

CS-106AW

SUREN

PIR Motion Sensor

Wireless-Module Ready



*Micro-Current
Wireless Sensor!*

Wireless Features

- ❑ 6-pin OEM wireless module interface
- ❑ 2 x AAA battery – 2 years
- ❑ Alarm, Tamper and Test output signals
- ❑ <20 micro-Ampere current draw
- ❑ 3-minute alarm lockout to conserve battery
- ❑ Wide operating range (-40°C to + 55°C)

Wide Temperature Range

- ❑ Operation from -40°C to +55°C

False Detection Immunity

- ❑ **HighBar™** detects intruders consistently, while rejecting small-signal false alarms!
 - High immunity to shock, white light, temperature, RF, electrical surges
- ❑ **Four-Stage White Light Protection**
 - White diffusing lens
 - Black absorbing shield
 - Clear bug guard – less light concentration
 - Large white-light filter (on 4 x 5mm detector window) – detector elements far from filter

Reliable Detection

- ❑ **High-efficiency Spherical Lens**
 - Maximum optical signal strength
 - Attractive appearance
- ❑ **122-field-of-view Lens/Detector System**
 - Staggered layout for best detection
 - Alternating polarity for strong signals
- ❑ **SUREN DSP ASIC** featuring HighBar™** waveform processing – the best in detection and false-alarm rejection! Signals are first filtered, then real pulses are separated from noise according to their duration. Detection function is repeatable, because detection requires consistent signal size – signal must always cross both thresholds with alternating polarity (+ / -) pulses – better than many ASIC-based sensors.

Many other sensors can signal alarms just due to a much smaller signal crossing one threshold several times in succession. This is a common false detection cause.

HighBar™ detects intruders consistently, while rejecting small-signal false alarms!

- High immunity to shock, white light, temperature, RF, electrical surges
- ❑ Temperature compensation (option); dual-slope, for best summertime detection.
- ❑ **Reliable Circuits**
 - No aluminum electrolytic capacitors
 - Reverse battery polarity protection

*** Patents pending worldwide.*

Easy Installation

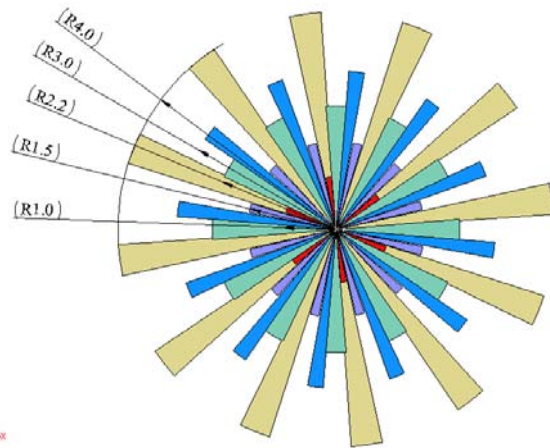
- ❑ Spring clips for mounting in drop ceiling
- ❑ Trim ring for mounting on solid ceiling
- ❑ Knock-out holes for mounting and wiring

Optical View Pattern

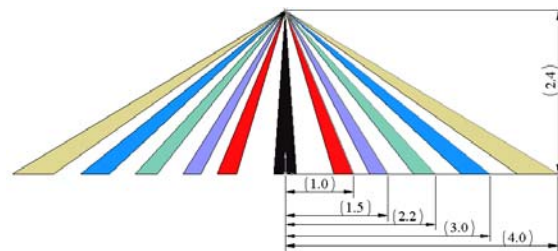
Product Features

- HighBar™** intruder detection works to provide consistent detection sensitivity throughout the monitored area, over the full range of intruder motion speeds.
- Sensitive tamper detection switch
- Wide operating temperature range (-40°C to +55°C)
- Microcontroller temperature analysis for best summertime detection
- Tightly-mated bug guard to protect the sensor optics from insects, spiders and dust
- Selectable detection sensitivity (standard/high) for different environmental requirements
- LED enable function for testing

Top View



Side View



Specifications

Alarm, Tamper, Test Signals	Pull-high/pull-low: Inactive = 0 Vdc; Active = Battery Voltage			
Detection Range:	6m circle with sensor mounted at 2.4m height.			
Power Supply:	2 x AAA battery (total 2.1 – 3.3 Vdc) <20 uA current draw			
RF Immunity:	20 V/m 10 – 1000 MHz; 10 V/m 1000-2000 MHz			
Sensitivity:	1-event or 2-event			
Temperature Range:	-40°C to +55°C			
Qualifications	EN 50131-2-2 Grade-2			
Height range:	2.3 - 6.0 m			
Housing:	High-impact ABS			
Dimensions:	38mm overall height; 93mm diameter; 25mm below drop ceiling			
Optical fields-of-view	Long Range	Mid Range	Short Range	Look-down
	48	48	16	10

All specifications are subject to change without notice.