

Zigbee Wireless PIR Occupancy Sensor



The Zigbee Wireless PIR Occupancy Sensor is designed to wirelessly monitor the occupancy levels of a space and transmit a wireless digital signal over a Zigbee wireless network back to the Titan Products TPZ-Net Co-ordinator.

Self healing, mesh networking can be achieved through adding TPZ-Net Repeaters to the network.

The TPZ-Net Co-ordinator will then transmit the wireless information directly onto a BACnet MS/TP or Modbus network.

Using passive infra-red technology the TPZ-PIR sensor will detect movement and transmit this state wirelessly using a frequency of 2.4GHz. The sensor will detect full body movement up to 12m and limb movement up to 5m. The sensing angle of the TPZ-PIR is 110°.

The TPZ-PIR/LL incorporates a light level sensor. When used in lighting applications the light level sensor can be used to ensure lighting is not switched on unnecessarily.

The TPZ-PIR range of sensors will transmit an unoccupied signal after the delay timer has completed its cycle uninterrupted by movement detection. This timer can be set to 10, 15 or 30 minutes via the TPZ-Net PC commissioning software.

When the sensor is reporting an occupied state the light level will be transmitted every 2 minutes or when a significant change of value occurs. This change of value is editable (see table).

Light level change of value reporting can also be inhibited once the light level in the space has reached a certain level. This value is also editable through the TPZ-Net PC Commissioning software (see table).

The TPZ-PIR is rated at IP20..

Specification

| | |
|-----------------------------------|---|
| Power Supply: | AA 3.6V, 2600mAh lithium thionyl chloride battery |
| Battery Life: | Up to 3 years (depending on transmission intervals) |
| Network Technology: | Zigbee |
| Transmission Frequency: | 2.4GHz |
| Transmission Power: | 8dBm |
| Transmission Range: | 30m - 60m indoor (depending on building type) 200m outdoor (line of sight) |
| Detection Range: | Up to 12m (full body movement) Up to 5m (limb movement) |
| Light Level Measurement accuracy: | +/- 10% of selected range |
| Light Level Range: | 0 - 3000 lux |
| Material Rating: | IP20 |
| Dimensions (mm): | 113 x 60 x 40 |
| Country of Origin: | UK |
| Product Codes: | TPZ-PIR (PIR only) TPZ-PIR/LL (PIR and Light Level) |

Note: It is strongly recommended a site survey is carried out prior to installing any wireless sensors.

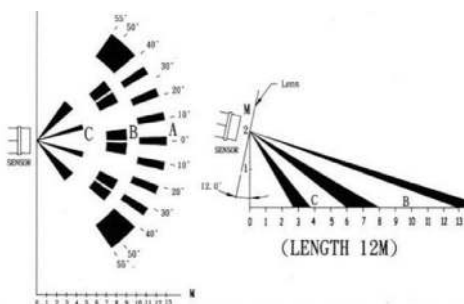


Editable Values

When the TPZ-PIR sensor transmits an occupied signal, the light level value is transmitted every 2 minutes or when a significant change of values occurs with the light level. This change of value figure is edited within the TPZ-Net PC commissioning software. When in an occupied mode it is possible to inhibit the light level transmissions once the light level is above a set threshold. This can also be edited in the TPZ-Net Commissioning software.

| Change of Value (Lux) | Light level inhibited above level (Lux) |
|-----------------------|---|
| 25 | 750 |
| 50 | 1000 |
| 75 | 1250 |
| 100 | 1500 |
| 150 | 2000 |
| 200 | |
| 250 | |
| 500 | |
| 1000 | |

Detection Range and Angle



Battery Connections



Features

- Zigbee wireless technology
- Self healing, mesh networking technology
- Easy to set up
- Up to 12m detection range
- Optional light level sensor
- AA sized easy clip in battery
- Designed and manufactured in the UK

Titan Products are proud members of the Zigbee Alliance.



For more information on the TPZ-PIR or any other sensors from the Titan Products TPZ-Net range please visit www.titanproducts.com or call the sales team on +44 (0)161 406 6480.

t: +44 (0)161 406 6480 • e: sales@titanproducts.com • w: www.titanproducts.com

UK DESIGNED, DEVELOPED AND MANUFACTURED

Ref: SKU 141

