- Flexible at -40°C
- Resistant to oils, solvents, and coolants
- Abrasion-resistant & halogen-free jacket
- Resistant to microbes and hydrolysis
- Tear resistant polyurethane jacket provides excellent service life in harsh environments against most oils, solvents, and coolants



#### ÖLFLEX Power IX

- International approvals: UL, CSA <HAR> & CE
- One cable does the job of four, reducing inventory
- One specification for easy and safe installation
- Oil-, chemical-, and abrasion-resistant jacket
- Ideal for high-stress applications in dry and damp environments
- UV-resistant jacket for outdoor use

#### SKINTOP SL/SLR

- The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief
- Superior integrated locking mechanism includes an internal ratchet for vibration-proof protection
- Multi-trapezoidal thread requires just one twist to tighten
- Generous high-quality neoprene bushing provides a liquid-tight and dust-proof hermetic seal





### radiant® RF Lighting Control

- 2/3 of homebuyers prefer an app or touchscreen for lighting control
- Award winning Tru-Universal LED dimmer in-wall and plug in module
- Alexa voice control enabled!
- Available in radiant® and adorne® collections for multiple designs and finishes
- Automated control for iOS, Android and Apple Watch



### Premium HDMI Cables

- Today's new 4K Televisions work at 2160p which is 4 times the clarity of 1080p/60
- Legrand's premium cables can handle a full 18 gigabits per second (Gbps)
- Independent 3rd Party Certification
- Previous generations of cables may work, or they may create snowing, loss of audio, or other issues.
- Choose the HDMI cable you know will work, not hope will work



### MDU Enclosures

- MDU enclosure solution provides easy, cost-effective distribution for video, voice, and data services throughout multi-dwelling units or small homes
- The ideal solution for meeting a project's specific needs with simplicity and speed
- Simplifies the specification and installation of basic wiring projects



### Home Theater Install Kit

- Manages excess cable via in-wall storage, while providing slack for convenient access to the back of TV when needed
- Allows media center to be moved closer to the wall
- Includes 15A 125V tamper resistant decorator receptacle
- Supports easy extension of electrical wiring when paired with other products in the recessed connection kit family
- A/V Source Components
- Angled Duplex Outlet



### 30" Plastic Enclosure

- Great for wireless and wired installations
- Attractive design suitable for living spaces
- Extra venting keeps equipment cool
- Universal mounting grid works with multiple manufacturers



### On-Q Speakers

- Complete line of wall, ceiling, outdoor, even rock speakers
- Good, Better, Best Options
- Color Coded Mounting Brackets
- Pairs well with Intuity and digital audio systems





**P&S PlugTail® Devices**

- Total installed cost is 30% less on commercial projects
- Perfect for pre-fab operations
- Fewer switch and receptacle mis-wiring call backs
- PlugTail circuit tester and lighting jumper adds functionality
- Switch, Sensor, Receptacle, GFCI, and TVSS options



**SteriGuard™ Antimicrobial Plugs, Connectors, Cord Drops**

- Provide a new and innovative approach to controlling microbial growth by incorporating antimicrobial additives that remain stored in the polymer and are continually released to the surface, providing long-lasting protection
- Independent testing reveals the ability of these assemblies to inhibit the growth of E. Coli, Listeria, MRSA and Salmonella
- Antimicrobial additives are embedded in polymer making them resistant to scuffing and cleaning
- UL and CSA listed, NSF certified
- NEMA Type 4, 4X, 6, 6P and IP67 Protection and resistance to high-pressure hose-downs



**IEC 309 Disconnects & Mechanical Interlocks**

- Extra-rugged construction for wet, humid and corrosive environments
- Corrosion-resistant stainless steel captive screws ensure watertight seal
- NEMA 4X and 12 watertight-rated
- Fusible models equipped with blown fuse indicators
- Hinged access door with window enables fast fuse change-outs on fusible models



**The radiant® Collection**

- More style and function with P&S's radiant® collection
- Consistent form, fit and function across electrical, lighting and On-Q lines
- Clean, modern profile line of screwless wall plates
- Black shutters on all tamper-resistant devices
- Homeowners prefer radiant® to standard devices



**USB Charging Receptacles**

- Charge multiple USB-powered devices at the same time
- Available in Fed Spec and Hospital Grade versions
- Chargers available with single receptacle, duplex receptacle, 3-way switch, and four charging ports.
- Eliminates the need for plug-in chargers



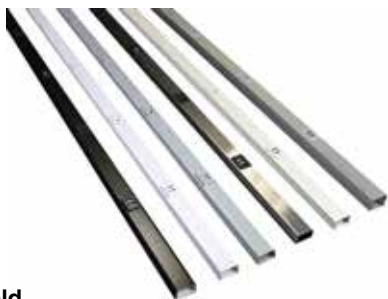
**Dual-Function AFCI/GFCI Receptacles**

- Self-Test GFCI technology paired with Arc Fault Protection
- Federal Specification WC596 Listed
- Two trip indicator lights for easy identification and reset
- Protects from parallel and series Arc Faults
- Patented SafeLock® protection disconnects power to the receptacle if critical components are damaged



**deQuorum Flip-Up Counter Boxes**

- Field wired version is UL Listed for residential counter tops
- Exceeds UL1363 Spill Water Test
- Duplex 3.1A USB Receptacles
- Available in durable black powder coat and stainless steel finishes



**USB Plugmold**

- 2.4A USB Type A receptacles provide a fast charge
- Eliminates the need for AC adapters
- Multiple versions: All USB, Alternating USB and Power, and USB with power

**GFCI Plugmold**

- Add GFCI protection to multiple outlets
- Backsplash tile work remains clean and uncut

**All Versions**

- Patented tamper-resistant shutter system
- Available in 3', 5' and 6' versions
- Black, gray, ivory, white, anodized aluminum and stainless steel



**OFR Raceway**

- Bring power, communications and A/V connectivity anywhere
- ADA compliant
- Very few SKU's
- Ideal for retrofit conference rooms
- Easy to Install, mounts directly to the floor covering, whether it's wood, tile, or carpet



**Evolution Series Poke-Thru**

- 6", 8", and 10" configurations
- Available pre-wired for faster installation
- New & Improved Cover Design
- ADA Compliant and UL 2hr Fire Rated
- Power, communications & A/V compatibility



**Outdoor Charging**

- Combine power and lighting in one pedestal
- LED area light or indicator light options
- Rugged aluminum construction
- Durable premium power coat finishes
- Lockable door available



**PVC Floor Boxes**

- Round (881) or rectangle designs (880MP)
- Ratchet-Pro™ Cover System works with uneven concrete
- Models with 2" KO's available
- Graduated cubic inch marking on inside of box
- Complete line of brass, brushed aluminum, and polycarbonate covers





#### Dual Function AFCI/GFCI Receptacle

- Engineered to meet the latest UL standard for auto-monitoring (self-test); periodically conducts an automatic internal test to confirm that GFCI protected power is available
- On initial power up, tests the GFCI circuit within 3 seconds
- Patented Lockout Action prevents reset if the device is damaged



#### Antimicrobial Treated Devices

- Touch surfaces of devices are entirely treated with antimicrobial materials, providing an added layer of protection
- Made with an E.P.A. registered additive
- Helps resist development of mold, mildew, fungi and other odor-causing bacteria



#### Rhino-Hide Rough Service Wiring Devices

- Highest environmental protection ratings of any device in its class:
  - UL 50E Type 3, 3R, 4, 4X, 6, 6P, 12, 13
  - IEC IP66/IP67/IP68/IP69K
  - ABS certified for marine and offshore installations
- Self-closing lid ensures receptacle is always protected and will never "weld" to threaded connection



#### USB Charger/Duplex Tamper-Resistant Receptacles

- Smart chip designed for recognizing and optimizing the charging requirements of individual electronic devices
- Two high-powered USB charging ports with 3.6 amps of charging capacity
- Compatible with USB 2.0 electronic devices



#### Commercial Devices

- Manufactured to withstand demands of commercial and institutional applications
- Heavy duty mounting strap
- Fast wiring and installation with brass triple drive combination screws
- Available in 15A or 20A
- Backed by ten-year limited warranty

#### Medical Grade Power Strips with Mounting Bracket

- Available in 2, 4 and 6 outlet configurations
- Choice of 7' or 15' AC power cord with molded right-angle hospital grade plug
- Surge-protective models are UL 1449 3rd edition compliant, providing the ultimate protection against voltage surges that can damage or diminish the performance of sensitive electronic equipment



#### Industrial LED Lighting

- Industrial LED lighting line includes energy efficient, robust, waterproof and hazardous location approved luminaires.
- Designed to provide lighting for areas where water, vibration, maintenance or temperature negatively affects conventional illumination.

#### Provolt™ Occupancy and Vacancy Sensors

- Comprehensive solution integrates occupancy sensing and daylight harvesting capabilities
- Combines line voltage multi-technology, PIR or ultrasonic sensor with a power pack and photocell (occupancy sensors only) in a self-contained, easy-to-install compact device
- Includes 2 photocells for daylight harvesting (occupancy sensors only)



#### Decora Digital Dimmer

- New Design for contemporary style
- Control manually or using free iOS and Android app
- Bluetooth compatibility provides point-to-point control up to 30 feet
- Control dimmers and switches within the home one at a time
- Automatically set dimmer through connections with smart devices, adjust to local sunrise/sunset times



#### Metering VerifEye™

- VerifEye™ line offers submeters, communication products, and software solutions
- Easy integration with third party building management system platforms
- Installer friendly, reverse phase LED and power and load indicators provide installation diagnostics
- Ease of communication between multiple parties and platforms





### Samsung SmartThings + Leviton Bundle

- Affordable yet comprehensive whole-house automation from two of the best manufacturers in the world
- Includes Samsung SmartThings v2 Hub, Leviton VRM1 Dimmer, Leviton VRS15 Switch
- Compatible with many Leviton wireless devices including sensors, thermostats, and load controls, as well as third-party devices including locks, cameras, and more.
- Voice controlled home automation - Amazon Echo or Google Home
- Bundle sold exclusively via electrical distribution at a great value for mass-market, MDU, and builder home automation projects
- Please visit [Leviton.com/SmartThings](http://Leviton.com/SmartThings) to see installer information, compatible products, FAQ, and marketing materials like brochures



### Vizia RF+ Z-Wave Wireless Lighting Control

- One-touch control of lights, dramatic scene transitions, timed events and many desirable options to enhance your home without the need for new wiring
- Utilizes popular Z-Wave protocol for attachment to capable hubs, controllers, gateways, and security systems
  - Robust product line designed to be used stand-alone includes dimmers, switches, fan speed controls, plug-in modules, and a smart receptacle
  - Easily setup and control scenes or zones: Wall Controllers are ideal for remote control of one or multiple Vizia RF + scene-capable devices
  - Accessories for Vizia + and Vizia RF + include color change kits to allow fast and easy color changes for all wall mounted devices in the following high gloss colors: White (-W), Ivory (-I), Light Almond (-T), Gray (-G), Black (-E), Red (-R), Brown (-B)



### Lumina Gateway Wireless Energy Management System

- Powerful wireless energy management solution for small commercial, new construction and retrofit, controlling lights, fans, shades, pumps, and more
- The Gateway, motion sensor, door/window sensor, light switch, thermostats, and load control modules can allow automated control of loads with remote control from a tablet/smartphone
  - Create a complete wireless ecosystem to control lights, temperatures, heavy-duty loads like pumps, window coverings, and much more
  - Easy schedule-based programming for automated energy savings
  - With no monthly fees and free remote access, it's perfect for restaurants, retail, and small offices
  - Receive automatic e-mail alerts based upon events



### Hi-Fi 2 Distributed Audio Systems

- Free stand-alone iOS app controls audio on the patio, in the gym, or in the kitchen
- Use Bluetooth™ to stream your favorite music throughout every room. Let anyone be the DJ!
  - Now available in an affordable amp only model. Add volume controls and remote inputs only where desired, since the amplifier has local inputs as well
  - Amplifier and distribution are mounted in a Leviton Structured Media Center, with Cat5e/6 runs to remote audio input modules and volume source controls
  - When used with an Omni automation system, press one button for a party to distribute audio throughout the area. Utilize a two-way voice module to enable Hi-Fi to act as a PA system using a standard landline telephone.

### Omni Security & Automation Controllers

- A UL-Listed security and fire panel, with comprehensive automation built-in
- Whether Z-Wave, ZigBee, or UPB, use one controller to manage all of your sub-systems
  - Incorporate temperature/humidity/ventilation, video surveillance, access control, audio/video automation, wireless security sensors, irrigation, and much more to create a comprehensive control solution fit for commercial or residential
  - Activate devices based upon schedule (time/date/sunrise) or event (door opening, motion detected, temperature change)
  - Access multiple properties remotely from a smartphone, tablet, or PC with zero monthly fees or contracts
  - Revered as the Swiss Army Knife of the industry as it can tackle a wide variety of scalable applications, from condos to light industrial facilities
  - UL listed for security/fire in residential, security for commercial







**LED Wall Luminaire  
TWH LED/ TWP LED**

- TWH LED replaces up to 400W metal halide; TWP LED replaces up to 250W metal halide
- Saves up to 77% energy savings over metal halide luminaires
- L87 at 100,000 hours; Expected service life of 100,000+ hours
- 67CRI; 5000K Color Temperature
- Options of 10, 20 and 30 LEDs



**Low Profile LED Wallpack  
OLWX1/ OLWX2**

- Replaces up to 70-400W metal halide
- Saves up to 88% in energy savings over metal halide luminaires
- Simple, secure installation
- Junction box (included) for all conduit through-wiring
- Mounting plate (included) for mounting to 4" recessed junction box



**I-BEAM® IBG LED High Bay**

- Replaces up to 1000W HID
- Energy savings up to 65% when compared to fluorescent and HID
- Compact form factor and fewer components simplifies installation
- Offered in 2' and 4' with general, wide, narrow and focus distributions
- Available in 3000K, 3500K, 4000K and 5000K
- Some configurations are DLC Standard and DLC Premium qualified products



**FEM LED Linear**

- Low-profile, multi-purpose fixture, suitable for most demanding applications
- 3,000 to 20,000 lumen packages with up to 135 LPW with medium or wide distributions
- One-piece, seamless fiberglass housing won't corrode, rust, or crack
- Available in both 4-foot and 8-foot
- Use common tools for easy serviceability access
- IP65, IP66, IP67 and NSF Splash Zone 2 rated



**KAX LED Area Luminaire**

- Available in 2 sizes - Size 1 replaces up to 400W MH and Size 2 replaces up to 1000W MH
- Standard field-rotatable optics allows 90° rotation to the right or left
- Optional tilt arm allows up to 80° tilt
- Easy installation with integral universal mounting
- Expected service life of up to 20 years

**Wet Location, Vapor Tight  
Luminaire DMW2 LED**

- Replaces up to (3) 32W T8 or (2)54W T5HO lamps
- Lightweight, low-profile two-piece design for easy install
- Multiple mounting options: ceiling mount; wall mount; pendant mount; suspended mount; or, junction box mount.



**Quantum® ELMLT LED Emergency Lighting Unit**

- Delivers virtually the same amount of light from the 1st through the 90th minute
- Mount at heights from 7.5'-20' with up to 75' spacings
- Lamp sources deliver a typical service life of 10 years
- Provides paths of egress with up to 4:1 max-to-min ratios
- Quick-Mount® installation

**BLT Relight Series**

- Relight kit to replace 2- or 3- lamp fluorescent troffers or parabolics
- Energy savings of up to 60%
- Installs in less than 5 minutes from the room side—no need to access plenum
- Clean, neutral design ideal for commercial applications
- 0-10V dimming down to 10%
- Some configurations are DLC Standard qualified products



**JCBL Round LED High Bay**

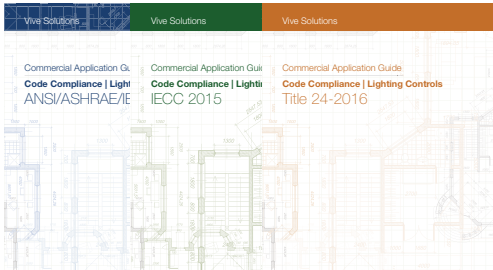
- One-for-one replacement for existing HID fixtures to maintain traditional look of space
- Replaces up to 400W HID and four- or six-lamp T5HO luminaires
- 57% more energy efficiency over comparable HID fixtures
- Lumen outputs: 18,000 at 162W or 24,000 at 200W
- Rated for damp locations and features an IP65 rated optical enclosure



**MRSLED Strip Retrofit Kit**

- Permanent retrofit solution that will withstand the test of time
- Replaces T8 and T12 strips while saving up to 40% in energy costs
- 1,500-10,000 lumens available in 4' and 8' configurations
- Quick and easy installation
- Mounted to traditional channels that are 2.75" to 5" in width
- Integrated sensor and battery pack





### Vive

- Revolutionary wireless lighting control solutions for new and existing commercial buildings
- The right solution now and for years to come for: any budget, area, fixture and sensor controls, latest energy codes and standards
- No factory setup required
- Simple setup and programming options with the Vive wireless hub
- App guides to help you meet codes: [Lutron.com/AppGuides](http://Lutron.com/AppGuides)



### In-Wall Sensors

- Lutron quality and performance, now in a sensor
- Full line of reliable in-wall sensors
- \*New\* 0-10V dimmer sensor - no power pack required
- XCT technology ensures lights stay on in occupied spaces
- Durable design with clean aesthetic - tamper resistant lens and extended relay lifetime
- Models for any application and all lighting loads
- Sensor Selection tool: [Lutron.com/SST](http://Lutron.com/SST)



### Caséta Wireless

- Control lights, shades and temperature from anywhere
- Easy 3-way installation - no wiring necessary for remote
- Works with compatible dimmable LEDs, incandescent and halogen bulbs
- Add control from a smart device using the Lutron Smart Bridge - Free app is available for IOS and Android
- Uses Clear Connect wireless technology - no callbacks
- Add wireless shades (3-5 year battery life) to eliminate glare, create privacy, and keep a room cool, all with one touch
- \*New\* ELV - Phase Selectable dimmer
- Set timer once and never reset again - schedule automatically adjusts when seasons change.
- Works with: Honeywell, Nest, Hunter Fans and Sonos
- Caséta Wireless Website makes choosing your application, easy: [CasetaWireless.com](http://CasetaWireless.com)



### Dimmers

- C•L dimmers fix the issues with lamp compatibility
- Future-proof your dimmer installations as the lamp landscape changes
- High performance dimming minimizes problems like flicker, shimmer and pop-on seen with other dimmers
- Tested and UL Listed to work with more than 800 LED and CFL lamps
- 0-10V dimmers available for LED and fluorescent fixtures
- Compatibility Tool available to help you choose which bulb you should pair with your Lutron dimmer: [lutron.com/bulbtool](http://lutron.com/bulbtool)





**Multi-Position Tap Box**

- Safe & Secure -- protect against energy theft with padlockable 3-point latching mechanism and optional penta bolt locking
- Ideal for housing developments, strip malls & apartment buildings
- Three Phase
- Aluminum Construction
- Wall or Pad Mountable



**Vigilant® | Automatic Transfer Switch**

- Residential, agricultural and light industrial applications
- Single- and three-phase options
- Galvanized steel enclosure meets ASTM A653
- Available in sizes ranging from 100-1250 amps
- Compatible with Milbank's air-cooled and liquid-cooled standby generators
- 5-year warranty



**Manual Transfer Switch**

- Learn Function allows user to monitor power output of generator
- Learn Function helps determine available circuit loads and allows user to monitor the portable generator's capacity to prevent overloading
- Optional inlet box available
- 30 amp and 50 amp models available



**Digital Inverter Generators**

- 4-cycle gasoline-powered inverters provide two 120V AC outlets
- Sizes ranging from 1000W-1800W
- Quiet operation, 9-11 hours run time
- AC overload reset button
- Less than 3% total harmonic distortion, safe for sensitive electronics



**Air-Cooled Home Standby Generators**

- Ideal for homes & small businesses
- Sizes ranging from 8-20kW
- Liquid propane and natural gas options
- Durable outdoor enclosure made of Galvanneal steel
- 3- and 4-year warranties

**400A Meter Main**

- Single and three phase
- Ideal for large homes, small offices and commercial buildings
- Heavy duty lever bypass meter socket
- One 400A breaker
- Safe & secure with optional barrel lock and easy outside access to main service disconnect in emergencies
- Easy install



**SynapSwitch™ | Automatic Transfer Switch**

- Calculates voltage and frequency
- Single-phase options
- Whole-house power management
- 100 amp and 200 amp models available
- Lightweight (42 lbs.)
- Compatible with Milbank's air-cooled and liquid-cooled standby generators
- 3-year warranty



**Milbank's OneSERT Program**

- After a natural disaster hits your area, One-Stop Emergency Response Team will get you the power generation product you need, when you need it
- After-hours call support 24 hours per day, 365 days per year (800-227-5564)
- Single point of contact to coordinate all aspects of the order
- Expedited product availability



**3250-7500W Portable Generators**

- Ideal for wide array of applications
- Manual and electric start options
- EPA compliant
- 11-14 hours run time
- 4-6.6 gallon fuel tanks
- 3-year warranty



**Liquid-Cooled Home Standby Generators**

- Ideal for large luxury homes and businesses
- Provide automatic backup power
- Sizes ranging from 25-62kW
- Liquid propane and natural gas options
- Single- and three-phase options
- Corrosion-resistant enclosure
- User-friendly controller
- 4-year warranty





- FORCE LOGIC™ M18™ 10 Ton Knockout Tool ½" to 4" Kit**
- Powerful enough to punch 4" holes in 12 gauge Stainless Steel
  - Quick Connect Alignment System allows for easy set-up without the tool
  - Exact™ Punches and Dies with cross-hairs for accurate holemaking
  - Compatible with Competitive Accessories



- M18™ FORCE LOGIC™ 6T Knockout Tool ½"-2" Kit**
- Punches up to 4" holes in 14 gauge mild steel
  - Ideal for service: 40% lighter weight and compact size deliver the best clearance for tight spaces
  - EXACT™ punches and dies are rated for both mild and stainless steel punching



- M18™ FORCE LOGIC™ Cable Cutter Kit with 750 MCM Cu Jaws**
- Powerful 6T hydraulic pump effortlessly cuts through 750MCM Cu in 3 seconds
  - Open Jaw, In-line design easily fits into crowded panels
  - Patented Anti-Spreading Jaw design provides the best power to size ration in the industry
  - One handed operation: Fully balanced tool design and automatic jaw opening



- M18™ REDLITHIUM™ High Demand™ 9.0 Battery Pack**
- REDLINK™ Intelligence provides optimizes performance and overload protection using total system communication between tool, battery, and charger
  - Best-in-Class pack construction offers long-lasting performance and durability
  - Fuel gauge onboard displays remaining runtime for less downtime on the job



- M18™ FORCE LOGIC™ 600 MCM Crimper**
- Proprietary Jaw Alignment System holds connector for instant alignment
  - PFM™ (Predictive Force Monitoring) Ensure optimal pressure for every crimp and fastest crimp time in the industry
  - Tool records and stores every crimp made. One Key™ enabled for professional reporting
  - In-line design and 350 degree head rotation for easy access in the tightest panels

- M18™ ROCKET™ LED Light Tower/Charger (Tool Only)**
- 5 second setup, 7 foot extension
  - 3,000 Lumens of multidirectional light with 3 independently pivoting heads
  - Impact resistant, reinforced legs
  - Built in M18™ charger
  - Covered AC Plug-in



- Combination Wire Plier**
- Reaming head design-smooths edges of metal pipe from ½" to 1"
  - Bolt Cutter-thread and cut #6 and #8 bolts to preferred length
  - Wire stripper-strips 8-18 AWG (solid wire); 10-20 AWG (stranded wire)
  - Curved cutting blade for clean cuts through larger wire sizes
  - Rust protection-increases tool live by reducing corrosion

- 25FT Magnetic Tape Measure**
- Nylon bond blade protection
  - 5 point reinforced frame
  - Patented finger stop
  - Magnetic Hook
  - Blueprint Scale
  - Dual Sided Printing



- M18 FUEL™ SAWZALL® Reciprocating Saw W/ One-Key™ Kit**
- Delivers faster than corded cutting speed and durability of a corded saw
  - One-Key™ compatible: customize, track and manage tool's performance and location
  - POWERSTATE™ Brushless Motor supplies constant power for fasted cuts and reduced heat for extended life



- M12™ Cordless Sub-Compact Band Saw Kit**
- One-Handed Cuts: Most compact size and lightest weight of any cordless band saw
  - Powerful Motor: Cuts ¾" EMT in 3 seconds, up to 150 cuts per charge with the REDLITHIUM™ XC Battery
  - 1½" cut capacity for a wide range of applications
  - Meets OSHA Guarding requirements: Suitable for one handed use







### Woodhead Watertite® Wiring Devices

- Huge selection of connectivity, cordsets, receptacles, and boxes
- NEMA type 4, 4X, 6, 6P, IP65, IP66, and IP67 performance standards
- NEōTEX® Paracril OZO rubber construction for the ultimate in durability



### Woodhead Super-Safeway™ Wiring Devices

- Super-Safeway devices are designed for abusive conditions and dependable performance
- NEōTEX® Paracril OZO rubber construction for the ultimate in durability
- Stainless-steel tri-drive hardware provides a stronger, more long-lasting product



### Woodhead Strain-Relief, Support, Pulling, MAX-LOC® and Cord Grips

- The widest, deepest grip range in the industry
- Stainless steel, aluminum, zinc-plated steel, and plastic materials available
- Strain-relief grips feature threaded-style bodies in stainless steel and non-metallic



### Woodhead Portable GFCI Products

- Safeway for commercial and super-safeway for industrial applications
- Open-neutral relay meets OSHA requirements for use safety
- 15, 20 or 30A, 120 or 240V, single and multi-phase configurations



### Woodhead Portable Lighting

- A wide range of cost-effective portable lighting solutions designed to create safe and well-lit work areas in a host of industrial environments
- Incandescent, fluorescent, and LED products in line and low-voltage configurations
- Handlamps, stringlights, wide-area, wet-location, hazardous duty, and explosion-proof lighting types



### Industrial Duty Cord Reels

- Designed for the most demanding industrial applications
- NEMA -3 and -4 ratings for both indoor and outdoor use
- Precision collector rings for up to 36 conductors
- Containerized mainspring enables safe and easy replacement



### Brad Automation Connectivity

- One source for every industrial passive interconnect application
- M8, M12, Mini-change™, and Ethernet connectivity, cords, receptacles, blocks
- Huge selection of materials, lengths, and configurations are available
- Ultra-Lock® Connectivity makes for fast, secure, IP67/IP69K connections



### Communication and Control Products

- NIC cards, harsh-duty active I/O, connectivity, cord sets, software, to diagnostics
- Full-array of industrial Ethernet product ranging from board-level, bulkhead, cord sets, to connectivity
- Category 5E data performance in keystone, circular, and USB configurations



### Aero-Motive® Tool Balancers

- Light, standard, and heavy industrial-duty balancers support tool loads from 1 to 370 lbs.
- Manual and automatic-safety locks are available to ensure user safety
- Industrial-type upper mounts provide 360° swivel motion and proper tool alignment



### Everything Else You Need.....

- Pendant Stations: watertite and super-safeway designs in multi-button and speed configurations, key lock, E-stop
- Outlet Boxes: standard and custom outlet boxes and stringers
- Grounding Reels: for welding and grounding applications





#### Cable Ties

- UL 94V-2 rated material
- Available in lengths from 4" through 60"



#### EASY-WRAP™ Electrical Tapes

- Premium tape has wide range of 0°F to 176°F
- Premium & general purpose are UL & CSA rated
- Easy-Wrap™ superior cloth duct tapes are heavy duty



#### 1 & 2 Hole Compression Lugs

- Peep hole allows easy inspection of the termination to assure complete cable insertion
- Short barrel models ensures ease of cable insertion of flex and extra-flex copper cables (locomotive, welding, mining cables)



#### EASY-TWIST™ Wire Connectors

- Listed UL486
- CSA Approved & RoHS compliant
- Square wire spring geometry for tight & secure connection



#### Miniterms

- High quality electro-tin plating to hinder corrosion and low contact resistance
- Broad line, including nylon or vinyl insulated or uninsulated

#### LED Lighting

- 5 styles of LED wallpacks that offer energy savings, higher lumen output with lower wattage
- Longer life span - less maintenance for parking lot or roadway lighting



#### Mechanical Single & Double Lugs

- T Series set-screw connectors have wire ranges from 6-14 AWG through (2) 1000-350 MCM
- SR Series splicer/reducers range from 2-14 AWG through 750-250 MCM



#### Grounding Clamps

- G Series bronze ground clamps are UL Listed 467 to assure product performance & safety standards
- Pipe clamps that have range of 1 to 3 conductors.



#### TORK® Listed for LED

- TORK® 1100B Series is Listed for LED lighting: the easy installation you like stays the same.
- Also Listed for LED are TORK® SS700Z SunSet Astronomic In-Wall, TORK® SS400 Series In-wall timers, and the wide range turn-lock photocontrol TORK® 5237-UL: perfect for street and parking lot lighting where builders have installed LED fixtures.
- TORK® ZTL Series is our UL Listed long life photocontrol with Zero-Crossing switching, enhanced MOV surge-protection and the industry's best 15-year warranty.
- TORK® 1100B Series
- TORK® Photocontrol 5237-UL
- TORK® SS700Z Series
- TORK® ZTL Series Advanced Electronic LED Photocontrol



#### Mechanical Single Copper Lugs

- TCP Series: UL 486A/B with temp rating of 90°C, CSA listed
- TC Series: 600V (2000V max per UL 486B)
- DE Series: 11 sizes ranging from 10-14AWG through 1000-600MCM







#### F3SG-RA Light Curtain

- Advanced light curtain functions like dynamic muting, multiple blanking modes, reduced resolution, cascading, etc.
- IP67 housing with recessed lens for better protection
- Standard DIP switch configuration
- Multilingual troubleshooting accessible easily via PC or smart phone

#### OS32C Safety Laser Scanner

- First Safety Laser Scanner with Ethernet/IP interface for status and measurement data
- 4m max safety range for full 270°
- Compact size allows OS32C to be mounted away from potential impacts
- 70 zone sets for maximum flexibility



#### UMQ Series Safety Mat

- Disconnectable M12 cable
- One piece molded rubber instead of laminations
- Easy to install trim kits
- Raised texture for easier cleaning and longer life
- Multiple mat systems and custom mats available

#### G9SP Standalone Programmable Safety Controller

- Ethernet/IP interface for sharing status and monitoring w/ PLC or HMI
- Free configuration software makes setup and troubleshooting easy
- 3 Safety I/O versions to accommodate small to mid-size applications



#### D40Z/A Non-Contact Safety Switch

- Solid State construction eliminates moving parts
- Advanced monitoring allows series connection while maintaining CAT4
- Built in two color LED for indication and trouble shooting
- Compact allowing for mounting from multiple sides



#### D4SL-N Guard Locking Safety Switch

- Compact yet rugged guard locking switch
- Multiple contact configurations available
- Terminal type or connector type
- Handle and slide assembly accessories available to reduce install labor
- LED indication for quick troubleshooting and notification



#### ER Series Rope Pull Emergency Stops

- Tough die cast aluminum construction
- Rope spans up to 200 meters
- IP67 for use in washdown applications
- Multi-color LED for easy indication and troubleshooting



#### A4EG Safety Rated Enabling Grip Switch

- Can be used as “secondary safeguarding device” in many applications allowing safe bypass for setup, adjustment, or clearing a jam
- Built in Emergency Stop switch as well as momentary aux switches available



#### G7S Series Force Guided Relays

- Force guided contacts for safety applications
- Compact size to save panel space
- Socket style for ease of use
- Four pole and six pole versions
- DIN rail or direct back panel mounting sockets available



# Panasonic

## WhisperGreenSelect

- Customizable, all-in-one fan
- Pick-A-Flow™ speed selector – one fan, you choose the CFM
- Pre-installed multi-speed control module with high/low delay timer up to 60 minutes
- Plug 'N Play™ modules provide up to two value added features (select from SmartAction® Motion Sensor, Condensation Sensor or NiteGlo™ LED Night Light)
- Revolutionary DC motor with SmartFlow™ technology for optimum CFM output
- Flex-Z Fast™ installation bracket provides flexible, fast and easy installation
- Integrated dual 4" or 6" duct adapter
- Fits in 2 x 8 construction
- Lighted version has Two replaceable, 7W, GU24 base LED lamps
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, California Title 24, WA Ventilation Code and ENERGY STAR® for Homes 3.0



## WhisperCeiling & WhisperLite

- Quiet, yet powerful – ideal for new and remodel residential applications
- Integrated dual 4" or 6" duct adapter on 50-110 CFM models
- 50-110 CFM models fit in 2 x 8 construction
- Large volume (190-390) CFM options available for light commercial applications
- UL listed for tub/shower enclosure when GFCI protected
- Lighted version has (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
- Can be used to comply with ASHRAE 62.2, LEED, IAP, EarthCraft, California Title 24 and WA Ventilation Code



## WhisperFitEZ

- Ideal for remodeling and hotel new construction or renovation
- Pick-A-Flow™ Speed Selector – one fan, you choose the CFM (80 or 110)
- Flex-Z Fast™ bracket provides flexible, fast and easy installation
- Detachable installation adapter provides even greater flexibility
- Low profile housing design fits in 2 x 6 construction
- 4" duct with 3" duct adapter included
- UL listed for tub/shower enclosure when GFCI protected
- Lighted version has (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California



## WhisperValue & WhisperValue Lite

- Ideal for residential construction (single and multi-family) and manufactured homes
- 3 $\frac{3}{8}$ " housing depth – lowest profile ENERGY STAR® fan available
- UL approved for ceiling or wall mount – perfect fit in a 2 x 4 stud bay
- Wall installation eliminates the need and cost for a radiation damper
- Optional 24 gauge steel, fire code rated 4" oval to 3" round duct adapter, sold separately (Model # FV-VS43R)
- UL listed for tub/shower enclosure when GFCI protected
- Lighted version has (2) 13W self ballasted GU24 base CFL lamps and a 4W night light
- Can be used to comply with ASHRAE 62.2, LEED, IAP, California



## WhisperRecessed LED

- Architectural grade recessed fan/light
- Ideal for use in the bathroom, living room or laundry room
- Quiet and powerful 80 CFM ventilation hidden above the ceiling
- (1) 14W GU24 base, dimmable LED lamp
- Adjustable recessed light minimizes glare
- Beautiful lighting with 6 $\frac{1}{2}$ " aperture and advanced luminaire design
- Integrated dual 4" or 6" duct adapter
- Fits in 2 x 8 construction
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED, IAP,



## EcoVent

- Ideal for new residential construction
- Perfect cost effective ENERGY STAR® solution for Home Builders
- 70 CFM – 0.4 sones at 0.1" w.g. (56 CFM/1.1 sones at 0.25" w.g.)
- Unique Veri-Boost™ integral switch ensures the fan meets designed airflow requirements and provides Ventilation
- Verification Assurance:  $\geq$ 50 CFM installed performance, to help meet the new ENERGY STAR® 3.0 standards
- Small grill design complements the aesthetics of your bathroom, powder room or laundry room
- Fits in 2 x 6 construction
- Available in contractor packs only – housing and motor/grille packaged separately reduces risk of parts being lost or damaged on site
- UL listed for tub/shower enclosure when GFCI protected
- Can be used to comply with ASHRAE 62.2, LEED and ENERGY STAR® for Homes 3.0





**Series IO Ultrasonic Sensors**

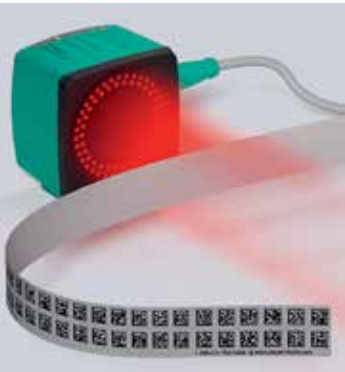
- Series IO allows for programming using either a PC, push buttons, or software
- PC connection allows for further configuration of parameters such as filtering and beam width
- IO-Link capability allows the sensor to be connected to SmartBridge technology
- Modern state of the art design has highly visible LEDs while still maintaining a hose down rating


**R10X Series**

- Three different series, one platform
- Every available sensing mode, including measurement
- Visible red LED and laser light source versions available
- IO-Link built into every sensor
- Temperature range of -40 to 60°C
- IP67/69K enclosure rating


**PCV**

- Non-contact, absolute positioning camera using data matrix codes
- Positioning information in both X & Y direction, including speed data
- Large scan window coupled with redundant data matrix squares ensures readability
- Precise positioning down to 0.1 mm resolution with high speeds over 27 MPH
- Data matrix code tape with adhesive backing allows quick and easy install


**SmartBridge**

- Display sensor status and parameters on a mobile device for easy troubleshooting
- Change sensor parameters without a PC or even a PLC
- The graphical user interface makes parameterization in the field easy
- Record process data and events easily to a micro SD card right inside SmartBridge

**R2000 2D Laser Scanner**

- 2D laser scanner with gapless, 360° detection angle
- Detection range up to 30 m, repeat accuracy


**Inclination Sensors**

- Measure angular position with an F99 series inclination sensor
- Inclination sensors for industrial applications:
  - General Automation
  - Commercial Vehicles
  - Renewable Energy
- Standard types: Single and dual axis, current or voltage output, switching PNP outputs, fixed range or pushbutton
- Special types: CANopen, CANbus with SAE J1939 (new for 2015)
- Angular measuring range: -180° .... +180°; -60° .... +60°; -15° .... +15°; other special ranges possible


**UHF Identification Systems**
**UHF RFID Read Head**

- 500 mW for up to 2 m range
- High temperature to 150 °F
- Reads up to 40 tags at one time

**UHF Tags**

- On-metal industrial and label-type tags for hundreds of applications


**Low-Profile Pile Driver**

- Slim, 8 mm mounting depth - requires 90% less mounting space than equivalent cylindrical sensors!
- Durable stainless steel sensing face
- 6 mm sensing range
- Ferrous and non-ferrous models
- Ideal for metalforming and welding industries
- Weld immune models feature Black Armor™ coating and POC cable





**Bebcu EPS® Purge & Pressurization**

- Control temperature in enclosure
- Prevent moisture and dust
- Less maintenance and easier access
- Customized certified solutions with all the necessary certificates
- Increase the life expectancy of expensive electronics



**Solution Engineering Centers**

- Global reach that expands to nine locations world-wide
- Provide all necessary certifications required including ATEX, IECEx, CSA and UL
- World-renowned, high quality products, exceptional service and undisputed hazardous location technical expertise



**Human Machine Interface: Oil & Gas**

- Extremely robust design provides product longevity
- Reliable performance under adverse environmental conditions
- Globally certified for ATEX, IECEx, and NEC
- Field maintainable HMI units



**Human Machine Interface: Life Sciences**

- Designed according to common GMP requirements typical in regulated processing facilities
- Ideal for cleanroom and hygienic applications
- Focused products that solve the environmental challenges and obstacles presented by taking HMIs into hazardous areas



**Isolated Barriers - H-System**

- Reduced wiring, mounting, commissioning, and documentation
- Simple mounting of modules without tools
- Line fault detection for field circuits
- Modules available with international approvals--SIL2 and SIL3 ratings for easy and reliable planning

**Signal Conditioners**

- Improves signal quality when there is significant distances between the input signal and the control system
- Isolation prevents ground loops
- Use of devices with wireless transmission close to the signal circuit
- Signal conditioners ensure the conversion of the input signal to a standard format supported by the DCS or PLC



**WirelessHART**

- Wide range of supportable devices
- Hazardous rated adapters and gateways
- Quick and easy planning through DTM and web interface
- Simple network diagnostics
- Complete flexibility in the selection of the control system manufacturer



**Isolated Barriers - K-System**

- Power Rail drastically reduces wiring, line collective error and flexible installation and expansion
- Simple maintenance
- Simple configuration using DIP switch or software
- Modules available with international approvals--SIL2 and SIL3 ratings for easy and reliable planning
- Horizontal and vertical mounting



**Hazardous Area Cable Glands**

- For armored and nonarmored cabling
- Ex e and Ex d rated
- Type 4/4X and IP66/68
- Uniquely designed with internally secured fittings for easy installation
- Triple-sealing inserts to prevent water intrusion
- Supports a wide range of cable diameters



**Hazardous Area Remote I/O**

- Maintain existing field wiring and devices
- Communication gateways for Profibus, FF, and Modbus
- Compact system with minimal space requirements
- Combine Ex and Non Ex I/O modules in the same backplane





## EvoKit LED Retrofit Kit

- Efficacy up to 110 lm/w
- Either 0-10 or Mark10 dimming drivers to help curb energy use and meet new legislative standards when paired with suitable controls solutions
- Simple installation in under 5 minutes
- Multiple sizes, color temperatures and lumen packages available



## InstantFit LED T8 Lamp

- Full light output in spaces with temperatures down to -4°F (-20°C)
- Perfect for applications with frequent "on/off" switching cycles
- Buildings that desire to be mercury free
- Suitable for damp locations
- Glass-free for use in food areas and refrigerated food displays



## T8 V

- Features ALTO II Technology
- Save 7 watts per lamp instantly when replacing a standard T8 32W lamp
- Operates on any Instant Start and Programmed Start Ballast
- Reduce maintenance costs
- 50% less mercury than the original ALTO T8 lamps
- 38,000-hour rated life



## DiamondSpark LED Candles

- Lowers maintenance costs by reducing re-lamp frequency
- Installs into existing candelabra and medium base fixtures
- Emits virtually no UV/IR light in the beam
- Contains no mercury
- Available with WarmGlow technology



## LED Lamps with WarmGlow Technology

- Transition from 2700K to 2200K with dimming
- Excellent color rendering of 80 CRI
- Flexibility to create the right light level and ambiance
- Integrate seamlessly into recessed luminaires
- Uniform light distribution with greater visual comfort



## LED Vintage-Style Lamps

- Allow you to maintain a warm, classic light effect while providing longer life and energy savings
- A variety of aesthetically pleasing, classic lamp shapes (A19b, A15, ST19 & BA11)
- Integrates a compact driver design to achieve the decorative look and feel
- Instant on
- A15, A19b, and ST19 lamps are UL wet rated for outdoor usage (e.g. Marquee signs, patios, pergolas)
- >80% energy savings when compared to conventional equivalents
- 5x the lifetime when compared to conventional equivalents (15,000 hrs)



## EvoBase LED Retrofit Kit 2'x 2' and 2'x 4'

- A highly efficient, LED retrofit kit designed to upgrade recessed linear fluorescent troffers
- Provides fluorescent-like uniform light distribution
- Excellent color rendering with a CRI above 80
- Extremely high efficacies up to 120 lumens per watt



## LED PLT/C

- Replaces compact fluorescent lamps (4-pin)
- Compatible with a wide range of ballasts
- Fits into existing G24q/GX24 fluorescent socket
- Lasts 2x longer than comparable fluorescent tubes
- Energy savings of up to 60%
- Mercury free
- 40,000-hour rated life



## LED T8 Driver

- ICN-2P16-TLED-N operates 1 or 2 lamps
- ICN-4P16-TLED-N operates 3 or 4 lamps
- IntelliVolt 120-177V
- Based on economical eFluo ballast platform; lamps operated at high frequency
- Optimized to provide the highest efficiency while operating TLED lamps at their design wattage/lumens
- When replacing existing ballast due to age or mandate, new drivers offer the highest efficiency opportunity

#### PT Terminal Blocks

- Save wiring time up to 50% by directly pushing in ferruled/solid conductors
- Eliminate the risk of under-torqued wires by using Push-In leg spring
- Choose the ideal terminal block from a complete lineup spanning 24 AWG to 300 MCM

#### Quint 4 Power Supply

- Alarm setting lets you know when your power supply begins to derate due to ambient temperature
- Gas discharge tubes and MOVs are present in all units to provide coordinated protection against transients
- An analog output is available to send real-time current, voltage, or power being used back to your PLC, HMI or SCADA controller

#### TMC 8 UL 489 Listed Breakers

- Varied trip curves for multi-pole options that include dual ratings to accommodate a variety of applications
- Full line of accessories and bus bars for increased functionality and ease of installation
- Trip-free design to increase safety against closing during an over current event

#### HEAVYCON EVO - Heavy-Duty Connectors

- Bayonet-locking gland allows users to install or reposition cables on-site
- IP66 Protection and NEMA 4/4x/12
- All four bayonet glands fit every Evo housing, reducing inventory requirements by 70%
- Integrated PE connection eliminates the need for an additional PE module

#### VL2 Industrial PC's - Reliable, Redesigned, Reinvented

- Dual 2.5 SATA drive bays
- Unique gull-wing door access to new PCI-e option
- Native hardware RAID support
- Configurable as a panel PC (PPC) and a box PC (BPC)
- Fanless design for industrial applications
- Powerful and energy-efficient Intel® Core™ processors
- Easily removable rotating or solid-state hard drives in a variety of sizes

#### mGuard Secure Cloud

- This free service allows you to securely access and control remote machines and equipment in just a few clicks
- Award winning industrial hardware including Wired, Cellular and Gigabit connections
- IT friendly, with little or no interaction with the customer IT/Security department
- [us.cloud.mguard.com](http://us.cloud.mguard.com)



#### RADIOLINE

- Wireless Radios for I/O and Serial Communication
- Simple configuration; used for wire-in, wire-out operation
- Easy, software-free configuration for simple I/O to I/O communication, programming via the thumb wheel on the radio makes setup and installation quick and easy



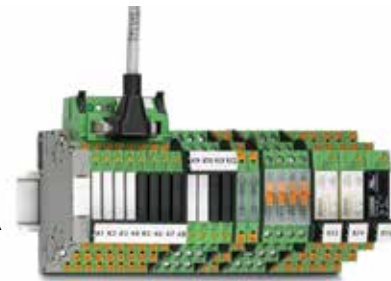
#### Rogowski Coil - Energy Monitoring

- Perfect for retrofits and new applications
- One part number has 8 configurable ranges that can measure currents from 0-100 to 0-4000
- Flexible coil and small packaging of coil makes it easy to install a CT virtually anywhere in the system, even in tight panels and wireways



#### PLC Relays

- Slim relays available in electromechanical and solid state measuring only 6.22 mm for single-pole and 14 mm for double pole, reducing the space required in your cabinet
- Used in low power applications, best suited for circuits needing 6A of current or less
- Push-in, cut-to-fit bridges require no tools, eliminating wiring errors and saving time



#### Mobile Printing

##### THERMOFOX Handheld Printer

- Lightweight, rugged handheld printer easy to use in the field or around the shop

##### THERMOMARK PRIME - Thermal Transfer Card and Sheet Printer

- A rechargeable battery and integrated marking software makes this printer fully portable for field installations and around the shop
- The ink ribbon is contained in a drop-in cartridge saving time and frustration when switching or replacing







## SP5000 Series - Enhanced HMI

- Screen sizes from 7.5" - 15" available
- 12 display + box combinations
- Connect your enterprise network with the factory floor
- With separate display and box units, you can replace display without affecting the project file



## LT4000M Series - Modular HMI + Control

- Available in 3.5" or 5.7" LED backlit LCD displays
- Each unit has a full graphic touch screen interface and multiple connectivity options
- All-in-one HMI + control
- Quick and easy 22mm hole installation without the need for a new panel cut out
- Separate display and communication modules
- Supports up to four different communication protocols



## GP4000M Series - Modular HMIs

- Available in 3.5" and 5.7" LED backlit LCD displays
- 22mm quick mounting into standard hole punch
- Easy display replacement with separate communication modules
- Expand functionality and connectivity with GP-Pro EX software and USB solutions
- Use rear module mounted on a DIN rail as a blind HMI
- Install your HMI quickly and easily using this great modular design

## EZ Series - Expand your HMI with Pro-face USB Solutions

- Think outside the HMI with Pro-face EZ Series USB solutions
- Program all products easily with GP-Pro EX Software
- Increase security with the Pro-face fingerprint recognition unit
- Monitor alarms and machine errors from a distance with the EZ Tower Light and Illuminated Switch
- Provide simple data entry and programming with the EZ Numpad unit



## GP4100T Series

- The Pro-face GP4100 Series compact operator interface offers a crisp, clear and bright, LCD Display with Analog Touch Panel for improved visibility and precise part placement. Available with Ethernet or Serial Port options.
- 65,536 color, LED backlit TFT color LCD Display
- 64-bit RISC CPU for ultra-fast screen refresh and communication
- No grid analog touch panel for improved visibility and precise part placement



## PS5000 Series Industrial PCs

- Excellent performance
- Intuitive multi-touch display
- Extensive connectivity options
- 10" - 22" Display sizes available
- Flexible modular design
- Built to order for application customization
- Now available with BLUE Open Studio HMI SCADA software



## GP4000H Graphical Pendant Station HMIs

- The Pro-face GP4000H graphical pendant station offers extensive, built-in, time-saving features that help customers develop fast, consistent, standardized graphical interfaces plus flexibility of location. These 5.7" tethered units have up to 10m cables for freedom of movement and offer a built-in emergency stop and key enable switch. Add single platform data management and control with GP-Pro Ex and Pro-Server EX software to complete the winning combination.
- Emergency Stop Switch
- 3-Position Enable Switch
- Clear Visibility



## Custom Overlays for your Pro-face HMI

- Custom brand your Pro-face HMI with your own logo or full bezel custom overlay
- No minimum quantity required
- Rapid delivery
- Available for all current Pro-face HMIs





### Downlights/RDLED 2" Downlight

- 8W replaces 50W MR16 with energy savings of 82%
- Up to 696 lumens, 79 lm/W
- TRIAC dimmer compatibility for additional light control down to 5%
- Precision-engineered optics deliver smooth light without hot spots or glare
- 100,000-hour LED Lifespan



### Indoor LED Panel/EZPAN™

- Evenly diffused ambient illumination
- Offered in two sizes and three wattages: 2x2 (30W and 40W) and 2x4 (40W and 50W)
- 0-10V dimmable driver, standard
- Emergency battery backup option available
- Available with factory-installed Lightcloud™ lighting control system Controller
- Ultra-efficient edge-lit LED panel with an efficacy of up to 130 lm/W



### Indoor Commercial LED Downlight/DLED8

- Available with high 90+ CRI
- Universal driver is compatible with TRIAC, ELV and 0-10V dimmers
- 30W DLED8 replaces 50W MH and 32W CFL, 38W DLED8 replaces 70W MH and 42W CFL
- Lightweight design for easy installation and increased safety
- Available in 2700, 3000, 3500 and 4000K



### Stairwell LED Luminaire/TREDSAFE™

- Available in 2 ft. (28W) and 4 ft. (36W)
- Diffused lens for smooth light distribution
- 0-10V dimming driver, standard
- Optional integrated ultrasonic motion sensor; more reliable than passive infrared (PIR) which requires a clear line of sight
- 100,000-Hour LED lifespan



### Linear LED Luminaire/BOA™

- Proprietary optics produce soft dimensional illuminance at the lens and over 700 lumens per linear foot
- Length offered in 2-foot increments up to 12 ft.
- Available in two light levels; 5W or 10W per linear foot
- 0-10V dimming down to 10%
- Pendant, recessed and surface mount options
- 100,000-Hour LED lifespan, no tubes to replace
- All mounting hardware included for pendant models

### Garage Light/PORTO™

- Integrated photo/motion sensor control available
- Replace up to 175W MH
- Ultra-High efficiency up to 118 lm/W
- Pendant and surface mount
- Low glare, vandal-resistant polycarbonate lens
- 20% uplight eliminates "cave effect"
- Three power packages available in 30, 42 and 55 Watts



### Lightcloud™ Lighting Control System

- Scheduling, daylight harvesting, personal dimming, occupancy & vacancy sensing
- Save users up to 68% on lighting energy costs starting on day one
- Unlimited tech/user support and set up
- Measures, tracks and reports real & estimated power usage over time
- Lightcloud™ devices communicate over secure, wireless mesh network
- 10-year full hardware warranty



### Indoor LED Center Basket/SWISH™

- Available in 2x2 (19 & 29 Watt) and 2x4 (39 & 49 Watt) models.
- 0-10V dimming standard on all models
- Emergency battery backup available
- Optional occupancy sensor or Lightcloud™ Controller
- 100,000-Hour LED lifespan



### Linear LED Washdown/SHARK™

- Available in 2 sizes and 4 wattages: 2 ft. (18 and 25W), 4 ft. (36 and 50W)
- Versatile mounting options: Chain, junction box, angled surface mount or vandal-resistant surface mount
- IP66 and NEMA 4X ratings protects against dust, water ingress and corrosion
- 0-10V dimming
- 100,000-Hour LED lifespan



### LED Area Light/ALED360

- Available in 260W or 360W
- Optional integrated motion sensor/ photocell for multi-level control
- Optional bi-level dimming (enables 25, 50 or 75% dimming)
- Multiple mounting options: pole, slipfitter or wall
- 5 Pin and 7 Pin ANSI 136.41 control receptacles available
- 100,000-Hour LED lifespan
- 1,000 Watt equivalent







**Industrial Automation: HMI Operator Panels/Red Lion® Series Graphite® HMIs**

- A range of sizes available from 7" to 15"
- Core Controller*
- Industry-standard crimson control engine
- Protocol conversion of over 300 drivers
- Web server for data visualization
- Real-time data logging to SD card or via FTP

**Industrial Automation: PID Controllers/Red Lion Series PXU PID Controllers**

- Designed for machine builders, systems integrators and commercial equipment manufacturers
- A single model provides tighter, more reliable control over a wide range of industrial automation processes, including temperature, flow and pressure



**Industrial Automation: Visual Management/Red Lion Series ProductVity Station™**

- Ready-to-deploy plant floor visual management system that displays real-time Key Performance Indicator (KPI) data and Andon messages on large televisions
- Ideal for factory floors, processing plants or any place where performance needs to be tracked and monitored



**Industrial Automation: Protocol Conversion/Red Lion Series Data Station Plus**

- Support for 300+ protocols for multiple simultaneous conversions
- Three serial and one Ethernet port standard
- Easily configured with Crimson(R) 3.0 software
- Virtual HMI with web server for remote viewing and control



**NT24k®-16TX-POE Industrial PoE+ Switch**

- IEEE 802.3af/at output up to 30 Watts per port/ 240 Watts per switch
- Smart Plug-and-Play Operation
- 22 to 49 VDC redundant power inputs
- Wide -40° to 80°C operating temperature
- Robust remote monitoring
- N-Ring™ and N-Link™ network ring technology



**Industrial Networking: Ethernet/N-Tron(R) Series NT24k(TM) Gigabit Ethernet Switches**

- Up to 24 all-Gigabit ports supporting copper, fiber and SFP connectivity
- Powerful Layer 2 network management with built-in security
- Plug-and-play features include auto-IGMP configuration and N-Ring(TM)/N-Link(TM) network healing



**Industrial Networking: Ethernet / N-Tron Series Modular NT24k Gigabit Ethernet switches**

- Up to 24 Gigabit Ethernet ports
- Layer 2 management
- Flexible modular format for different configuration options
- Hot swappable modules
- Mix and match Gigabit, copper and fiber modules
- Redundant AC and/or DC power input options



**Industrial Networking: Cellular M2M / Sixnet® Series RAM 9000 Cellular RTUs**

- Combines built-in I/O and an active GPS receiver with multiple serial and Ethernet ports to securely monitor remote devices (also available with wifi option)
- Ideal for deployment in industrial M2M networks such as oil and gas, water/wastewater, utility, transportation and mining applications



**Graphite® Expansion Racks**

- USB cable connects expansion rack to graphite platform
- Support for additional plug-in modules
- Wide -40° to 75°C operating temperature
- Rugged industrial design for harsh environments



**Graphite™ Module: HSPA+ Cellular**

- Remotely monitor and control assets
- High-speed cellular data connection
- Removes need for external gateways
- All-in-one solution, easily programmed





### Enclosure/316 Stainless Steel TS8

- UL Type 4X modular enclosure has rugged stainless steel platform for harsh environments
- 30% more mounting space than traditional unibody enclosures of equal dimensions
- Four-point latching system and foamed-in-place gasket provide a water and dust proof environmental seal



### HMI, Operator Housing/Comfort Panels

- Aesthetic and functional aluminum HMI enclosures are light weight, easy to modify, and provide heat dissipation
- Built in handles with plastic corner protectors provide easy adjustment of panel position
- Removeable aluminum front panels can easily be modified for holes/cutouts and component mounting

### Support Arm Systems

- Suspension arms allow engineers the design flexibility to provide maximum user to machine interface interaction with consideration of user safety and ergonomic functionality
- Rittal CP60, CP120 and CP180 systems provide the same aesthetics in three different size offerings
- Simple time saving level adjustment system make installation and adjustment easy



### WM Wallmount Enclosure

- One-piece welded and removable door; continuous 1-piece, foamed-in-place gasket
- Zinc-plated mounting panel included
- Wall-mounting holes (carbon steel), sealed rivet nuts (stainless steel)
- Flange-trough collar opening channels liquids, dirt, and dust away from enclosure sealing surface

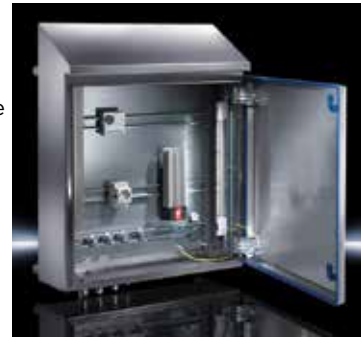


### LED Lights

- Double the illumination with an extra low voltage range. 4000K Neutral White. Ready for immediate global use with wide-range voltage 100-240 V (AC) and 24 V (DC).
- Materials: Plastic and aluminum with transparent Fresnel structured cover
- Compact tool-free assembly clips to latch-in hook pattern with the option for screw fastening. Magnetic option also available.

### Enclosures / Hygienic Design

- Designed to meet the most stringent sanitary and cleaning requirements of Food and Beverage Industries
- Sloped surfaces facilitate quick runoff of liquids
- Unique one piece blue silicone gasket provides long life and replaceable while maintaining industry certifications.
- IP 69K and UL Type 4X Listed



### Enclosures/Flange Mount Disconnect TS8

- Flexible and modular enclosure design listed UL Type 12 that allows for easy integration and accepts most commercially available operator handles
- Expandable and modular enclosure compatible with all standard TS8 accessories
- Optional high amperage adapter plate allows for future system upgrade without performing additional cutouts in the field while maintaining Type 12 rating



### Air Conditioners/TopTherm Blue e Cooling Units

- Cooling capacities range from 1025 BTU to 14,500 BTU (300W - 4kW)
- Available in wall mount and roof-top mount configurations
- Integral electric condensate evaporator
- Coated condenser coil may eliminate the need for a filter and reduce maintenance costs
- Digital e-Comfort controller display has more than 20 failure and alarm codes
- Available in NEMA 12, 4X



### Air Conditioners/ Blue e+ Cooling Units

- Energy costs account for almost 50% of the total cost of an air conditioner. Rittal's Blue e+ hybrid technology saves up to 75% in energy costs
- Multi-voltage design allows one unit for use in 110V - 240V; 1-; 50-60Hz and 380V - 480 V; 3-; 50-60Hz applications without additional transformers
- Cooling capacities range from 6826 BTU to 20,500 BTU (2kW - 6kW)
- Speed regulation for demand-based cooling provides more consistent temperature control
- Large, user-friendly, multi-lingual, Industrial-grade touchscreen display
- UL Listed







**Harmony XB7—22mm Monolithic Pushbuttons, Switches and Pilot Lights**

Complete offering of 22mm controls including: spring return push buttons, illuminated buttons and switches, mushroom head emergency stop buttons and more.

- Complete product (contacts are built in) with a full complement of accessories



**Harmony XVU Tower Lights**

Modular customizable signaling solutions from 1 to 5 LED colored lights and sound options with a 60mm diameter

- Modular—can be configured easily
- Super Bright Integrated LED—no bulbs to replace
- Only 21 part numbers for the entire system—less stock required



**Altivar ATV320 Drive for Simple and Advanced Machines**

- The Altivar Variable Speed Drive designed for OEMs that meets simple and advanced application requirements for 3 Phase synchronous and asynchronous motors from 0.18 to 15 kW (0.25 to 20 Hp)
- Simple installation, advanced connectivity, reliable motor control, continuous machine operation and comprehensive embedded safety solutions

**Harmony XB5R Wireless Pushbutton**

- The only wireless and batteryless pushbutton in the industrial market
- Wireless Pushbuttons and Rope pulls provide freedom of movement that increases productivity and reduces downtime



**Zelio RXG Plug-In Interface Relays**

RXG Relays save valuable panel space while delivering robust performance.

- 16mm wide to maximize panel usage
- Industry standard products = direct replacements for the competition
- 1 C/O 10 A, 1/3HP and 2C/O 5 A, 1/6HP models



**Drives for Industrial Processes**

- Specifically designed for industrial processes such as: Oil & Gas, Food & Beverage, Mining, Metals and Minerals, and Water and Wastewater Management

**Altivar ATV630 Drive for General Purpose, Pumps and Fans**

- Over 30 functions dedicated for pumping applications as well as functions for fan and simple material handling applications
- Real time energy monitoring, keypad display, embedded fieldbus, and smart device monitoring



**Altivar ATV930 Drive for Mechanical Movement and Artificial Lift**

- Maximize productivity with excellent motor control and connectivity capabilities (1HP to 500HP)
- The first service oriented drive with embedded power measurement and energy dashboard



**Magelis GTU HMI**

The Magelis GTU HMI offers the best flexibility with its unique concept. Combine a CPU box with a display of your choice.

- Availability of 4:3 and 16:9 format and multi display function to ensure a high level of performance and openness

**M221/M241/M251 PLCs**

- Compact or Modular design
- USB, Serial & Ethernet for flexibility in connectivity and communications
- Ethernet IP Scanner (master) and Adaptor (slave) capability
- Host Custom web pages designed in SoMachine Software (WebVisu) - Accessible on any Smart Phone or Computer with a web browser



**Modicon M340 PLC**

The Modicon M340 PAC provides numerous cost and high-end performance in a mid-range processor.

- Compact size (4 in. height by 3.7 in. depth)
- High-density 64 point digital I/O cards and 8 channel analog I/O cards (Standard X80)

**Modicon M580 ePAC**

- Ethernet backplane offering 10x communication speed
- Cyber Security ready with Achilles Level 2 certification
- Advanced functions with High Availability services
- Hot Standby Processor and power supply redundancy





### SEM3™ Embedded Micro Metering Module™

- Truly Embedded - installed at our Siemens plant providing lower costs
- Very flexible design - with open communications, HMI displays and pulse I/O for embedded & retrofit applications
- Supports Multiple Circuits - meeting High density metering requirements
- High Accuracy - Exceeds Revenue grade requirements metering V,I,P kW, kWh & More
- Very Cost effective design
- Embedded web-server for configuration and real time data view.



### Dual Function Circuit Breaker

- Combines GFCI and AFCI, protecting against both Arc Faults and Ground Faults
- Saves on installation time by combining two devices into one
- Cost effective method of protecting against both arc faults and ground faults
- Plug-in or bolt-on branch circuit breakers for Siemens load centers and panelboards



### P1 Unassembled Panelboards

- Offer even greater flexibility and potential for customers to configure solutions that are optimized to meet the many unique applications and budgetary requirements that today's projects demand
- Same day over the counter availability
- Product consistency between factory built and unassembled means your job sites will have the same look, quality and parts



### 3VA Molded Case Circuit Breaker

- Flexible: Whether in industrial applications, infrastructure or buildings - 3VA offers safe, flexible and efficient application options for low-voltage power distribution
- Range of frame sizes covering 125A to 600A with our 3VA5 and 3VA6
- Wide variety of external accessories meets your needs for global applications



### WireGuide Load Centers

- Load centers accept new electronic circuit breakers with shortened neutrals that slide directly into the neutral bar
- Over 4 inches of wire bending space
- 11 SKUs each available in both grey and white
- Pre-trimmed and ready to install neutrals have an "Oops Loop" if extra wire is needed
- Full length neutral bars
- Decreased installation time
- Pre-trimmed breakers available in Dual Function, GFCI and 1 and 2 pole CAFCI

### Class 82 Slim Line NEMA Pump Controller

- Well suited for irrigation and similar pumping applications and is built to withstand the harsh elements of the outdoors
- Designed specifically for the agricultural market
- Compact and light-weight NEMA type 3/3R enclosure for ease of installation, fabricated with galvanized steel for superior corrosion resistance



### Type VBII Safety Switches

- Available in 30 to 1200 amps
- Double break visible blade switch action reduces heat and increases switching speed to enhance performance
- Enclosure types: 1, 3R, 12, 4X Stainless, 4X Non-Metallic
- 50,000 cycles for an unmatched life expectancy on 30-200 amp heavy duty in type 1, 3R and 12



### New Siemens QR Circuit Breaker

- Compact design for use in North American markets
- Trip unit ratings from 100A to 250A
- Field installable internal accessories - shunt trip, aux switch or shunt/aux combo
- Two accessory pockets in 3-pole breakers. One accessory pocket in 2-pole breakers
- High in-rush current capability (450%)
- Push-to-trip button



### 1-Pole Combination Type AFCI Breaker

- Detects arcing faults (an unintentional arcing condition in a circuit) that standard circuit breakers are unable to detect
- Is intended to mitigate the effects of arcing faults by functioning to de-energize the circuit when an arc-fault is detected
- Detects all three types of arcing: line-to-neutral, line-to-ground, and series arcing



### Sm@rt DAS

- Simple, scalable - Can integrate all MCCBs, ICCBs and Power Circuit Breakers in a single system
- Consistent Architecture - System can be used in most equipment including Switchgear, Switchboards, and Power Panels
- Outside the Zone - Maintenance switches can be mounted on a remote panel outside arc flash zone
- Complies with NEC 240.87
- Scalable solution to add multiple breakers







**MT-Series Keystone Jacks**

- Engineered to exceed ANSI/TIA-568-C.2 component performance specifications
- Available in screened and unscreened versions
- Slim profile for the highest density applications
- Effortless termination with Signamax 4-Pair Termination Tool for improved wire retention

**Faceplates**

- Signamax Faceplates are available in Single, Double, Decora, Stainless Steel, Angled, and Oversized, allowing for mounting of any combination of keystone jacks or multimedia modules
- Top and bottom designation labeling window options for convenient faceplate identification
- Angled Face plates allow an angled patch cord exit to prevent damage to the connector



**Field Installable Plugs**

- Guaranteed transmission performance parameters per ANSI/TIA-568-C.2 after installation
- Designed for connecting directly to field devices such as security cameras & industrial electronics
- Effective crosstalk suppression with overall "360-degree" solid-metal shielding & PCB-based electrical design



**MD-Series Patch Panels**

- Engineered to exceed ANSI/TIA-568-C.2 transmission performance specifications
- MD-Series panels are offered in Category 6A, 6, or 5e with 12, 24, or 48 ports
- Featured with fully enclosed, modular design to provide flexibility & protection during termination
- Effortless port designation features along each port for quick identification



**High-Density Rack-Mount Optical Fiber Enclosures**

- HD Rack-Mount Optical Fiber Enclosures offers termination density up to 288 fibers
- Designed for cross-connections & inter-connections within cabling system applications like data centers, equipment rooms, or in enterprise offices

**Media Converters**

- Signamax Media Converters are the economical bridge between a copper infrastructure and an optical fiber
- Supports data, voice, video, & image transport over a variety of transmission media
- Offered with PoE+ capabilities for a maximum of 30 watts



**Ethernet Switches**

- PoE/PoE+ switches provide a data pathway & power to control and monitor devices
- Managed switch options allow the ability to configure, control, & monitor LAN networks
- Unmanaged switch options offer low cost plug-n-play convenience for simplified installations



**Industrial Media Converters**

- Designed for harsh environments where consistent operation at temperature extremes is necessary
- Supports data, voice, video, & image transport over a variety of transmission media
- Offered with PoE+ capabilities for a maximum of 30 watts
- Conversion from twisted-pair copper cable, multimode fiber, & singlemode fiber in standard Ethernet to gigabit Ethernet protocols



**Industrial Ethernet Switches**

- Designed for harsh environments where consistent operation at temperature extremes is necessary
- PoE/PoE+ switches provide a data pathway & power to control and monitor devices
- Managed switch options allow the ability to configure, control, & monitor LAN networks
- Unmanaged switch options offer low cost plug-n-play convenience for simplified installations
- Compact, rugged switches offer an excellent solution for small enclosures exposed to the elements



**SFP Interface Modules**

- Signamax SFP Interface Modules are a flexible means to extend Gigabit Ethernet over multimode or singlemode fiber
- Designed to work with Ethernet switches or media converters equipped with SFP receptacles
- Manufactured to meet the SFP Multi-Source Agreement
- Hot pluggable with a metal enclosure for low EMI
- Integrated for options like extended temperatures, up to 110 km link distances, and low power dissipation





#### Sunmodule Plus Solar Panels

- Monocrystalline solar panels with high performance cells structure, available with black frames
- Meet stringent SolarWorld quality standards, exceeding all industry standards and certifications
- 25-year warranty to guarantee maximum performance through the lifetime of your system and 10 year product workmanship warranty
- Five busbar product available in 290-300 Wp and 280-290 Wp



#### Sunmodule XL Solar Panels

- Offer maximum reliability and energy density for project planners and investors
- When installed, the Sunmodule XL solar panels provide 30% greater rated power when compared to 60-cell modules thanks to its 72-cell format, reducing system costs
- With a 25A maximum reverse current, and certified to UL standards to 1500V system voltage longer string lengths are possible further reducing installation costs
- High performance cell structure available in 340-350 Wp models
- 25-year linear performance guarantee and 10 year product workmanship warranty
- High mechanical loads up to 178 psf, extended cable lengths and available in 1500V



#### Sunmodule Protect Solar Panels

- 0.35% maximum annual degradation
- 30-year linear performance guarantee and 10 year product workmanship warranty
- Higher energy-yield-over-service-life ratio, and optimal protection against mechanical loads and environmental factors
- Positioned between two sheets of glass, the placement of the cells makes them less susceptible to shear stress, thereby reducing cell breakage versus a traditional backsheet panel
- Available in 275-280 Wp Mono Black models



#### Sunmodule Bisun Solar Panels

- Bifacial solar panels offer up to 25% more yield thanks to the use of the latest, high efficient PERC cell technology combined with SolarWorld duo cells
- The duo cells are active on both the front and back, making them capable of converting light from all directions into power
- Ideally suited for ground-mount systems or flat roofs. When combined with highly reflective surfaces such as white membrane roofs or white stone, more light is reflected into the module, increasing the energy yield
- Available in 60 cell and 72 cell formats.
- Up to 30-year linear performance guarantee and 10 year product workmanship warranty





**I-Line Combo Panelboard**

- Saves time and space by combining I-Line and NQ/NF sections in one panelboard
- Requires up to 40% less space
- 600y/347 Vac, 48 Vdc maximum
- 1200 A max main circuit breaker or 800 A max main lug
- 1200 A max branch circuit breaker
- Available in single enclosure (26" and 32" width) or duplex enclosure (32" and 44" width)

**I-Line Smart Cell for I-Line Panelboards and Switchboards**

- Efficiently monitor system status and manage energy
- Communicate over Ethernet
- Add communications without adding footprint or high costs
- As easy as adding an I-Line circuit breaker
- Units available for ERMS, metering, IFEs, and more!

**PowerPact B CBs for I-Line/OEM Panels**

- Innovative circuit breaker with a space-saving design
- One-click accessories make it easy to customize.
- Smaller than previous PowerPact circuit breakers.
- Wider range: 15 - 125 A.
- A variety of connections types, including EverLink creep compensating technology.
- Din rail and screw mounting

**TeSys U Self-Protected Combination Motor Starters**

- Short circuit current rating is 65 kA on 480Y/277V systems according to UL508 Type E with an option of 130kA at 480V Delta
- Totally coordinated motor starter is ready to restart immediately after a fault is cleared

**Homeline Dual Function Circuit Breakers**

- Faster installation - fewer connections
- Saves wire - fully distributed split neutral bar
- Frees gutter space - no pigtails, easier troubleshooting
- TIME SAVER diagnostics provide additional circuit information at the touch of a button



**SurgeLogic SurgeLoc**

- Engineered with input from contractors
- Quick and easy installation
- Easy field mounting and retrofitting
- Custom bus bar, rails, dead front, and fasteners not required

**Solar Combiner Box**

- First line in market designed with solar installers and electrical contractors in mind
- Variety of sizes and multiple mounting choices meet any PV system need
- Flexible installation with top, bottom, and side entry
- Substantial wire bending space
- Touch-safe interior shielding guards

**Harmony XB5R Wireless, Batteryless Push Button**

- Quick and easy installation
- Eliminates wires and cables
- Flexible due to its mobility
- Greater control and mobility for operators
- Maintenance-free

**GO Plug-on Neutral Load Centers and Combination Arc Fault (CAFI) and Dual Function Circuit Breakers**

- CAFI Circuit Breakers connect directly to the neutral bar, providing a time- and labor-saving installation
- Fewer connections - faster installation

**Safety Switches**

- Designed to outperform other switches in wide range of demanding applications
- Time-saving design features make installation quick and easy
- Visible blades verify down-stream circuit is de-energized
- Rugged construction and corrosion protection



### A19 Contractor

- Rated life: up to 11,000 hours
- UV and IR free
- Mercury and lead free
- RoHS compliant
- Available in 2700K & 5000K color temperatures



### BR30 Contractor LED

- Dimmable down to 10%
- Rated life: up to 11,000 hours
- Damp location rated
- Available in 2700K and 5000K color temperatures
- Good color quality
- Lightweight



### Contractor PAR LED

- Rated life: up to 11,000 hours
- Beam angle: 45°
- UV and IR free
- Mercury and lead free
- RoHS compliant
- Available in 3000K and 5000K color temperatures



### FO28 XP SS Fluorescent Lamps

- Energy savings compared to standard 32W T8 lamp:
  - 22% with the 25W XP/SS
  - 12% with the 28W XP/SS
  - 6% with the 30W XP/SS
- 94% mean lumens
- Lead free
- Made in the USA
- Dimmable



### FO28 XP XL Fluorescent Lamps

- Available in full wattage (32W) and reduced wattage SUPERSAVER® types
- Energy savings compared to standard 32W T8 lamp
  - Up to 12.5% with the 28W XP/XL/SS
  - Up to 22% with the 25W XP/XL/SS
- Up to 96% mean lumens
- Dimmable
- Lead-free and RoHS compliant

### Glass PAR LED

- Up to 75 LPW
- Dimmable down to 10%
- Long life: up to 25,000 hours
- Available in 2700K, 3000K, 4000K and 5000K color temperatures
- CRI>80
- Energy savings up to 87%
- Longer life than traditional halogen lamps



### Integrated Bulb

- Integrated lamp and trim
- Dimmable down to 25%
- Available in 2700K color temperature
- Long life: up to 11,000 hours
- UV and IR free
- Mercury and lead free
- RoHS compliant
- Energy savings up to 77%



### LED Glass T8

- Optimized glass optics available in
  - Dimmable on 0-10V 4ft/15.5W
  - Non-dimmable 4ft/12W, 3ft/12W, 2ft/8.5W
- Optimized plastics optics available in non-dimmable 4ft/15.5W
- CCT: 3000K, 3500K, 4100K, 5000K
- Beam angle: 220°



### LED T8

- Available in 4ft
- CCT: 3000K, 3500K, 4100K, 5000K
- Beam angle: 220°
- Compatible with instant start and select programmed rapid start (parallel-wiring) electronic T8 ballasts with input voltage of 120-277V and 347V
- THD <20%, power factor >0.90



### RT Contractor

- Lumen package:
  - RT 4 - 550 lumens,
  - RT5/6 - 625 lumens
- Replacement for 50W and 65W incandescent lamps
- RT4 fits into most 4" recessed downlight fixtures
- RT5/6 fits into most 5" and 6" recessed downlight fixtures
- CCT: 2700K/3000K/4000K/5000K
- CRI: 80







### eFab™ by Thomas & Betts

- Online configurator improves job site efficiency and profitability
- Free BIM downloads of robust models in popular software formats
- Dedicated engineering support team to assist with design, pre-planning or development of take-offs

### Ocal' Blue PVC Coated Conduit and Fittings

- UL Listed Type 4X NEMA PVC-coated conduit bodies
- Threads protected through a hot-dipped galvanizing process
- Meets the requirements of NEMA RN-1 without exception
- A full undisturbed zinc coating under the PVC coating fulfills the requirement of NEMA RN-1 regarding the restriction of harmed or eroded zinc coating over the conduit

### ABB PV Vault™ Rapid Shutdown Device

- Meets NEC® 690.12-2014 residential and small commercial solar PV rooftop rapid-shutdown requirements
- Connects two to four PV strings/arrays and discharges PV array within 10 seconds
- Compatible with residential and commercial rooftop inverters and features dual MPPT outputs to maintain the benefits of inverter channels

### T&B Solar Solutions

- Ty-Rap® weather-resistant nylon 12 cable ties and cable edge solar clips
- Blackburn® ground rod clamps, mechanical lugs and solar panel grounding lugs
- Color-Keyed® one- and two-hole, standard- and long-barrel compression lugs and splices
- Color-Keyed C-taps for 600V applications and Dragon Tooth® transition washers

### TY-RAP® High Performance Cable Ties and Accessories

- The Original Cable Tie® invented by Thomas & Betts
- Features "The Grip of Steel™" 316 stainless steel barb in the head of the tie for superior, reliable strength
- Complies with the new UL62275 standard:
  - One of the first cable ties to be rated Type 21S
  - Most are also AH-2 plenum rated

### T&B® Commercial Grade Liquidtight Fitting

- CuLus certified commercial grade liquidtight fitting
- Sizes: 3/8" - 4" straights, 45's and 90's
- 3/8" - 2" sized straights are steel; All other sizes and angles are malleable iron
- Suitable for indoor and outdoor use



### T&B® FITTINGS Flexible Cord and Cable Connectors

- High performance, easy installation and a broad product range
- Compact Ranger® connectors, available in steel, stainless, aluminum and non-metallic, provide twice the cable range with superior strain relief and a gland that restricts cable bending



### SUPERSTRUT® Pre-Fab Strut Services

- Custom metal framing products and services to help reduce end-user material and labor costs
- Eliminates the cost of over-ordering material, on-site fabrication, scrap disposal and storage
- Strut channel in any length you need from 1 ft. to 18 ft.
- Custom engineering and pre-fabrication of trapeze systems and support structure
- No-cost, no-obligation quotes



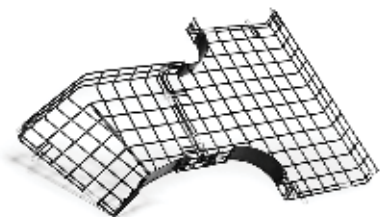
### T&B® FITTINGS Expansion/Deflection Coupling for Rigid Non-Metallic Conduit

- Joins two rigid PVC conduit runs in applications requiring movement in any direction at structural joints
- Suitable for use indoors, outdoors, direct buried or embedded in concrete



### QUICKTURN® Basket Tray

- One-tool installation that simplifies the entire process
- Ideal for commercial and industrial cable tray applications
- Offered in rugged steel construction with powder-coat or hot-dipped galvanized finish
- Features built-in UL bonding and splicing
- NEC® compliant, with no bonding jumpers required
- UL® Classified and made in the United States





#### LED Wall Pack

- Contains high performance EVERLINE LED modules, drivers, optics and thermal management components
- Maximum energy savings (up to 50% savings vs. standard HID)
- Long LED life ensures low maintenance costs as well as enhanced safety. No lamp replacement at 20,000 hours

#### LED Chains

- Endless configurations
- Superior fastening system using 3M VHB tape and/or screw mount
- High efficiency for maximum loading on power supply (just 100mA per foot)
- Highest quality LEDs for consistent color and brightness
- Precision tuned
- Over voltage, current & short circuit protection



#### LED Driver Replacements

- 150W Constant Current Drivers for indoor and outdoor applications
- Reduced EMI levels allow for multiple drivers in a single fixture
- Enhanced transient protection protects the driver and LED module
- Thermal fold back protects the system during extreme temperature events
- Constant voltage



#### LED Retrofit Kit

##### NEW: LED Retrofit Assembly

- Kits available for 2 ft. and 4 ft. fixtures
- Each kit consists of (2) LED Lensed Modules, (1) LED driver, hardware and installation instructions
- Contains high performance EVERLINE LED lamps, drivers, optics and thermal management components



#### LED Vapor Tight

- Universal offers 4 ft. and 8 ft. luminaires
- Contains high performance EVERLINE LED modules, drivers, optics and thermal management components
- Reduced energy consumption versus traditional fluorescent (40% vs. traditional system)
- All versions are equipped with 0-10V dimming LED drivers
- Capable of being connected to photocells or building management systems for additional savings



#### CFL Multi-E Kit

- Universal input voltage (108 - 305 volts, 50/60Hz)
- Installer-friendly; ensures you have the right ballast every time
- Reduces inventory costs and requirements
- 1- or 2- lamp operation of multiple lamp applications
- End-of-lamp life shutdown circuit for safe operation



#### ULTim8 PS and Triad T5 & T5HO (Linear Fluorescent)

- Quick programmed start technology
- True parallel lamp operation
- High efficiency design
- Universal input voltage
- Smallest cross section available (1.0" x 1.18")
- Program rapid start for long lamp life

#### LED T8 Tubes and LED Ready Ballasts

- Ideal for T8 fluorescent lamp replacement - installing directly into existing fixtures that have electronic T8 ballasts
- Provide ease of installation, immediate energy savings of 30% or more, and low maintenance (because of their long life, with a 50,000+ hour lifetime at L70)



#### eHID & Multi-5 Uni-Pak (HID) (Electronic & Magnetic)

- Mini-square enclosure
- Universal input voltage
- Qualified by all major lamp companies
- High efficiency operation
- Smaller, lighter design
- Color-coded leads for easier installation
- New easy-ordering catalog nomenclature

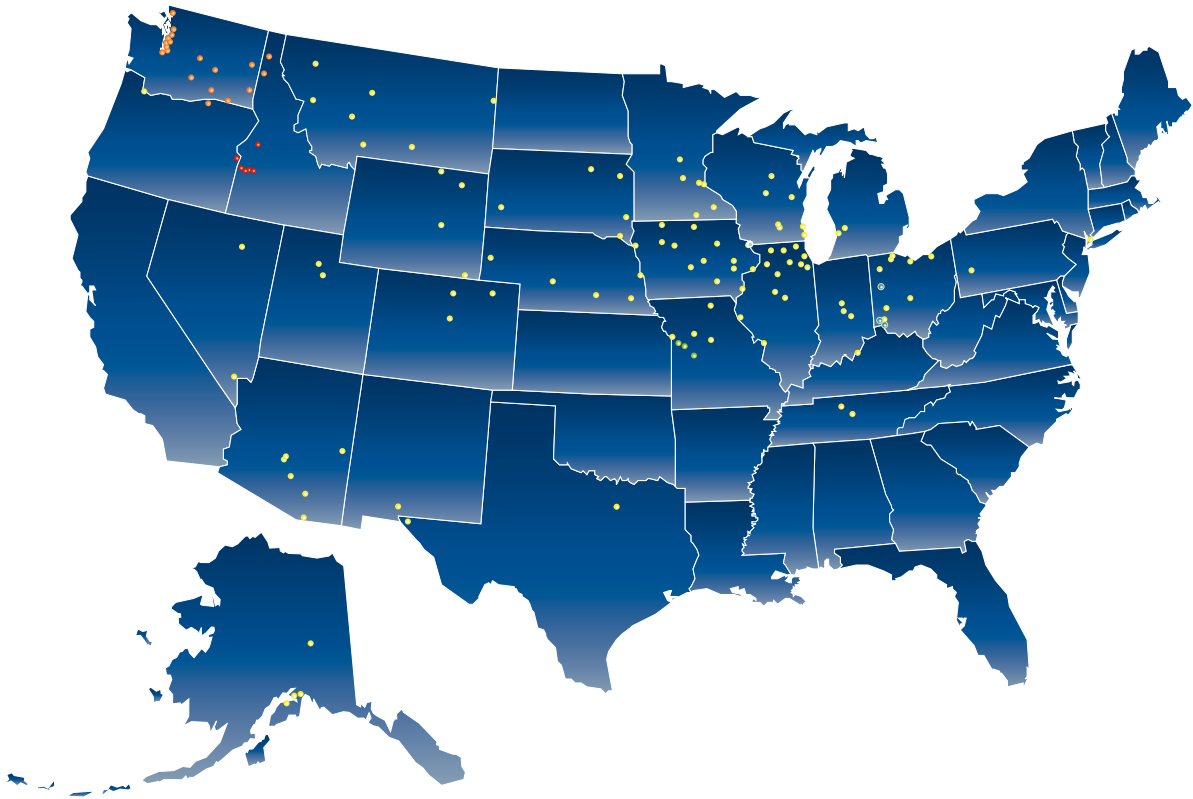


#### LED Sign Tube

- LED Outdoor replacement solution for T12HO or T8HO lit signs
- Fast and easy installation using the existing RDC sockets without modification
- Features 90 degree adjustable RDC style end caps for correct lamp orientation in vertical or horizontal installations
- Durable acrylic tube contains LEDs that have excellent light distribution and are available in single-sided or double-sided configurations
- Class II, 24V Constant voltage product
- Can be installed using daisy-chain or parallel wiring







## LOCAL SERVICE, NATIONAL SUPPORT

**140+** LOCATIONS

Crescent Electric is one of the ten largest electrical distributors in the United States. With more than 140 locations, we serve local needs with personal service and bring a wide range of products through the national support of premier electrical manufacturers.

### CRESCENT ELECTRIC PROVIDES A FULL RANGE OF SERVICES:

- Local Inventory
- Daily Deliveries
- 24-Hour Emergency Service
- Technical Support Center
- Project Management Team
- Industrial Specialists

### CRESCENT INSIDE SALES STAFF (CISS)

- Real-time access to \$120M in national inventory
- Reducing downtime with a rapid-response team
- Nationwide coverage
- Sales professionals who help plan projects from start to finish

Find a location near you: [cesco.com/locations](http://cesco.com/locations)

### CORPORATE OFFICES:

**Crescent Electric Supply Company:** 815.747.3145

**BA Supply:** 816.525.9600

**Stoneway Electric Supply:** 509.535.2933

**Interstate Electric Supply:** 208.375.6880

**Crescent Inside Sales Staff (CISS):** 800.397.3900

**24-Hour Emergency:** 800.397.3900

[cesco.com](http://cesco.com)

### CRESCENT TECHNICAL SUPPORT CENTER

Technical Solutions for Electrical Control and Industrial Automation Products

Phone: **866.432.9581** | E-mail: [techsupport@cesco.com](mailto:techsupport@cesco.com)

*Connect with us on social media:*

[www.facebook.com/CrescentElectricSupply](http://www.facebook.com/CrescentElectricSupply)  
[www.twitter.com/CrescentElectrc](http://www.twitter.com/CrescentElectrc)





**The Supply Line 2017**

