

PIR

PASSIVE INFRARED SENSOR



**RELIABLE DETECTION
OF MOVING TARGETS**

EXENSOR





PIR

PART OF THE FLEXNET PLATFORM

The PIR detects infrared radiation emitted by an object moving across the sensor's field of view. Using advanced algorithms, the device provides the traveling direction of an object and filters out false alarms. Encrypted communications (AES-256) ensures alarm data is securely transmitted to the base station by the built-in radio.

Recording mode enables the sensor to operate in radio silence while recording its alarms, images and messages which can be later retrieved by request from the user. If the communication link is interrupted, alarm data is automatically stored within the device until the communications link is restored. When re-established the device will automatically send in the stored data.

The PIR consists of a Module Core unit with integrated radio, GPS receiver, battery, and an interchangeable PIR Module. Three variants of the PIR module are available: short, medium and long range, with different detection ranges and fields of view. The PIR module can be connected as an external component to any other type of Flexnet sensor.

Whether deployed as a standalone device or as part of a more sophisticated multi-sensor system, the PIR provides great detection capabilities ideally suited for the surveillance and protection of troops and critical assets. Each sensor operates as an individual node in the Mesh network, relaying data from other sensors to the base station.

Technical specifications

Size	<ul style="list-style-type: none"> • 63mm x 74mm x 185mm (Short) • 63mm x 74mm x 208mm (Medium) • 63mm x 74mm x 265mm (Long)
Weight	<ul style="list-style-type: none"> • 0.58kg (Short) • 0.59kg (Medium) • 0.80kg (Long)
Operational endurance time	<p>30 days with integrated rechargeable battery (1-year battery as option)</p> <p>An external battery can be connected to extend operational endurance time</p>
Temperature	-32 to +71° Celsius in operation
Environmental	MIL-STD-810
EMC	MIL-STD-461
Tamper alarm	Built-in anti-tamper function with GPS
Position	GPS for self-location

PIR performance and data

PIR Variant	Short	Medium	Long
Length	90mm	114mm	168mm
Diameter	25.5 mm	25.5mm	53mm
Weight	175g	185g	395g
Lens FoV	30 degrees	8 degrees	4 degrees
Beam width	8m at 15m	8m at 40m	8m at 100m
Detection - Person	15m	40m	80m
Detection - Vehicle	30m	60m	200m

Capabilities

- Provides direction of travel alarm data
- High performance/weight ratio
- Remotely configurable sensitivity levels
- Ability to mount PIR module away from core module using a connection cable
- An additional PIR lens can be connected to the same core module
- Input/output signals for activating other devices
- Rapid and easy deployment