

PIR-230-E/BLE/WF



Motion, Temperature, and Humidity Sensor Module

Features

- Adjustable Time-Delay / Lux / Sensitivity
- Internal Photosensor for Smart Switch Control
- LED Indicator for PIR/Temperature Sensor
- Temperature Sensor for Measuring Room Temperature
- Suitable as either Temperature or Fire Alarm
- Relay Output Can be Used to Control Light Via the PIR/Temperature Sensor
- Suitable for loads up to 1500 W (Incandescent) and 300 W (Fluorescent)
- Fluorescent (T8) Loading Capability
- Wide range of Communication Interfaces and Protocols
- Compatible with IEEE802.11b/g/n standards (PIR-230-WF Only)
- Support infrastructure and limit-AP modes for wireless networks (PIR-230-WF Only)
- Ceiling or Surface-Mount Design



Introduction

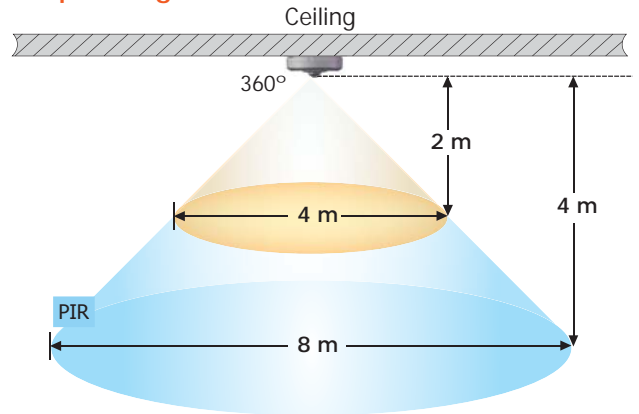
PIR series modules have the ability to detect infrared waves generated by the human body within a diameter of approximately 8 meters, with a coverage area of 360° for indoor motion detection. The modules can be configured to automatically switch on a light if motion is detected. The modules also contain a temperature and humidity sensor for measuring indoor temperature and humidity, or it can be configured to activate a fire alarm. A wide range of interface connections can be selected to suit individual needs, including RS-485/Ethernet/Wi-Fi, provide support for the DCON and Modbus RTU/TCP protocols, and can be easily integrated into existing HMI/SCADA/central control systems. A free Utility is also included that allows configuration information and data to be displayed in a powerful chart format that can be exported to Microsoft Excel.

The screw-free quick-connect connector and the DIP and rotary switches make the modules easy to install, repair, and maintain. The casing of each module is made from UL94-V2 rated fireproof material, and the white minimalist exterior design ensures that it is easy to match with interior decoration.

Applications

- Lighting and exhaust fans in public toilets
- Common lighting in staircases
- Lighting in parking areas
- Garden lights
- Lighting for changing rooms in shops
- Corridor lighting, and many more situations

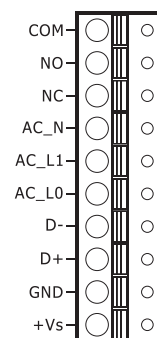
Operating Distance



DIP Switch Settings

SW1	ON	OFF
1	DCON	Modbus
2	SW Config.	HW Config.
3	High Node	Low Node
4	INIT	Run
5	Reserved	
6		
7		
8		
9		
10	FW update	Null

Pin Assignments

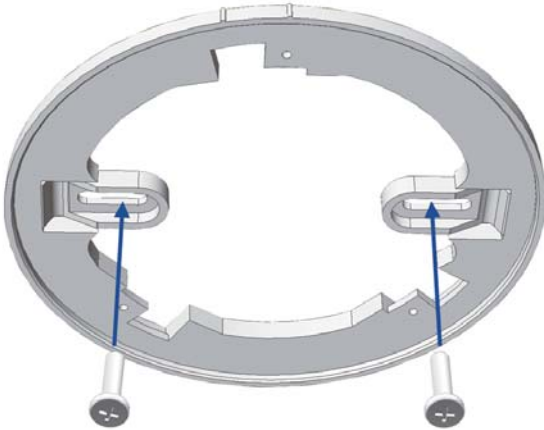


Specifications

Model	PIR-230-E	PIR-230-BLE	PIR-230-WF
Motion and Occupancy Sensor			
Delay Time	Hardware: 8-step Switch-selectable (seconds): 6, 16, 33, 66, 131, 262, 524, 1049 Software: 16-step (seconds): 2, 4, 6, 8, 16, 33, 49, 66, 131, 262, 393, 524, 1049, 2097, 3146, 4194		
Lux Control Level	Hardware: 2 modes(Dawn and Dust) / Software: 5-step		
Detection Height	4 m Max.		
Motion Detection Field of View	360°; 8 m Diameter Max.		
Occupancy Detection Field of View	-		
PIR Response Time	1 second		
Temperature Sensor			
Measurement Range	-40 to +120°C		
Fire Alarm	65°C (Programmable)		
Resolution	0.01°C		
Accuracy	±0.5°C (at 0 to 60°C)		
Relative Humidity Measurement			
Range	0 to 100% RH		
Resolution	0.01% RH		
Accuracy	±5% RH		
Digital Input			
Channels	2		
Type	Wet		
On Voltage Level	70 to 220 VAC		
Off Voltage Level	20 VAC Max.		
Input Impedance	68 KΩ, 1 W		
Relay Output			
Channels	1		
Type	Power Relay, Form C		
Max. Load Current	NO: 10 A @ 250 VAC NC: 6 A @ 250 VAC		
Load Wattage	Incandescent Bulb: 1500 W Max.; Fluorescent Lamp: 300 W Max.		
Communication			
Node Address	Hardware: 160 to 191 / Software: 1 to 255		
Protocol	DCON, Modbus RTU, Modbus TCP		
Wired Interface	Yes, RS-485 X 1 and Ethernet/PoE X1		
Wireless Interface	-	Bluetooth	Wi-Fi
Supported Standard	-	BT 4.0	IEEE 802.11 b/g/n
Wireless Mode	-	Slave	Infrastructure/Limited AP
Wireless Security	-	AES 128	WEP, WPA ,WPA2
Transmission Range	-	20 m (LOS)	50 m (LOS)
LED Indicators			
LED Indicators	Yes,1 as Power/Communication Indicator. 1 as Alarm Indicator.		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal, ±8 kV Air for Random Point		
EFT (IEC 61000-4-4)	±4 kV for Power Line		
Power Requirements			
Power Supply	18 to 48 VDC, PoE		
Reverse Polarity Protection	Yes		
Consumption	2 W	2.5 W	3 W
Mechanical			
Installation	Ceiling /surface mounted		
Protection Class	IP20		
Dimensions (D x H)	Ø 150 mm x 53 mm		
Environment			
Operating Temperature	0 to +35°C		
Storage Temperature	-30 to +80°C		
Humidity	10 to 90% RH, Non-condensing		

Mounting

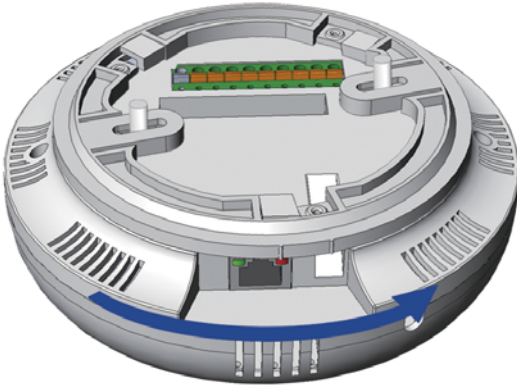
① Align the locking guides



② Attach the mounting plate



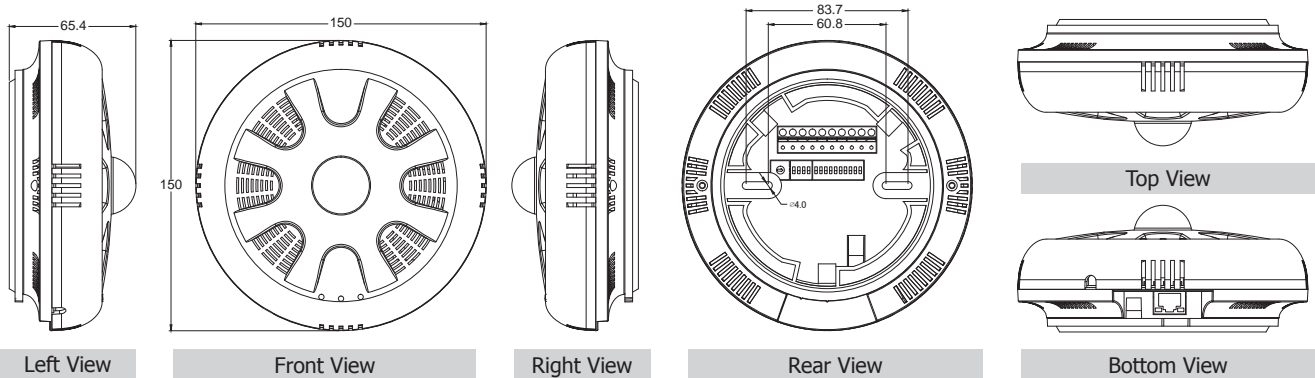
③ Turn the cover clockwise



④ Lock the cover in place



Dimensions (Units: mm)



Ordering Information

PIR-230-E	PIR Motion Sensor, Temperature and Humidity Sensor Module(Ethernet)
PIR-230-BLE	PIR Motion Sensor, Temperature and Humidity Sensor Module(Bluetooth)
PIR-230-WF	PIR Motion Sensor, Temperature and Humidity Sensor Module(WiFi)

Accessories

EWB-C150	External Wall Box for PIR-200 series
4PCA-RJ45-04	RJ45 Cable, Male-Female, 30cm