SIEMENS

Green room automation with EnOcean wireless technology

EnOcean room units and wall transmitters reduce energy consumption – while ensuring a high level of room comfort and flexible operation.

Answers for infrastructure.

EnOcean products – innovative energy savings in every room

Maximum energy efficiency and sustainability for a green future: EnOcean room units and wall transmitters from Siemens are environmentally friendly solutions that control heating, ventilation, air conditioning, lighting and shading in every room. Thanks to their innovative design and intelligent, wireless technology, the devices require only very little energy.

The room units' integrated solar cells as well as the wall transmitters' power-generating push buttons cover the energy requirements self-sufficiently. This eliminates the need to use batteries in nearly all rooms*.

* For use in rooms with insufficient light (e.g. heating room) an optional battery can be added.

Flexibility in room operation – thanks to wireless communication

Flexible, energy-saving communication via EnOcean technology

Wall transmitters and room units with EnOcean technology communicate wirelessly – via radio frequency. As a result, cables to the control points are not necessary for forwarding the individual switching, dimming and control commands to the building automation system. This means these devices can be positioned flexibly in a room and placed exactly where they can be reached most easily or, for example, at the ideal measuring point for room temperature. And if the usage of a room changes, they can be repositioned at any time.

This reduces losses in rental income from prime real estate that is renovated frequently, for example office complexes, since the renovation can be performed during business operations. In historical buildings, comfortable room automation can be installed without visually disruptive surface-mounted cabling and without damage to the structure. And even the recognition of a building as a green building is supported because renewable energy is used and thus battery disposal* is not necessary.

enocean alliance
No Wires. No Batteries. No Limits.

1 Product case

- Flat design for wall mounting
- No wiring
- Positioning flexibility thanks to wireless technology
- Walls will not be damaged during mounting

2 Frames

- Harmonious integration into the ambience through various designs, shapes and materials
- Especially easy to mount thanks to surface installation – simply screw or glue onto different surfaces

3 Solar cell

- Self-sufficient operation
- No batteries needed, no additional waste
- Image statement for energy efficiency
- Less operation and maintenance costs

Gateway

- Integrates up to 32 EnOcean devices into a building automation system
- Room devices can be easily linked to gateway via their "teach-in button"

* For use in rooms with insufficient light (e.g. heating room) an optional battery can be added.

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4 Setpoint adjuster

- Adjustment of room temperature to a comfortable climate

- Optimum comfort thanks to individual temperature adjustment

5 Fan levels

- Function for controlling ventilation systems

- Switching of room operating mode "Auto" when the room is occupied to "Protection" when it is unoccupied

- Higher level of room comfort thanks to individual fan speed settings and operating modes

6 Lighting/shading control

- Wall transmitters to control lighting (on/off/dimming) or shading

- Energy generation when pressing a button

- Single and double wall transmitters available

7 Freely configurable button

- Freely configurable via the building automation system (e.g. control of scenes)

- Configurable as central off switch in order to turn off all specified loads

The illustration shows a combination of the following products: room unit QAX98.4, two double wall transmitters AP222 and a DELTA miro frame (glass).

Intelligent room automation for the future

Supporting all communication standards, suitable for many HVAC applications

Green, intelligent and wireless – EnOcean products from Siemens meet the wireless standard in building automation. They can be used for many applications, from lighting and shading control to HVAC control. In addition, gateways for various communication protocols – such as LON, KNX, Modbus, BACnet and TCP/IP serial – allow integrating EnOcean products into a superior building automation system.

Flexibility in design and positioning

Thanks to the wireless technology, EnOcean products can be flexibly positioned in rooms. This facilitates installation and offers a great deal of freedom in case the interior design or room usage should change. In addition, the products are compatible with various DELTA frames as well as with frames of many third-party manufacturers, allowing them to be optimally matched with any room design.

Straightforward installation, convenient operation and reduced maintenance

EnOcean products are easy to mount. They can be simply attached with glue or screwed onto the surface – even on fragile surfaces such as sandstone, marble, concrete and glass – without requiring flush mounting and cabling, thus minimizing the installation effort.

Moreover, they provide maintenance-free technology: unlike conventional wireless technology, EnOcean devices are self-powered using solar or electromechanic power – without harmful waste of batteries.

Safe investment to increase productivity

The investment in EnOcean products pays off right from the start. For instance, installation costs are reduced to a minimum, thanks to wireless technology. Maintenance costs are eliminated through maintenance-free technology. Renovated areas are available more quickly, boosting productivity. Batteries are obsolete thanks to low energy consumption and self-powered operation.

Highlights

- Investment protection thanks to open communication standards
- Environmentally friendly – no harmful waste of batteries thanks to self-sufficient operation of the devices
- EnOcean products can be easily repositioned thanks to wireless technology
- Less operation costs in maintenance, as no batteries need to be replaced

	Setpoint adjuster	Room operation mode/ventilation	Configurable button	Lighting/ shading
Room units with temperature sensor				
QAX98.4	■	5-step	■	
QAX97.4	■	2-step	■	
QAX96.4	■			
QAX95.4				
Wall transmitters				
AP221/AP222				■

The table gives a short overview of Siemens products that are equipped with EnOcean wireless technology. For further information, please contact your local Siemens office or visit our Web site: www.siemens.com/enocean

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.

Answers for infrastructure.
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 preferred partner for energy-efficient, safe and secure buildings and infrastructure."

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