PIR-130-AC/PIR-130-DC

PIR Motion Sensor and Temperature Sensor Module

Features

- 360° Motion Detection Up to 8 m Diameter Range
- Time-Delay / Lux. / Sensitivity Adjustable
- Photo Sensor Inside for Smart Switch-on Control
- LED Indicator for PIR/Temperater Sensor
- The Temperature Sensor for Measuring Room Temperature or Fire Alarm
- Relay Output Can be Used to Control the Light Via the PIR/Temperature Sensor
- Up to 1500 W Incandescent and 300 W Fluorescent (T8) Loading Capability
- RS-485 Communication Interface
- DCON and Modbus RTU Protocols
- Ceiling Surface Mount Design

Introduction

The PIR-130 module includes a 1-channel passive infrared (PIR) sensor that is able to detect infrared waves generated by human within a range of approximately 8 meters in diameter with a 360° coverage area. The PIR-130 is used for indoor motion detection, and can be configured to automatically switch on a light if motion is detected.

The PIR-130 module also includes a 1-channel temperature sensor that can be used for measuring room temperature or can be configured to activate a fire alarm.

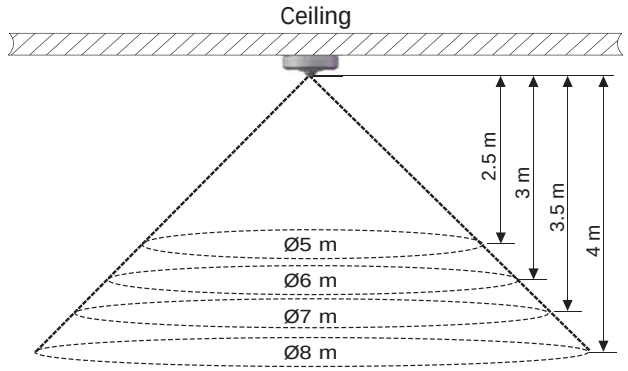
Applications

- Common toilets, for lights & exhaust fans
- Common staircases
- For parking lights
- For garden lights
- For changing rooms in shops
- For corridors & many more

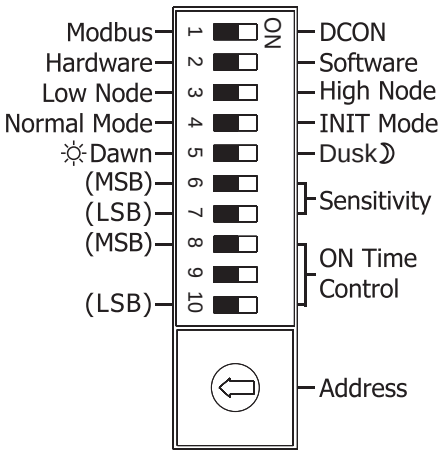
Specifications

Model	PIR-130-AC	PIR-130-DC
PIR		
Time-delay	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 mode (Dawn and dust) / Software: 5-step	
Detection Range	Distance: 4 meters Max.	
Detection Field of View	360°; Diameter 8 meters Max.	
Response Time	1 seconds	
Temperature Sensor		
Measurement Range	-25 ~ +100°C	
Fire Alarm	65°C (Programmable)	
Resolution	0.0625°C	
Accuracy	±2°C	
Relay Output		
Channels	1	
Type	Power Relay, Form C	
Max. Load Current	NO: 10 A @ 250 V_{AC} NC: 6 A @ 250 V_{AC}	
Load Wattage	Incandescent Bulb: 1500 W Max.; Fluorescent Lamp 300 W Max.	
RS-485 Interface		
COM Port	RS-485	
Transmission Distance (m)	Dependent on Baud Rate. For example, 1200 m Max. at 9600 bps.	
Baud Rate (bps)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	
Protocol	DCON, Modbus RTU	
Node Address	Hardware: 160 ~ 191 / Software: 1 to 255	
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	110 to 220 V_{AC}	10 to 30 V_{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection	
Power Consumption	2 W	1.3 W
Mechanical		
Installation	Ceiling mounting	
Protection Class	IP20	
Dimensions (D x H)	Ø 121 mm x 52 mm	
Environment		
Operating Temperature	0 to +35°C	
Storage Temperature	-30 to +80°C	
Humidity	10 to 90% RH, Non-condensing	

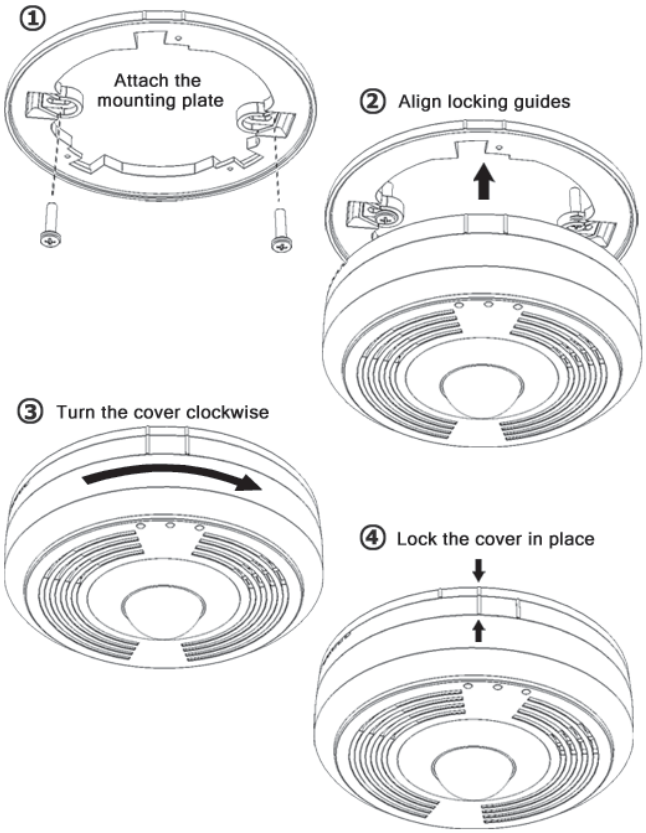
Operating Distance



DIP Switch Settings

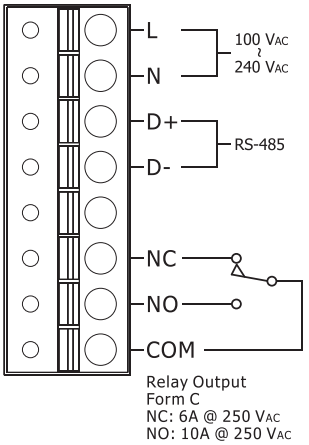


Mounting

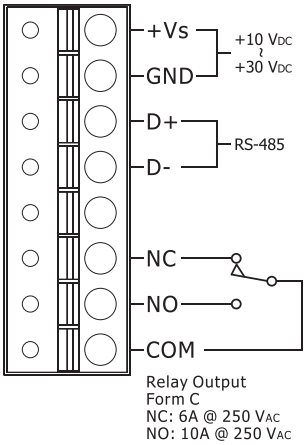


Pin Assignments & Wire Connections

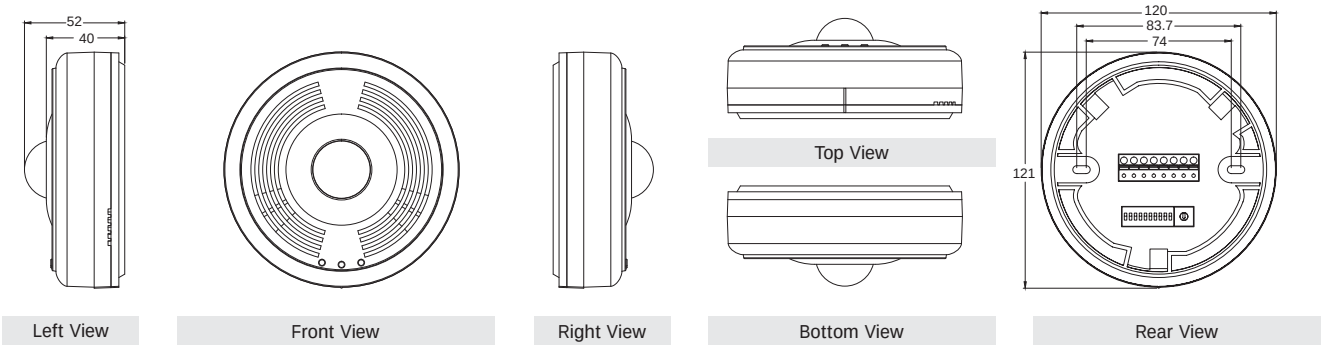
PIR-130-AC



PIR-130-DC



Dimensions (Units: mm)



Ordering Information

PIR-130-AC CR	PIR Motion Sensor and Temperature Sensor Module (110 to 220 VAC) (RoHS)
PIR-130-DC CR	PIR Motion Sensor and Temperature Sensor Module (10 to 30 VDC) (RoHS)