

# SP-012 **Digine™\*\***

## PIR Motion Sensor

# SUREN



### High False Alarm Immunity

- ❑ **HighBar™** waveform processing rejects noise! After signal filtering, real pulses are separated from noise by length of time. In the next stage, alternating polarity (+ / - ) pulses are required to qualify for an alarm – a false-alarm resistant design that performs better than most ASICs.
- ❑ **Three-Stage White Light Protection**
  - White diffusing lens
  - Clear bug guard – avoids light concentration
  - Large 4 x 5 mm white light filter window on detector, so elements can be far from filter
- ❑ **Digine™\*\*** Detector Amplifier –
  - Digital operation
  - High immunity to RF, shock, temperature changes, white light, electrical surges

### Easy Installation

- ❑ Deep wire channels and dual cable entry
- ❑ 45-degree corner-mounting surfaces
- ❑ Knock-out holes for mounting and wiring
- ❑ Swivel-mount accessory interface

### Reliable Detection

- ❑ **HighBar™** waveform processing delivers repeatable detection performance.
- ❑ Detection requires consistent signal size – the signal must cross both thresholds with alternating polarity (+ / - ) pulses. Other methods (including most ASICs) can create an alarm due to a small signal crossing just one threshold two times. That small signal is often a false alarm.
- ❑ **HighBar™** processing detects intruders!

### Why Digital?

– The **Digine™\*\*** amplifier has only ceramic capacitors. In traditional analog PIR detector amplifiers, gain and frequency response are set by aluminum electrolytic capacitors – less reliable and less accurate than ceramic capacitors.

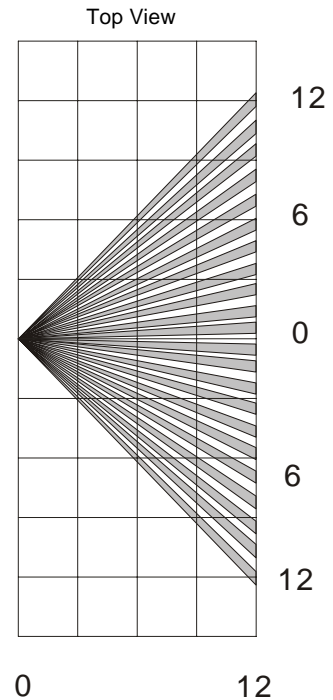
– Digital amplifiers, compared to analog amplifiers, can be more interference-immune.

*\*\* Patents pending worldwide.*

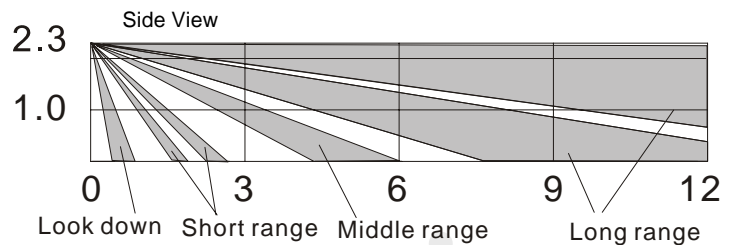
## Product Features

- ❑ **Digine™** detector amplifier and advanced **HighBar™** intruder detection work together to provide consistent detection sensitivity throughout the monitored area, over the full range of intruder motion speeds.
- ❑ Sensitive tamper detection switch
- ❑ Precise factory testing to ensure dependable performance of every sensor
- ❑ World-class immunity to RF interference
- ❑ Look-down detection directly below the sensor to catch wall-creeping intruders
- ❑ Tightly-mated bug guard to protect the sensor optics from insects, spiders and dust
- ❑ Selectable processing sensitivity for different environmental requirements

## Optical View Pattern



Swivel Mount



## Specifications

Range:	12 m in sensor-facing direction (max) 17 m at 45° angle from sensor-facing direction (max)			
Power Supply:	Voltage	Current		
	8 – 16 Vdc	18 mA at 12 Vdc		
Alarm Relay:	Reed type; 50 mA, 30 Vdc			
Tamper Switch:	Form A (NC) 50 mA @ 30 Vdc			
RF Immunity:	20 V/m 10 – 1000 MHz; 10 V/m 1000-2000 MHz			
Sensitivity:	2-event/2.5 C or 3-event/2.5C			
Temperature Range:	-10°C to +55°C			
EN 50131	Grade 2			
Housing:	High-impact ABS			
Dimensions:	94 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	8

CE  
Pending

All specifications are subject to change without notice.