

Summary

- Wireless Intrusion Detection
- Excellent Sensitivity / Range
- 5-8 Year Stand-Alone (Internal Battery) Operation
- Supports 2 Discrete Inputs
- Vibration / Motion Detect
- Wide Operating Temperature Range (-25 to +75C)
- GPS Synchronized Time Tagging of Data
- Alarming
- External Diversity Antennae



Description

The SC6306 Wireless Intrusion Monitor (WIM) is based on the successful SC6305.

The SC6306 is a Wireless Intrusion Monitor for use in a variety of applications. It's targeted for use in remote and hard to reach locations such as cabinets, field installations, stationary assets and the like.

The embedded battery and wireless modem provide users with a stand-alone device that greatly simplifies installation and helps minimize infrastructure costs in large scale deployments. Under typical operating conditions, the device can be expected to operate maintenance free and achieve a battery life of (5-8) years.

Canary products incorporate an RPMA wireless modem, compatible with Ingenu's RPMA Private and Public Networks. RPMA is a groundbreaking wireless technology built from the ground up, specifically targeting sensors and other low data rate devices. RPMA is an IoT solution that provides an optimal mix of coverage, capacity, low-power consumption, and cost. It fills a significant gap in between currently available short range mesh radios and cellular M2M modems.

The wireless link is a half-duplex system that operates in a star configuration. It is deployed using industry standard and time-tested modeling tools, similar to those used in the mobile telephony industry. The system delivers the lowest cost of ownership in the industry and is simple to deploy, operate, and maintain.

Typical Applications

- Utilities
- Environmental Monitoring
- Infrastructure
- Asset Management

Features

Interfaces:

- 2x Dry Contact Inputs
- 1x Voltage Output

Suitable for Indoor or Outdoor Deployment

- Polycarbonate Enclosure NEMA 4X Rated (IP66)
- -25C to +75C Operating Temp
- Suitable for mounting on poles or flat surfaces
- 5-8 Year Battery Life

Low Deployment and Maintenance Costs

Wireless Connectivity

- RPMA Network in Star Configuration
- Over 160dB of Link Budget
- GPS Synchronization and Time Stamping

Alarming

- Remote notification available when used in conjunction with external scheduler such as SCT's Remote Monitoring Solution

Other Features

- Configurable monitoring / sampling intervals
- Configurable data logging for redundancy
- Easy to Install, Configure and Use

Specifications

Radio Performance

Sensitivity: -143 dBm
Transmit Power: +20 dBm (NA), +10 dBm (EU)
Data Throughput: 60kbps
Access Point Capacity: 64,000 Nodes
Security: 128/256 bit encryption
Protocol: RPMA Network in 2.4 GHz ISM Band
Modulation: 1MHz Bandwidth, Dynamic DSSS
Diversity Support: Yes
Frequency: 2402 to 2476 MHz (NA), 2402 to 2481 MHz (EU)

Input

Maximum Input Voltage (No Damage): +48.0VDC
Maximum Input Operating Voltage): +12.0VDC
 V_{IN_HI} : $\geq +2.6$ VDC
 V_{IN_LO} : $\leq +0.4$ VDC
 R_{in} : >100 kOhm

Voltage Output

V_{out} : ≥ 2.0 VDC
 V_{out} : < 5.0 VDC
Minimum Output Impedance: 80Ohm

Vibration and Shock Detection

Configurable alarm threshold.

Interface

Status LED (powered, link, error)
I/O access is provided through cable gland. The SC6306 is shipped with a plug in the cable gland to ensure IP67 level protection in the absence of cables.

Dimensions and Weight

Size: 132 x 114 x 70mm (excluding antennas)
Weight: 450g (including battery)

Power Requirements

Battery Powered (SignalCraft Part# SCT-BM0652VC)

Environmental

NEMA 4x (IP66 per IEC 529)
Polycarbonate Enclosure is UL94-5VA
Flammability Rated
Operating Temperature: -25 to +75°C
Storage Temperature: -40 to +85°C
Humidity: 5% to 85%, non-condensing
Shock: TBD
Vibration: TBD

Customization

Customized variants are possible on large orders.
Contact us to discuss your requirements.

Support

Technical support is available through our website, www.signalcraft.com/support or by contacting us at support@signalcraft.com.

Calibration

Calibration is not required on this product.

Warranty

Full one year parts and labor when used under normal installation and operation conditions. Repair services are available for products no longer covered under warranty.

Ordering Information

Send inquiries to info@signalcraft.com.