ICP DAS

■ Safety ■ Energy Savings ■ Low Power Consumption ■

(High-sensitivity Type) (Long-range Type) (Standard Type)

PIR Series
Human Motion Sensor Module

PIR-234 Series

PIR-234-E

PIR-231-E

PIR-130 Series

PIR-231 Series

| Human Motion Detection | PoE-capable | T&H Sensor | Relay Output | Adjustable Time Delay | Support Various Communication Protocols |

High-sensitivity Type
Human Presence Detection

▶ Each module of the PIR-234/PIR-234L series contains 4 PIR sensors. Each PIR sensor can be independently configured to turn on/off, providing flexibility in adjusting the detection range and adapting to different layouts of the space.
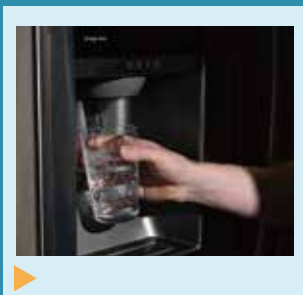
PIR-234 Series   **PIR-234L Series**

Are you facing these issues when using infrared sensors for human presence detection?

▷ **Lights go out abruptly when you are being focused in a meeting?**

▶ ▶ ▶

▷ **Or, lights go out suddenly while you are refilling water in an office pantry?**

▶ ▶ ▶

PIR-234/PIR-234L series, the high-sensitivity type, feature 4 built-in PIR sensors in each module. The design greatly enhances the sensitivity of human presence detection, capable of detecting movement with a diameter as small as 3 cm. This series is ideal for applications in which human body movement is subtle, preventing unnecessary light deactivation caused by undetected human presence. With a reliable lighting control system, you can concentrate on meetings, work, reading, and other indoor activities.

Meeting Room   **Office Pantry**   **Living Room**

10 meter

8 meter

6 meter

4 meter

2 meter

1 meter

PIR-231-E

ICP DAS

Long-range Type

Human Motion Detection

PIR-231 Series

▶ Have you encountered situations where passive infrared (PIR) sensors failed to detect human motion due to the installation height? PIR-231 series (Long-range Type) features a maximum detection range of 10 meters from the floor, making it suited for spaces with high ceilings, including warehouses, factories, and huge halls.

Stadium

Factory

Hall with High Ceilings

Warehouse

Standard Type
Human Motion Detection

PIR-130 Series   **PIR-230 Series**

PIR-130/PIR-230 series, the standard type, is designed to detect human motion and then activate lights accordingly. Individuals no longer have to fumble around in the dark for a light switch. Besides, the automatic lighting control system achieves energy savings. This series is suitable for various passage applications, including corridors, staircases, and entryways with shoe storage cabinets & benches.

Corridor

Staircase

Locker Room

Building Automation & Integrated IoT Applications

A combination of PIR and WISE enables lighting that creates different ambiances

Human Motion Sensor Module PIR-130/230

PIR-130/230 Human Motion Sensor Module   +   **M-7000** I/O Module   +   **WISE Series** Intelligent Edge Controller

Install PIR sensors at both ends of a corridor and connect them to the WISE controller. This system enables lighting control through IF-THEN-ELSE logic rules. For example, it can be configured to activate each light sequentially from the nearest to the farthest once a human walking motion is detected.

Building Automation & Integrated IoT Applications
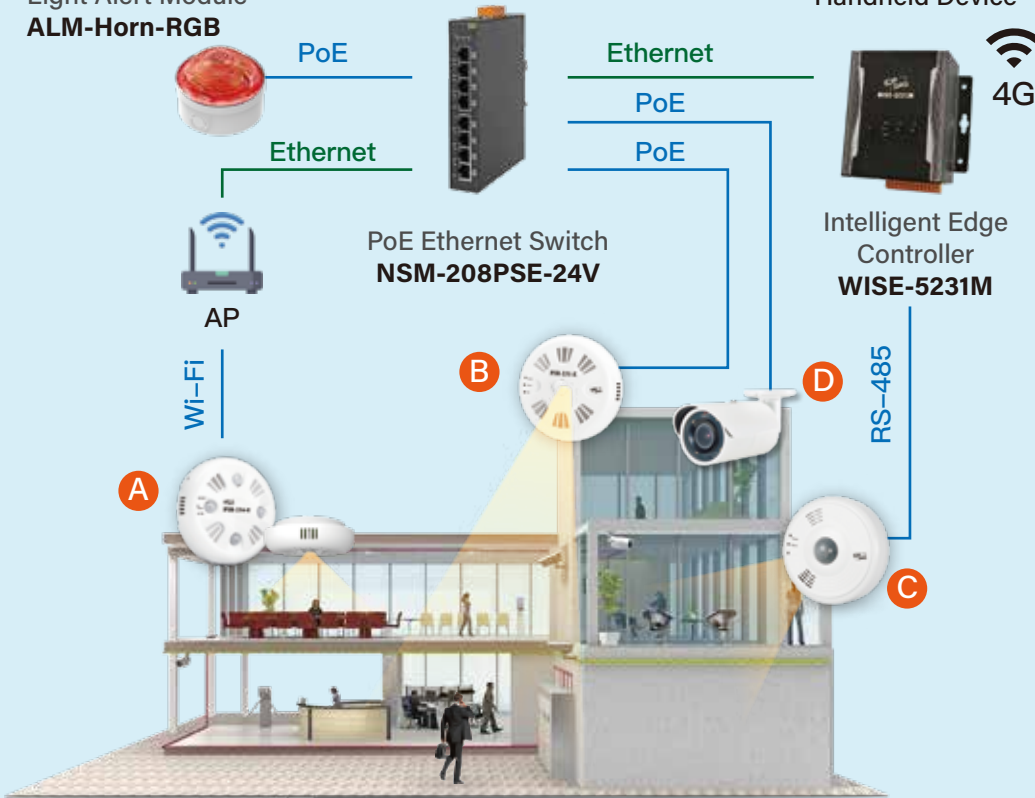
▸ Various Communication Protocols
▸ PIR Integrates with Building Monitoring Applications Easily
▸ Greatly Ease the Burden on Staff Conducting Inspections

An integration of the PIR series and WISE controllers enables detection of intrusions during off-hours. Besides, real-time alert messages can be sent via LINE or email to the right personnel. With an additional iCAM series - IP Camera, management staff can access live videos/photos of events for further verification.

Guardhouse

▸ With the ALM series - Alert Module, audible and visual alarms can be triggered once abnormal events are detected.

Sound & Light Alert Module
ALM-Horn-RGB

PoE

Ethernet

PoE

PoE

Ethernet

AP

Wi-Fi

PoE Ethernet Switch
NSM-208PSE-24V

Handheld Device

4G

Intelligent Edge Controller
WISE-5231M

RS-485

Ⓐ

Ⓑ

Ⓓ

Ⓒ

Ⓐ PIR-234-WF (High-sensitivity Type)

In meeting rooms, where the movement of individuals are subtle, PIR-234 Motion Sensor Module is recommended for lighting control.

Ⓑ PIR-231-E (Long-range Type)

In spaces with high ceilings, PIR-231 Motion Sensor featuring a long detection range (height) is recommended for applications.
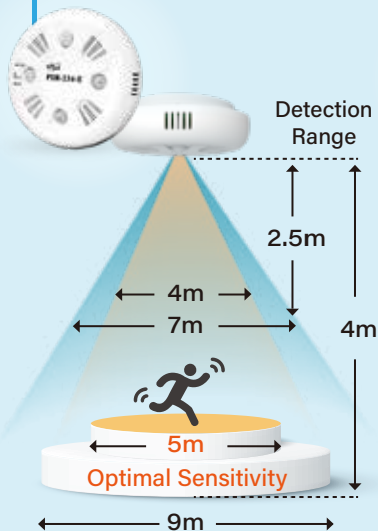
Ⓒ PIR-130 (Standard Type)

In office buildings, where people pass by often and show noticeable movements, PIR-130 Motion Sensor Module is recommended to detect human walking motion for lighting control.

Ⓓ iCAM Series

Once PIR sensors detect an unauthorized intrusion, the iCAM series - IP Camera captures videos and photos which are then displayed in the guardhouse. Alternatively, with the WISE controller, snapshots can be sent via LINE to the right personnel.
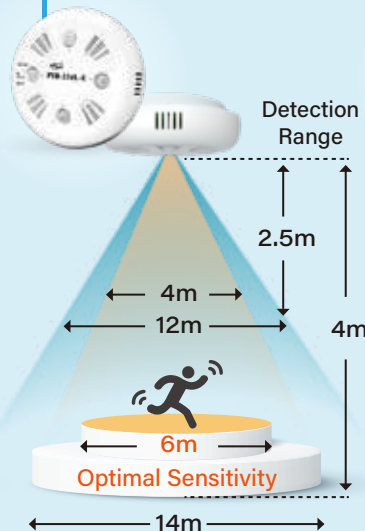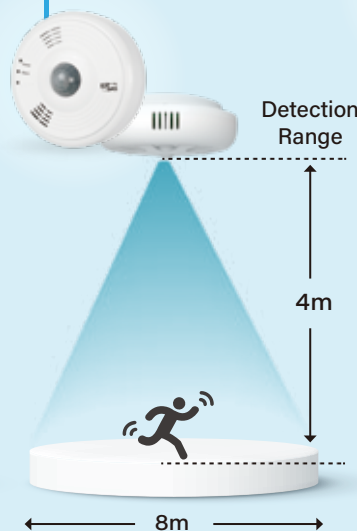

PIR-234-E
PIR-234-WF

High-sensitivity Type

Detection Range

2.5m

4m

7m

4m

5m
Optimal Sensitivity

9m

PIR-234L
PIR-234L-WF

High-sensitivity Type

(Wide Detection Range)

Detection Range

2.5m

4m

12m

4m

6m
Optimal Sensitivity

14m

PIR-230 Series
PIR-130 Series

Standard Type

Detection Range

4m

8m

PIR-231 Series

Long-range Type

Detection Range

10m

8m
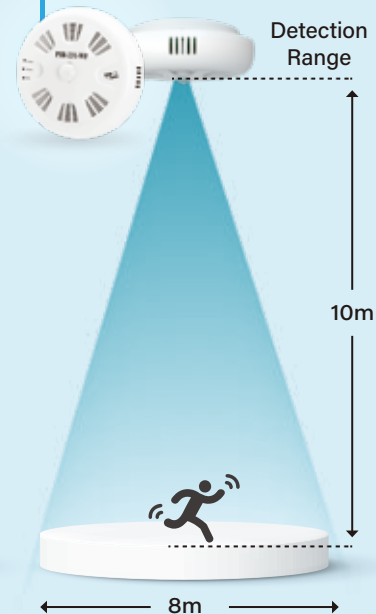
🔅 Selection Guide

High-sensitivity Type

Model	Communication Interface	Sensor	DI/DO	Power Supply	Detection Range (Height)	Detection Range (Diameter)
PIR-234-E	RS-485+Ethernet(PoE)	PIR + Temperature + Humidity	2 Relay	DC	4m	9m
PIR-234-WF	RS-485+Ethernet(PoE)+Wi-Fi					
PIR-234L-E	RS-485+Ethernet(PoE)					14m
PIR-234L-WF	RS-485+Ethernet(PoE)+Wi-Fi					

Long-range Type

Model	Communication Interface	Sensor	DI/DO	Power Supply	Detection Range (Height)	Detection Range (Diameter)
PIR-231-E	RS-485+Ethernet(PoE)	PIR+T&H	2 DI + 1 Relay	DC	10m	8m
PIR-231-WF	RS-485+Ethernet(PoE)+Wi-Fi					

Standard Type

Model	Communication Interface	Sensor	DI/DO	Power Supply	Detection Range (Height)	Detection Range (Diameter)
PIR-230-E	RS-485+Ethernet(PoE)	PIR+T&H	2 DI + 1 Relay	DC	4m	8m
PIR-230-WF	RS-485+Ethernet(PoE)+Wi-Fi					
PIR-130-AC	RS-485	PIR+T	1 Relay	AC	4m	8m
PIR-130-DC	RS-485			DC		

▶ **PoE-capable**   PIR-230, PIR-231, and PIR-234 Motion Sensor Module can be supplied with power via Ethernet without additional cabling.

▶ **Support Various Communication Protocols and Interfaces**

PIR series supports many communication interfaces (RS-485, Ethernet, Wi-Fi) and protocols (DCON, Modbus RTU, Modbus TCP, and MQTT). This allows seamless integration with HMI or SCADA systems and facilitates easy maintenance in distributed systems.

▶ **Built-in Temperature and Humidity Sensors**

PIR-234, PIR-231, and PIR-230 Motion Sensor Module have built-in temperature and humidity sensors, while the PIR-130 Motion Sensor Module only has the built-in temperature sensor. These sensors enable the PIR modules to offer temperature & humidity monitoring in addition to human motion detection.

▶ **Optional Accessories**

EWB-C150
Ø120 External Wall Box
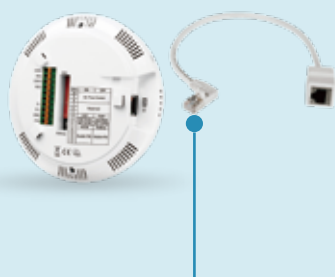
CA-RJ45-04
RJ45 Cable (Male to Female)

▶ **Installation Type**

Ceiling Mounting
(Basic Accessories)

▶ **Installation Type**

Wall Mounting
(External Wall Box Required)