

**MACHINE  
SENTRY®**

# Machine Sentry®

Long-Range, Low Energy Bluetooth®  
Gateway Solution



- Connect up to 100 Machine Sentry® vibration sensors to internet via Ethernet, Wi-Fi or 3G/4G Cellular network (with optional dongle)
- Suitable for both indoor and outdoor use – sealed to IP65
- Extends Bluetooth® connectivity up to 25m (82ft)
- Single cable installation – supports Power Over Ethernet (POE)
- The most user-friendly and easy to set up online condition monitoring system on the market today
- Scalable solution with full integration to Machine Sentry® hardware and software which are supported by ADA™ the Automated Diagnostic Assistant

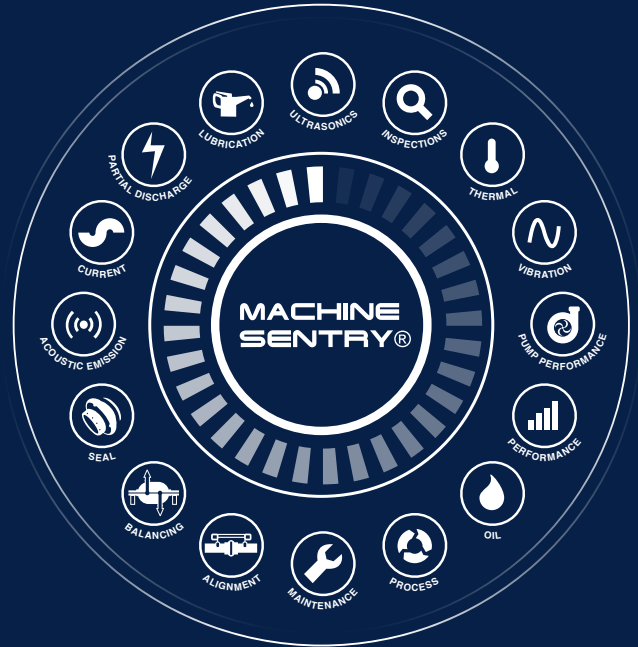
[www.machinesentry.com](http://www.machinesentry.com)

# The Machine Sentry® Gateway

The Machine Sentry® Gateway enables the creation of an industrial IOT System for your condition monitoring program.

## Features & Benefits

- 3g/4g, Wi-Fi, LAN connectivity to the internet
- Constant monitoring of machines
- Cost effective solution
- Simple to install and set up
- Early failure mode detection
- More accurate data acquisition
- Reducing data acquisition time constraint
- Reduce travelling time requirement
- Reduce equipment downtime
- Reduce maintenance cost
- Increase equipment uptime and efficiency
- 100% compatible with the Machine Sentry® product range of hardware and software
- Able to collect equipment vital signs without the need of a machine operator being present



## The Gateway is ideal for:

- Critical assets requiring more frequent data acquisition
- Early detection of changes in the behaviour of assets
- Detecting operation induced failure modes
- Intermittently running assets
- Inaccessible asset
- Multiple sensor installations
- Remote locations such as pumping stations
- Existing and current Machine Sentry® users



## Bluetooth® connectivity

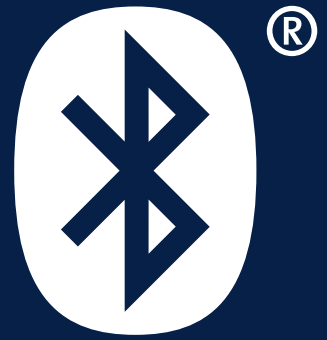
The Bluetooth® connectivity gives a fundamental advantage over traditional hardwire or Wi-Fi network solutions giving simple deployment, flexibility, and dramatically reducing installation costs.

Power consumption of the connected device is managed via Bluetooth® LE which significantly improves the battery life of the connected devices.

No longer do you need to use valuable operators to collect data using a handheld device. Data from your Machine Sentry® vibration sensors is automatically uploaded to your Machine Sentry® database. The wireless connection with the Machine Sentry® MSF sensors enables simple, consistent and effective collection of vibration and temperature data from pumps, motors, fans, bearings and many other types of equipment. The technology provides a unique opportunity to increase the efficiency of assets and reduce unplanned downtime, or breakdown.

The Gateway provides secure connection to the internet using the latest internet security protocols ensuring your data is safe.

The Machine Sentry® Gateway allows up to 100 Machines Sentry® Bluetooth® vibration sensors to be connected to the internet. The Gateway extends the Bluetooth® range up to 25m (82ft), can be powered using Power Over Ethernet (POE) and is suitable for mounting either indoors or outdoors.



## Specification

<b>Connectivity</b>	Supports broadcaster, listener, sender and receiver roles, and multiple-roles simultaneously
<b>Bluetooth®</b>	Connections: Up to 100 connections Antenna Gain: 5.7dbi vertical polarized Range: Up to 25m in open sight
<b>Wi-Fi (802.11 b/g/n)</b>	Mode: Wi-Fi client or hotspot (for setup only)
<b>Security</b>	Supports Bluetooth® 4.1 security standards Bluetooth® Secure Simple Pairing (Just Works, Passkey Entry, OOB) WPA2 enterprise security (PEAP-MSCHAPv2, EAP-TLS, EAP-TTLS) Advanced 128bit AES encryption Password protected router web console page MQTT communication encryption between Gateway and broker Firmware is signed by certificate to ensure authenticity Dedicated SSL private key and certificate import options
<b>Power</b>	Power-over-Ethernet: 802.3af/at compliant source Power consumption: up to 2.5W for normal usage; cellular USB modem adds an additional 2.5W
<b>Other Interfaces</b>	10/100 BASE-T Ethernet (RJ-45) uplink Reset button LED Indicators: Power / System USB 2.0 (used for cellular USB modem)
<b>Dimensions</b>	154mm (D) x 259mm (H) / 6.1 inch (D) x 10.2 inch (H) Weight: 800g / 28oz
<b>Environmental</b>	Temperature: -40°C to +65°C (-40°F to +149°F) - Humidity: 0% to 90% non-condensing (operating) Temperature: -50°C to +70°C (-58°F to +158°F) (Storage and Transportation) Up to 85mph sustained winds - Up to 135mph wind gusts (Wind resistance) IP rating: IP65
<b>Mounting</b>	Wall or pole mounting kit included
<b>Certification</b>	FCC (US), IC (Canada), CE (Europe), BQB, TELEC (Japan), CB, CRC (Colombia), SRRC (China), RoHS, REACH, ICASA (South Africa), ANATEL (Brazil), RCM (Australia), SUBTEL (Chile), NOM (Mexico)
<b>Warranty</b>	1 year limited hardware warranty



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