

# SA-01

## Wireless PIR Detector



Rosslare's SA-01 is one of a powerful line of high-performance indoor Passive Infrared (PIR) motion detectors, ideal for residential, commercial, and institutional applications.

Encased in an elegantly designed shell, the SA-01 is made with the highest level of SMD components and microprocessor technologies and offers the ease and convenience of wireless.

It packs advanced features such as walk and RF transmission test functions, movement and speed spectrum analysis, ultra-bright LED cover and wall tamper detection, ultra-low current consumption, and auto power save (APS) technology.

### GENERAL DESCRIPTION

The SA-01 wireless PIR motion detector is an indispensable component in any security system. The heart of the SA-01 is a high quality pyro-electric infrared energy sensor, an advanced FLASH nano-watt micro-controller, an A to D signal analyzer with temperature compensation, and an integral RF transmitter with low profile internal antenna. The SA-01's many features include Walk and RF tests, dynamic and static power save modes, selectable pulse counting, cover and wall tamper detection, and APS detection.

The SA-01 uses a widely available lithium 1300 mAh high power battery and is compatible with Rosslare Security products from the related Series (H-Series: 868.35 MHz, G-Series: 433.92 MHz).

### MAIN FEATURES

- Exchangeable Fresnel lenses: standard, long-range and curtain
- Highly sensitive dual element pyro-sensor, from world-leading manufacturers
- Environment digital temperature compensation to reduce false alarms

- 3 V, 1300 mAh lithium battery lasts for over three years at normal use. Low battery warning transmitted to panel
- Internal calibration following mounting height installation
- Selectable cover and back tamper detection for increased security
- Optional swivel mounting bracket for mounting in flexible locations (BR-11)
  - Dust-proof chamber designed to reduce thermal changes and provide insect protection
  - Using fuzzy logic algorithms, detection is improved and false alarms are reduced

### PROFESSIONAL GRADE FEATURES

- Adjustable sensitivity for normal or harsh environments (pulse count)
- Fully supervised sensor transmits the "keep alive" signal to the host every 20 minutes
- Easy and automatic Walk and RF tests
- Advanced digital algorithms for superior movement speed spectrum analysis
- Ultra resistant to transient shock, ESD, and RFI interference

# SPECIFICATIONS

## ELECTRICAL SPECIFICATIONS

▪ Battery Type	CR123 (3 V/1300 mAh)
▪ Current Consumptions	Standby 15 µA, 10 mA transmission
▪ Battery Life (nominal)	3 years (150 tr/day)
▪ Detector Type	Dual pyro IR element (IR filter 5 µm ÷ 14 µm)
▪ Temperature Compensation	Digital dual slope (+/- 1°C)
▪ Speed Detect	0.2 m/s ÷ 5 m/s, Δt = 1.1°C (0.66 ft/s ÷ 16.4 ft/s, Δt = 2° F)
▪ Sensitivity	2 levels of fuzzy logic (jumper setting)
▪ Arming Types	Normal: 2 minutes sleep following last alarm Dynamic: 2 minutes following last movement (retriggerable)
▪ Alarm Signaling	Red LED 2 seconds on event transmission: alarm, tamper, low battery
▪ Tamper Switches	Back and cover tamper
▪ Supervisory Signals	Electronic malfunction or temperature out of range is indicated by a flashing LED

## OPTICAL SPECIFICATIONS

▪ Optical Filter	White light protection
▪ Vertical Adjustment	By slot (+/- 2°)
▪ Max. Coverage	14 x 14 m (46 x 46 ft), 88°

## ENVIRONMENTAL SPECIFICATIONS

▪ Operating Environment	Indoor use only
▪ Operating Temperature Range	-10°C to 60°C (14° F to 140°F)
▪ Operating Humidity Range	0 to 95% (non-condensing)
▪ RFI Protection	>20 V/m up to 1000 MHz

## PHYSICAL SPECIFICATIONS

▪ Dimensions (H x W x D)	90 x 65 x 52 mm (3.5 x 2.5 x 2.2 in.)
▪ Weight	84.2 g (3.0 oz.)

## SYSTEM COMPONENTS

The SA-01 Wireless PIR is compatible with Rosslare's wireless control panels.

## PRODUCT WARRANTY

2-Year Limited Product Warranty

## ABOUT ROSSLARE SECURITY

Rosslare Security Products manufactures and markets high-quality security products via its worldwide offices and channel partners. Since 1980, Rosslare has offered high-quality systems for enterprise, small business, and residential applications. With Rosslare, you receive the best of all worlds: world-class product engineering and design; professional customer service spanning the globe; and the quality and affordability of a vertically integrated and self-owned manufacturing facility. Our expansive product range features much more than access control solutions and guard patrol management systems; we also offer applications software – such as License Plate Recognition, Time & Attendance, and DVR/alarm integration.

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