

PIR-230-E/PIR-230-WF PIR-231-E/PIR-231-WF

Motion, Temperature, and Humidity Sensor Module

Features

- Adjustable Time-Delay / Lux / Sensitivity (Lux/Sensitivity PIR-230 Only)
- 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
- Support infrastructure and limit-AP modes for wireless networks (PIR-230-WF/PIR-231-WF Only)
- Ceiling or Surface-Mount Design
- PIR-231-WF no CE ,FCC and UKCA Certification



■ 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





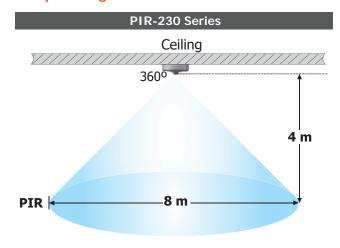
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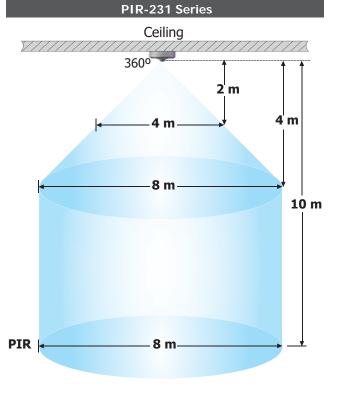
■ Specifications

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Model	PIR-230-E	PIR-230-WF	PIR-231-E	PIR-231-WF
EMS Protection				
EFT (IEC 61000-4-4)	±4 kV for Power Line			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal, ±8 kV Air for Random Point			
LED Indicators				
Status	Yes,1	as Power/Communication	Indicator. 1 as Alarm Ind	icator.
PIR				
Detection Height	4 m Max.		10 m Max.	
Detection Field of View	360°; 8 m Diameter Max.			
Lux Control Level	Hardware: 2 modes (Dawn and dust) /		-	
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			
PIR Response Time	1 second			
Temperature Measurement				
Fire Alarm	-40 ~ +120°C			
Range	65°C (Programmable)			
Resolution	0.01°C			
Accuracy	±0.5°C (at 0 to 60°C)			
Humidity Measurement				
Range		0 to 10	0% RH	
Resolution	0.01% RH			
Accuracy	±5% RH			
Wi-Fi				
Transmission Distance (LoS)	-	50 m (LOS)	-	50 m (LOS)
Standard Supported	-	Wi-Fi: IEEE 802.11 b/g/n	-	Wi-Fi: IEEE 802.11 b/g/n
Mode	-	Infrastructure/Limited AP	_	Infrastructure/Limited AP
Encryption	-	WEP, WPA ,WPA2	_	WEP, WPA ,WPA2
Digital Input				,,
Channels			2	
Туре	Wet Contact			
On Voltage Level	70 to 220 VAC			
Off Voltage Level	20 VAC Max.			
Input Impedance	20 VAC Mdx. 68 KΩ, 1 W			
Relay Output		00 101	-/ + **	
Channels				
Туре	Power Relay, Form C			
Contact Rating	NO: 10 A @ 250 VAC / NC: 6 A @ 250 VAC			
Number of Lighting Fixture	Incandescent Bulb: 1500 W Max.; Fluorescent Lamp: 300 W Max.			
COM Ports	Tricaria	CSCCITE Build: 1500 W Max.	, Haorescent Lamp. 500	W Plax.
Ports		PS-485 V 1 and	Ethernet/DoF V1	
Baud Rate	RS-485 X 1 and Ethernet/PoE X1			
Protocol	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200			
	DCON, Modbus RTU, Modbus TCP, MQTT Hardware: 160 to 191 / Software: 1 to 255			
Node Address		Haruware: 100 to 191	1 / SUILWATE: 1 (0 255	
Power Delevite Dueto tier				
Reverse Polarity Protection	Yes			
Input Range	18 to 48 VDC, PoE			
Consumption	2 W	3 W	2 W	3 W
Mechanical		Ø450 5	2 (01)	
Dimensions (mm)	Ø150 x 53 (Ø x H)			
Installation	Ceiling /surface mounted			
Ingress Protection Rating		IP	220	
Environment				
Operating Temperature	0 to +35°C			
Storage Temperature	-30 to +80°C			
Humidity	10 to 90% RH, Non-condensing			

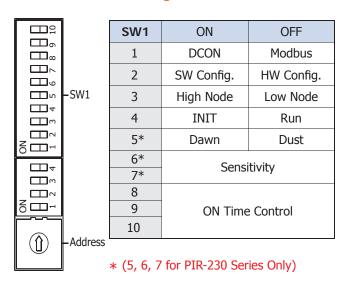
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Operating Distance

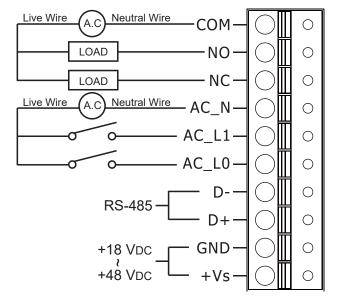




■ DIP Switch Settings



Pin Assignments

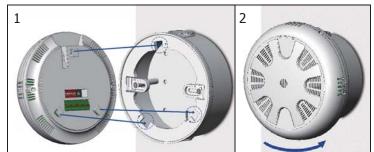


Mounting

Ceiling Mounting

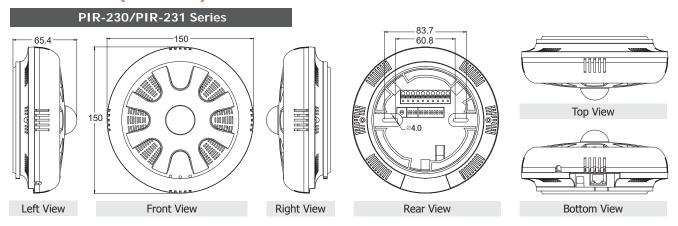


■ Wall Mounting (+ External Wall Box EWB-C150)



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■ Dimensions (Units: mm)



Ordering Information

PIR-230-E CR	PIR Motion Sensor, Temperature and Humidity Sensor Module (Ethernet) (RoHS)
PIR-230-WF CR	PIR Motion Sensor, Temperature and Humidity Sensor Module (WiFi) (RoHS)(Asia Only)
PIR-231-E CR	PIR Motion Sensor, Temperature and Humidity Sensor Module (Ethernet) (RoHS)
PIR-231-WF CR	PIR Motion Sensor, Temperature and Humidity Sensor Module (WiFi) (RoHS)(Asia Only)

Accessories

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