

SX-815 PYROFLEX™**

X-TEC Motion Sensor

SUREN



Microwave Doppler technology plus **PYROFLEX™****

Together, they create **X-TEC™** high performance!

Superior False Alarm Immunity

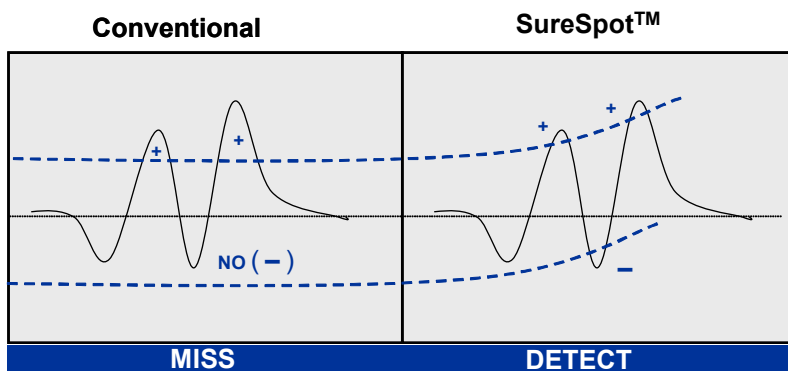
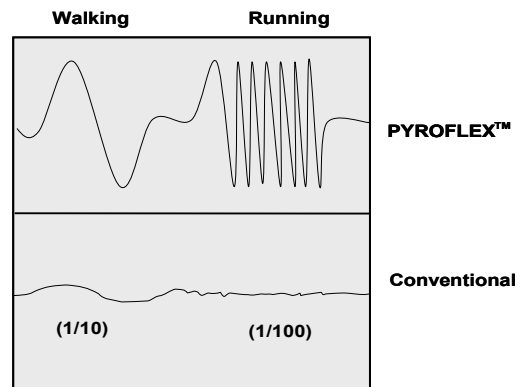
- ❑ **Reliable 10 GHz Microwave** Doppler technology plus digital signal processing
 - Detects intruders, not distractions
 - De-emphasis of constant motion signals, as from fans
 - Digital filtering of fluorescent light frequencies, 50/60 Hz selectable
- ❑ **PYROFLEX™** IR Detector** – The False Signal Smasher
 - 10x – 100x more signal than conventional detectors
 - Less amplification needed in sensor
 - 10x – 100x less amplification for false alarm signals
 - High immunity to RF, shock, temperature changes, white light, electrical surges
- ❑ Key-parameter supervision, with Failure Indication

Temperature Range

- ❑ Operation from -10°C to +55°C

Reliable Detection

- ❑ **SureSpot™** microcontroller waveform processing finds intruder signals among the complex curves and dips of real-world signal waveforms
- ❑ Robust planar-antenna microwave transceiver delivers strong intruder detection signals
- ❑ Summertime detection in near-human temperature environments



** U.S. Patent NO: 7,042,134 7,141,910
 U.K. Patent NO: GB 2 427 270
 Patents pending worldwide.

Product Features

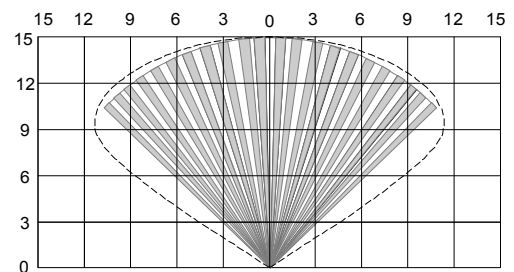
- ❑ Look-down detection directly below the sensor to catch wall-creeping intruders
- ❑ Precise factory calibration for dependable performance of every sensor
- ❑ Multiple white light immunity features:
 - Clear bug guard – no light concentration
 - White diffusing lens
 - Large IR detector window (4.2 x 5.2 mm)
- ❑ Consistent detection sensitivity throughout the monitored area
- ❑ Tightly-mated bug guard to protect the sensor optics from insects, spiders and dust
- ❑ Selectable processing sensitivity for different environmental requirements
- ❑ Sensitive tamper detection switch
- ❑ Full-time supervision of microwave function
- ❑ Automatic single-technology operation if one technology fails
- ❑ Continuous supervision of:
 - Power supply voltage
 - Ambient temperature
 - IR detector operational parameters
- ❑ Failure indication:
 - Blinking LED
 - Non-closing of alarm relay after any alarm signal event (Note: sensor will NOT initiate an alarm upon failure.)
- ❑ Remote LED Enable control input

Easy Installation

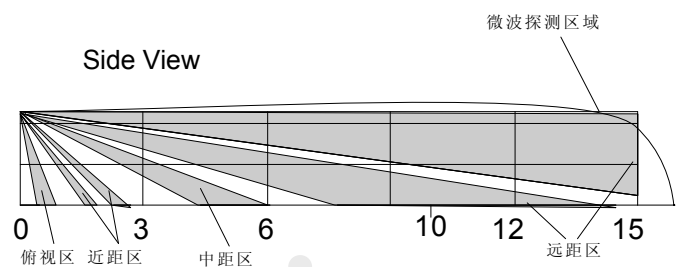
- ❑ 45-degree terminal block for easy wiring
- ❑ 10-minute zone finder mode
- ❑ Deep wire channels and dual cable entry
- ❑ 45-degree corner-mounting surfaces
- ❑ Knock-out holes for mounting and wiring
- ❑ Swivel-mount accessory interface
- ❑ 3 LED colors: Alarm, PIR, Microwave

Optical View Pattern

Top View



Side View



Specifications



Swivel Mount



No
Aluminum
Electrolytic
Capacitors

| | | | | |
|------------------------|---|-----------------|-------------|-----------|
| Range: | 15 m in sensor-facing direction (max) 15 m at 45° angle from sensor-facing direction (max) | | | |
| Microwave frequency | 9 – 11 GHz, according to country where sold | | | |
| Power Supply: | Voltage | Current | | |
| | 8 – 16 Vdc | 15 mA at 12 Vdc | | |
| Alarm Relay: | Solid state Form A (NC) 50 mA 60 V; 1500 Vrms iso. | | | |
| Tamper Switch: | Form A (NC) 50 mA @ 30 Vdc | | | |
| RF Immunity: | 50 V/m 10 – 1000 MHz; 10 V/m 1-2 GHz | | | |
| Sensitivity: | 2-event/1.5 C or 3-event/2.0 C | | | |
| EN 50131 | Grade 2 | | | |
| Temperature Range: | -10°C to +55°C | | | |
| Housing: | High-impact ABS | | | |
| Dimensions: | 112 x 50 x 42 mm (H x W x D) | | | |
| Optical fields-of-view | Long Range | Mid Range | Short Range | Look-down |
| | 44 | 12 | 6 | 4 |

All specifications are subject to change without notice.