

# **Product Guide**

Wall Mount PIR Occupancy Sensor (Volt Free & Switch Live)

# today, tomorrow and in the future

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#### **Product Overview**

The OC-W range of occupancy sensors are designed for use in energy savings systems where pet immunity is required and the lighting loads are automatically controlled based on human occupancy.

It detects movement using a PIR sensor and turn on the connected loads. There is an adjustable timer that switches off the load when the area is no longer occupied. The built-in light sensor aids additional energy savings in lighting control applications. The device will turn on the load only if the ambient light is below a preset level.

The unit is mounted on a single gang plate for easy installation.



#### **Products Features**

- Horizontal curtain detection pattern for pet immunity
- Up to 8 metre detection range
- 230Vac and 24V versions available

- Comes with 25mm Pattress box
- Built-in light sensor
- Touch switch to override the sensor (optional)

### **Product Specifications**

Power supply:  $230 \text{ Vac} \pm 10 \% 230 \text{V} \text{ versions}$ 

 $24 \text{ Vac/dc} \pm 10 \%$  for 24 V versions

Power consumption: 1W maximum
Sensor type: Infrared
Detection range: 8m

Field of view: 110°. See the detection pattern.

Output: Supply voltage for switched live versions. SPST for volt free versions

Terminals: Rising clamp for 0.5-2.5mm2 cable

Contact rating: 6A @ 240Vac resistive Timer adjustability: 10 secs to 12 mins

Lux threshold: 0-1000lux. Onboard jumper to enable/disable jumper.

Ambient temperature range:  $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  Dimensions:  $85 \times 85 \times 35 \text{ mm}$  Backbox depth: Minimum 22mm

Weight: 120gms Country of origin: UK

Product Order Codes	
Part Number	Description
OC-W-24VF-SM	Wall Mount Occupancy PIR Volt Free Contact 24VAC
OC-W-24VF-O-SM	Wall Mount Occupancy PIR Volt Free Contact Touch Switch Overide 24VAC
OC-W-24SL-SM	Wall Mount Occupancy PIR Switched Live 24VAC
OC-W-24SL-O-SM	Wall Mount Occupancy PIR Switched Live Touch Switch Overide 24VAC
OC-W-230VF-SM	Wall Mount Occupancy PIR Volt Free Contact 230VAC
OC-W-230VF-O-SM	Wall Mount Occupancy PIR Volt Free Contact Touch Switch Overide 230VAC
OC-W-230SL-SM	Wall Mount Occupancy PIR Switched Live 230VAC
OC-W-230SL-O-SM	Wall Mount Occupancy PIR Switched Live Touch Switch Overide 230VAC
OC-W-230SL-65-SM	Wall Mount Occupancy PIR Switched Live 230VAC IP65



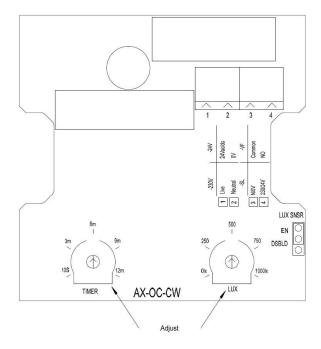
#### Installation

The OC-W should be installed by a suitably qualified technician in conjunction with any guidelines for the equipment it is to be connected to and any local regulations. The unit should be sited so that the detection pattern captures the normal occupancy positions inside the room.

Adhere to the following guidelines for the proper operation of the product.

- Switch off the power to the unit before performing any work on it.
- Avoid direct sunlight entering the sensor.
- Do not sight within 1 meter of any lighting.
- Do not position sensor within 1 metre of ventilation or forced air heating.
- Do not position sensor on a vibrating surface

#### **Connections**



### **Operation**

The 'LUX' preset sets the ambient light threshold below which the output will be ON when the PIR sensor detects a motion. When movement stops, the device will turn off the output after a time period set by the 'TIMER' preset. Touch switch on the front side allows the user to override the sensor and manually turn on and off the output.

Unit will be in 'AUTO' mode when it is powered up. Touch the switch to override the sensors and turn ON the relay. Touch again to turn OFF the relay.

The LED will light up or blink when the unit detects motion or change status.

Blinking Green LED - Motion detected in AUTO mode. Relay is ON.

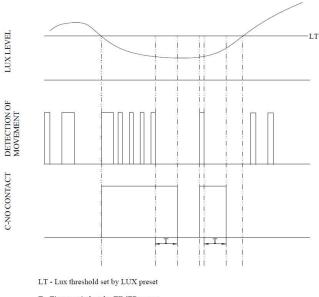
Blinking Red LED - Motion not detected in AUTO mode. Relay is OFF.

Constant green LED - (- O versions only) Relay is ON.

Constant Red LED - (- O versions only) Relay is OFF.

Alternating green and red - Sensor Error

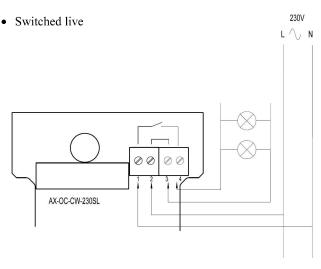
LUX sensor can be disabled using the onboard jumper. Once disabled, the unit will switch ON and OFF based on motion detection only.



T - Timer period set by TIMER preset

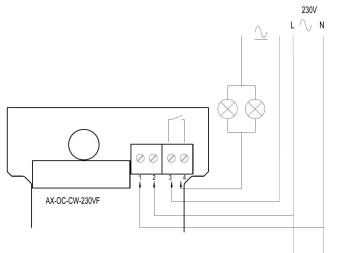
Operation in 'Auto' mode

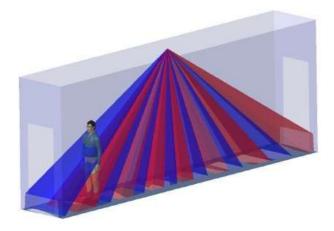
## **Typical Wiring Diagrams**





#### • Volt-free contacts

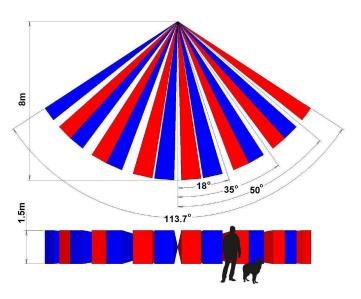




Typical application 2: Ceiling mounted in corridors. Detector is immune from air movement around windows and doors

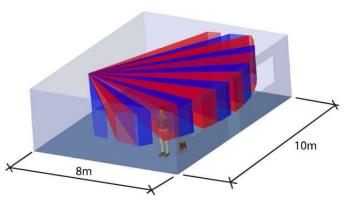
### **Optional Accessories**

### **Detection Pattern**





# **Typical Applications**



Typical application 1:Sensor mounted 1.5 meters above floor level. Detects human, Immune to pets.

### **Datasheet Contents**

Every effort has been taken in the production of this data sheet to ensure accuracy. Annicom do not accept responsibility for any damage, expense, injury, loss or consequential loss resulting from any errors or omissions. Annicom has a policy of continuous improvement and reserves the right to change this specification without notice.

# **Technical Support**

For further help or information on this and the other products in the MS Electronics range visit www.mselectronics.co.uk or call 0333 666 1176. Alternatively, email "techsupport@mselectronics.co.uk"

Additional copies of this product guide can be downloaded from our website.

# **Product Warranty**

MS Electronics guarantees all their products against manufacturing defects for 5 years from the purchase date. If your product is found to be faulty, MS Electronics will, at their discretion, repair or replace the product free of charge.

### **Note**

Any modification or damage to the outer casing of the product, as well as any damage to the product due to abuse or incorrect wiring may invalidate the guarantee.



email: info@mselectronics.co.uk tel: 01708 44 8566













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