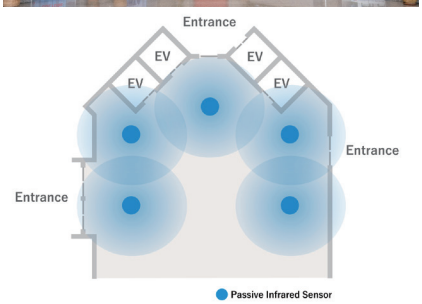
Energy Conservation Through Sensing Technology

Bangkok, Thailand

182 Sensor Switches Delivered to MRTA Head Office, a State-Owned Enterprise in Thailand. Advancing Energy Conservation in Buildings Using Automatic On/Off Lighting.

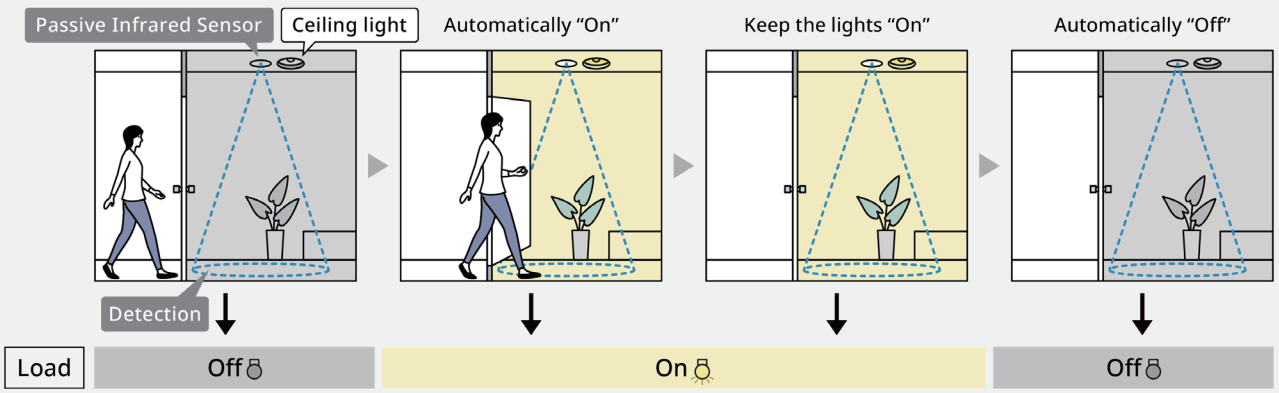
182 Panasonic sensor switches have been installed in the headquarters and second building of the Mass Rapid Transit Authority of Thailand (MRTA), a state-owned transportation corporation. MRTA is operating the Mass Rapid Transit (MRT) system in Bangkok and its vicinity, including in other provinces and between provinces, in accordance with the Royal Decree. MRT was built to meet the growing transportation demand in the Bangkok metropolitan area and to alleviate chronic traffic congestion, contributing to the improvement of the urban environment by aiding the area's economic development while reducing greenhouse gas emissions.

In recent years, MRTA has also been focusing on energy conservation measures for its facilities by converting lighting fixtures to LED, retrofitting energy-efficient air conditioning systems, and using sensors, actively participating in the global efforts for decarbonization.



What are PIR Motion Sensors?

When connected to lighting fixtures, Passive Infrared (PIR) Motion Sensors automatically turn lights on when a person approaches and automatically turns lights off at a set amount of time after people leave the area. When a person enters a sensor's detection area, the sensor detects the temperature change caused by the person's activity and converts it into an electrical signal.



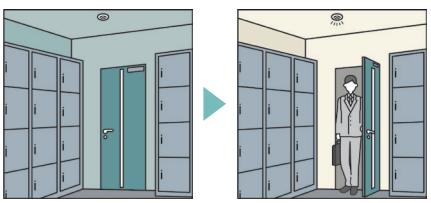
Automatic On/Off of Lighting for Convenience and Energy Saving.

Installing PIR Motion Sensors improves the convenience and safety of a space as it eliminates the need to turn switches on and off. As lights are turned on automatically when people are present and turned off automatically when there are no people present, PIR Motion Sensors save electricity and reduce CO_2 emissions.

Through this initiative, MRTA is promoting awareness of energy conservation within the company.

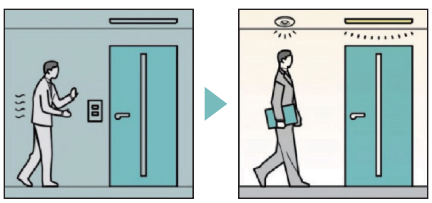

PIR Motion Sensor

Energy conservation awareness poster



Comfortable

No problem if your hands are full. Lights automatically turn on without touching a switch.



Safety

You don't have to find a switch in the dark, so it also improves safety.

Energy Saving

Lights will not be left on accidentally as they automatically turn off when no one is around.

Learn More
Solutions

Choose the Best Sensor to Fit Your Needs and Space

Panasonic offers a wide range of PIR Motion Sensors to fit various spaces and needs. The sensors that Panasonic supplied to MRTA this time are interconnectable types (WTKG2411 and WTKG2911), which cover large areas with the multi-point detection system. The sensors are widely used at entrances and hallways where people often come and go.
By installing multiple sensors in a single lighting circuit, the system can detect human presence and activity levels in all directions and control the lighting accordingly. In addition, the newly delivered sensors are equipped with PaPIRs, proprietary products developed by Panasonic. From the sensor lenses to the overall design, the PaPIRs were created to achieve high detection performance and reliability.

Sensors are installed at entrances and in front of elevators where people come and go. The high detection function detects human presence and activity levels in all directions.

Lights automatically turn on and off without people needing to touch switches, reducing hygienic concerns about touching switches in restrooms.

Lights in the hallways are also automatically turned on when the sensors detect human presence, and the lights are automatically turned off when no one is there.

Products for Solutions

Passive Infrared Sensor
WTKG2310
Ceiling Flush Mount Type
[3A 220-240V~]
1 min Time Delay

Passive Infrared Sensor
WTKF24816-TH
Interconnectable Type
Master Unit
[8A 220-240V~]

Passive Infrared Sensor
WTKG2411
Interconnectable Type
Master Unit
[3A 220-240V~]

Passive Infrared Sensor
WTKF2911-TH
Interconnectable Type
Auxiliary Unit
[DC12V]

Passive Infrared Sensor
WTKF331107-TH
WTKF331107B-TH
Stand-Alone Type
[3A 220-240V~]

Passive Infrared Sensor
WEBFP57311W8
Wall Type
[2A 220-240V~]

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