



# PIR-234-E/PIR-234-WF PIR-234L-E/PIR-234L-WF

Motion, Temperature, and Humidity Sensor Module

### **■** Features

- Adjustable Time-Delay
- 4 PIR Motion Sensors for increased sensitivity and range
- 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
- Provide High Power Relay Output to turn ON/OFF the Lighting Support Lighting Module (Max.):
  - ☐ Incandescent Lamp: 40 W/ 220 VAC \* 8 Sets
  - ☐ LED(Electronic ballast): 40 W/ 220 VAC \* 10 Set
- Wide range of Communication Interfaces and Protocols
- Compatible with IEEE802.11b/g/n standards (PIR-234-WF, PIR-234L-WF Only)
- Support infrastructure and limit-AP modes for wireless networks (PIR-234-WF, PIR-234L-WF Only)
- Ceiling or Surface-Mount Design
- PIR-234-WF, PIR-234L-WF no CE ,FCC and UKCA Certification









### **■** Introduction

PIR-234/PIR-234L series modules have 4 PIR Motion Sensors to increase sensitivity and the ability to detect infrared waves generated by the human body within a diameter of approximately 9 and 14 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.

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

- Common lighting in staircases
- Garden lights
- · Lighting for changing rooms in shops

- Lighting for Conference Room, Classroom, Pantry Room
- · Corridor lighting, and many more situations





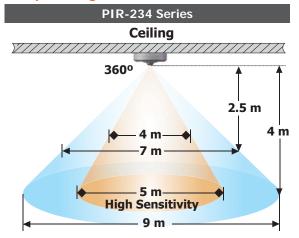
# **■** Specifications

Model	PIR-234-E	PIR-234-WF	PIR-234L-E	PIR-234L-WF			
EMS Protection							
EFT (IEC 61000-4-4)	±4 kV for Power Line						
ESD (IEC 61000-4-2)	±4 k	V Contact for each Termin	al, ±8 kV Air for Random	Point			
LED Indicators							
Status	Yes,1	as Power/Communication	Indicator. 1 as Alarm Ind	licator.			
PIR							
Sensor		4	1				
Delay Time		n-selectable (seconds): 6, ands): 2, 4, 6, 8, 16, 33, 49					
Detection Height		4 m l	Max.				
Detection Field of View	360°; 9 m D	iameter Max.	360°; 14 m l	Diameter Max.			
PIR Response Time		1 sec	cond				
Temperature Measurement							
Range		-40 to -	+120°C				
Fire Alarm		65°C (Prog	rammable)				
Resolution		0.0	1°C				
Accuracy		±0.5°C (at	0 to 60°C)				
Humidity Measurement							
Range		0 to 10	0% RH				
Resolution		0.019	% RH				
Accuracy		±5%	S 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			
Relay Output							
Channels			2				
Туре		Power Relay, For	m A (SPST N.O.)				
Contact Rating		16 A @ 250 VAC o					
Number of Lighting Fixture	(1).Incandescent Lamp: 40W/ 220VAC * 8 Sets (2).LED(Electronic ballast): 40W/ 220VAC *10 Sets						
COM Ports							
Ports	RS-485 X 1 and Ethernet/PoE X1						
Baud Rate	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200						
Protocol	DCON, Modbus RTU, Modbus TCP, MQTT						
Node Address	Hardware: 160 to 191 / Software: 1 to 255						
Power							
Reverse Polarity Protection		Ye	es				
Input Range	10 to 48 VDC, PoE						
Consumption	2 W	3 W	2 W	3 W			
Mechanical							
Dimensions (mm)	Ø150 x 53 (Ø x H)						
Installation	Ceiling /surface mounted						
Ingress Protection Rating	IP20						
F							
Environment			0 to +35°C				
Operating Temperature		0 to +	-35°C				
		0 to +					

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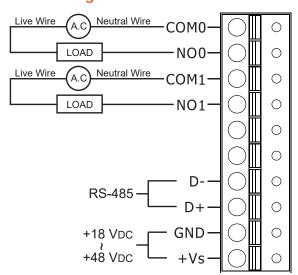
### **■** Operating Distance



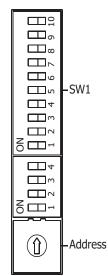
# Ceiling 360° 2.5 m 4 m 12 m High Sensitivity 14 m

PIR-234L Series

## **Pin Assignments**



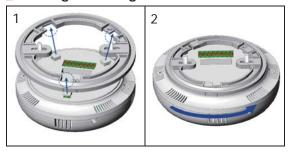




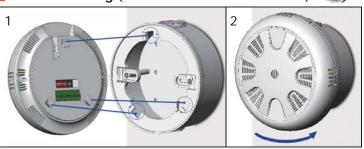
SW1	ON	OFF	
10			
9	ON Time Control		
8			
7	DO Control		
6			
5			
4	INIT	Run	
3	High Node	Low Node	
2	SW Config.	HW Config.	
1	DCON	Modbus	
4			
3	Enable PIR	Disable PIR	
2	EHADIE PIR	Disable PIR	
1			
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### **Mounting**

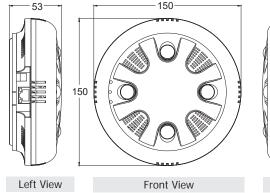
### Ceiling Mounting

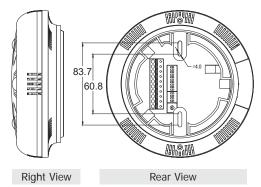


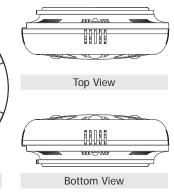
# **■ Wall Mounting** (+ External Wall Box EWB-C150)



### **■** Dimensions (Units: mm)







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# Ordering Information

PIR-234-E CR	PIR Motion Sensor, Temperature and Humidity Sensor Module(High Sensitivity / Height 4 m / Diameter 9 m)(Ethernet) (RoHS)		
PIR-234-WF CR	PIR Motion Sensor, Temperature and Humidity Sensor Module(High Sensitivity / Height 4 m / Diameter 9 m)(Wi-Fi)(Asia Only) (RoHS)		
PIR-234L-E CR	PIR Motion Sensor, Temperature and Humidity Sensor Module(High Sensitivity / Height 4 m / Diameter 14 m)(Ethernet) (RoHS)		
PIR-234L-WF CR	PIR Motion Sensor, Temperature and Humidity Sensor Module(High Sensitivity / Height 4 m / Diameter 14 m)(Wi-Fi)(Asia Only)(RoHS)		

### Accessories

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

### Selection Guide

	Human Motion Detection		Human Presence Detection		
	PIR-130-AC PIR-130-DC	PIR-230-E PIR-230-WF	PIR-231-E PIR-231-WF	PIR-234-E PIR-234-WF	PIR-234L-E PIR-234L-WF
Model				E TO THE DE	The state of the s
Applications	Shoe Char	let, Stairwells, nging Area/ ce Area	Hotel, Labby, High-Ceiling Factory/Warehouse	Meeting Room, Bedroom, Living Room, Locker Room, Pantry Room	Conference Room, Classroom
Sensitivity	stan	dard	standard	High	High
Detection Height Max.	4	m	10 m	4 m	4 m
Diameter Max.	8	m	8 m	9 m	14 m
Operating Distance	Ceiling  360°  2.5 m  4 m  8 m		Ceiling 360° 10 m	Ceiling  360°  4 m  7 m  High Sensitivity  9 m	Ceiling 360°  2.5 m  4 m  12 m  High Sensitivity  14 m

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