

SIEMENS



# Intuitive display and operator units

Multiple possibilities for cross-discipline display and operation of all room and building functions



## Everything under control – with the right display and operator units

The comprehensive portfolio of display and operator units from Siemens meets all the requirements of modern room and building usage. It offers a variety of models for the display and operation of lighting, shading, heating, ventilation and air conditioning – from simple pushbuttons and room thermostats to multifunctional room operator units as well as web-based systems. The devices are based on open standards like KNX, IP and BACnet. Wireless solutions on the basis of infrared and radio technology complete the offering.

In addition, the wide range of designs enables a harmonious integration into different installation environments.

# Wide variety for intuitive operation

## Comfort that facilitates room operation

Pleasant temperature, glare-free lighting and optimal air quality in a room can be set or controlled conveniently and intuitively – even via your smartphone while you're on your way. Cross-discipline controls allow the simultaneous operation of multiple room functions. All disciplines can be centrally operated using a single device. Depending on the device, consumption data can also be displayed. In addition, the operating concept of the Green Leaf symbol allows the user to easily set a room's optimal energy conditions.

## Flexibility that protects investments for the long term

Building automation and control systems from Siemens are characterized by a high level of flexibility. You can easily integrate infrared and radio systems that permit the manual control of room functions via a remote control device. Web solutions enable the mobile, location-independent display and operation of the building's automation. Thanks to open communication standards, third-party products can also be integrated and operated. In addition, all systems are modularly expandable.

## Profitable efficiency that always pays off

The user-friendly operation facilitates setting your room's automation and plants to an energy-efficient mode. Operating modes for lowering the temperature can save energy, while consumption data can be displayed on various devices – such as a room operator unit with a display, a touch panel or a web solution – and serve as basis for energy-efficient operation.

Users can also monitor whether operation is set for optimal energy consumption or whether the room control needs to be switched to an energy-efficient operating status.

The user-friendly operation also supports the optimized control of all disciplines, resulting in productive, satisfied users. The scene control is especially efficient because it can control several room functions simultaneously with just one command.

## Simplicity that ensures comfortable handling

Display and operator units from Siemens are designed for straightforward installation, commissioning and maintenance. KNX-based devices can be easily integrated into the KNX system via the ETS\*.

The battery-free and wireless EnOcean pushbuttons and room operator units can be flexibly mounted onto a variety of surfaces and are maintenance-free.

In addition, web-enabled devices allow individual, customer-oriented displays of user interfaces.

## Reliability that is backed by decades of expertise

As a member of a variety of standardization organizations like the KNX Association, BACnet Interest Group, DALI Group and EnOcean Alliance, Siemens is continuously leading the development of international standards. All products and systems from Siemens meet the latest standards. Expert knowledge in the areas of HVAC control technology, electrical engineering and building automation feeds directly into product development. To ensure a high level of product safety, conformity tests are conducted by independent certification bodies.

## Highlights

- Comfortable operation – with straightforward user guidance and universal operating concept
- Investment protection – flexible integration options and end-to-end compatibility of all operator units
- Efficiency – thanks to visual support for room users, for example with the Green Leaf symbol
- Less effort – as a result of straightforward installation and commissioning
- Future safety – due to products certified to the latest standards

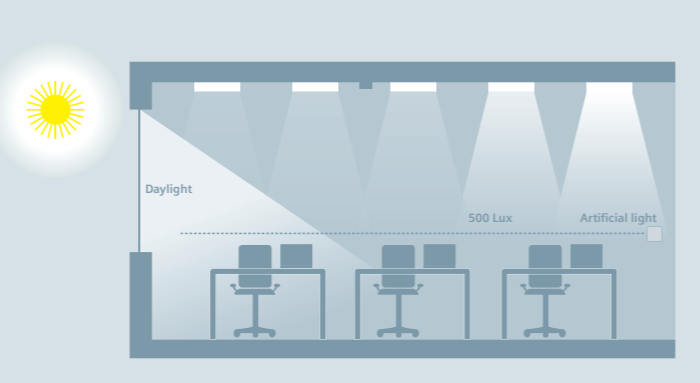
\* Engineering Tool Software

# Operator units for integrated applications

## Time-, presence- and brightness-dependent lighting

Time-dependent lighting control switches on or dims the lights at predefined times. Using brightness sensors, the smallest possible amount of artificial light is added to the incoming daylight until the preset brightness value is achieved – and if presence sensors are employed, only if someone is actually in the room.

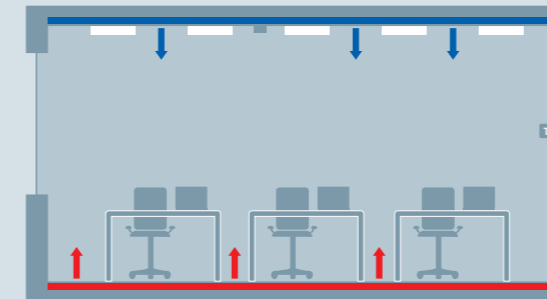
- Optimal lighting conditions in rooms and buildings
- Economical use of artificial light
- Lower electricity costs for lighting



## Comfortable temperature control

A single room control along with daily, weekly and yearly programs ensures that rooms are only heated or cooled on demand to reach the most comfort temperature. Presence sensors can also control the room's heating or cooling demand depending on whether or not people are present. As a result, the heating and cooling distribution only delivers as much energy as is actually needed in the room.

- Significant energy cost savings
- Ensures the perfect feel-good climate



Manual override

Using display and operator units, the current status of a room can be comfortably controlled and changed at any time. Independent of the automatic control of the room automation, the room's climate can be changed manually to individual comfort values – even cross-disciplinary using scene control if required.

## Display, monitoring and operation



From simple pushbuttons to web-based operation – room and building functions can be optimally displayed, operated and monitored using a variety of operator units. For example, the current air quality and room temperature or consumption data can be displayed, the automatic lighting and room temperature control can be manually operated and the settings can be changed.

- Comfortable status control of values like room temperature, lighting and energy consumption
- Straightforward operation of room and building functions, including scene control
- Activation of functions like vacation programs and central off switches
- Convenient changes to settings like setpoint values, ventilation levels and lighting intervals
- Green Leaf functionality for energy-optimized operation

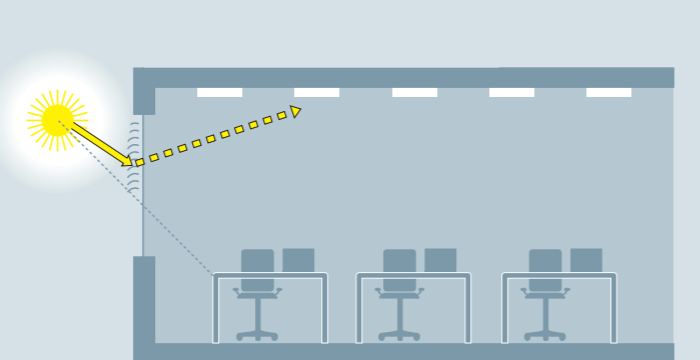
Manual override

For more information, please visit:  
[www.siemens.com/bt/integrated-applications](http://www.siemens.com/bt/integrated-applications)

## Shading control with daylight utilization

Sunlight tracking control lets blind slats follow the position of the sun and positions them in such a way that only diffuse daylight enters the room. Shadow tracking control increases the amount of daylight by only letting the sun enter the room within an adjustable range.

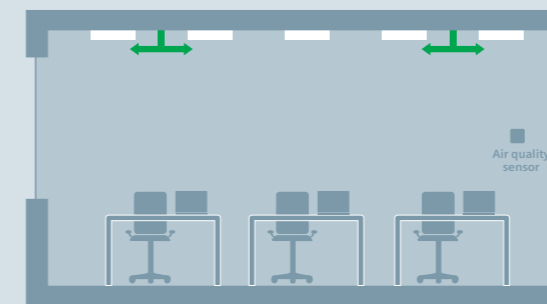
- Maximum utilization of daylight and glare-free room brightness
- Lower electricity costs for lighting
- Protection from external thermal influences like summer heat and winter cold, and therefore less heating and cooling demand



## Demand-controlled ventilation

Demand-controlled ventilation adjusts the amount of fresh air supplied – and therefore the energy needed – to the amount actually required.

- Pleasant, healthy room climate with optimal air quality
- No under- or over-ventilation
- No loss of warmth via inappropriate ventilation
- Adjusted supply of fresh air for unused rooms



# Universal operation of all disciplines

Convenient display and operation for rooms and buildings

## ③ Display and operation

### Central room and building functions



- Display and operation of all room and building functions via one device
- Innovative operating philosophy
- High-quality design and equipment
- Extended functionality with central applications like time switching function, scene control, alarm management

### Intelligent mobile operation and monitoring



- Web-enabled solutions for the display and operation of all disciplines
- Intuitive user interface with intelligent applications (for example, scenes and effect control)
- Utilization of pre-existing web-compatible devices like smartphones, tablets and notebooks – whether in the building or by remote control

## ② Operation and control

### Multifunctional and cross-discipline operation and control



- Room operator units with integrated sensors
- Multifunctional and cross-discipline operation of all systems in the room
- Harmoniously coordinated device models with or without display, for flush mounted and surface installation
- Broad range of room thermostats for fan coils, variable air volume systems, chilled ceilings, heating plants or heat pumps



## ① Standard operation

### Display and operation elements in a coordinated frame program



- Straightforward and intuitive operation of all disciplines in a room
- Pushbuttons and room temperature controls, harmoniously coordinated with the room's electrical installation, available in a broad range of designs and colors
- Can be combined with various frame designs in different colors, shapes and materials (like plastics, glass and aluminum)
- Modular installation solutions for regional, country-specific standards: CEE/VDE, UL, British Standard, modular 503 technology

### Remote operation

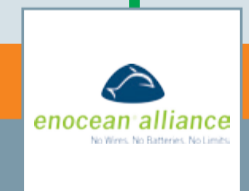


- Operate a room's comfort functions via infrared using remote handheld transmitters
- Fault-free and reliable operation in any environment
- Can be used worldwide with no restrictions

### Wireless and battery-free operation



- Battery- and maintenance-free radio technology
- Environmentally friendly and energy self-sufficient comfort solution
- Flexible and fast mounting on different surfaces
- Feeder technology to wired building automation and control systems



Siemens Switzerland Ltd  
Building Technologies Division  
International Headquarters  
Gubelstrasse 22  
6301 Zug  
Switzerland  
Tel +41 41 724 24 24

Siemens Building Technologies  
Brunel House  
Sir William Siemens Square, Frimley  
Camberley  
Surrey, GU16 8QD  
United Kingdom  
Tel +44 1276 696000

Siemens Ltd  
Building Technologies Division  
22/F, AIA Kowloon Tower, Landmark East  
100 How Ming Street  
Kwun Tong, Hong Kong  
Tel +852 2870 7888

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract. The document contains a general product overview. Availability can vary by country. For detailed product information, please contact the company office or authorized partners.

© Siemens Switzerland Ltd, 2016 • Order no. E10003-C38-5P-A0010-7600

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

**“We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure.”**