

# Sentinel Nomad

## Wi-Fi® Based Sensor Solution

802.11, 2.4GHz Radio  
Battery-Powered  
Rugged for outdoor applications



## Applications

The Sentinel nomad is ideal for storage applications where continuous monitoring is required.

- Health Care
- Food Storage
- Transportation (cold chain)
- Ware Housing
- Military

## Features

The complete solution includes the sensor, wireless transceiver, database and a web-based portal.

- small form factor”
- Web-based Data Visualization
- Up to 3 Years Life using a single Lithium AA battery
- Alarming/Alerting System
- Uses the Wi-Fi Infrastructure
- Audit Trail of the Sensor Data

## Benefits

No wireless receiver is necessary as it uses the existing Wi-Fi infrastructure – therefore the overall cost is significantly lower; full sensor audit trail; data can be viewed remotely from any computer using a web browser; sensor units are battery operated therefore portable; sensor units can last up to 5 years using a single Lithium AA battery (\*).

## Technical specifications

### Sensor Unit

Data Storage	At least 40 days of sensor data at sampling rate of once per minute
Data Visualization & Reporting	Desktop Software, Web Hosted or Enterprise Portal
Alerting System	Email or cell phone alerts when sensor crosses set threshold values (depending on Software version)
Power supply	Using a single AA 3.6V Lithium battery - Expected life of up to 5 years with measurements every minute (*).
Operating conditions	Operating temp. range: -40°C to +70°C Operating humidity range 0% RH to 99% RH
Physical dimensions	1.3"L x Ø 1.9" (32mm x Ø 47mm) Weight: N/Aoz (N/A g)
Regulatory	FCC, CE, EN12830, EN61010
Typical power emission	33 mW

### Wi-Fi

Radio protocol	IEEE 802.11 b/g compatible / g only not supported)
Supported rates	1, 2, 5.5, 11 Mbps only
Security	WPA2 - PSK (AES) WPA1 - PSK (TKIP) WPA1 + 2 PSK (AES + TKIP) 802.1x EAP FAST WEP (40bit, 104 bit)

### Networking

Addressing	IP v4 static or DHCP address
Protocol used to communicate with server	SNMP/UDP, UDP
Ports	161 - 163 on both server and sensor

### Probes

Internal Temperature sensor	Range : -40°C to 70°C Resolution : 0.1°C Accuracy : ± 1°C (at 25°C)
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