MACHINE SENTRY®

MSO-1 - Online

Experience What's Possible

- Flexible online condition monitoring system with vibration analysis, process parameters, thermography and oil analysis capabilities
- Multi-channel vibration monitoring continuous monitoring of up to eight vibration sensors plus four other low speed inputs (optional)
- 24/7 online remote monitoring accessible anytime, anywhere, via a secure portal login
- Flexible connection options GPRS cellular connection, wired or wi-fi, with optional email notifications

www.machinesentry.com

Machine Sentry®

Machine Sentry®, a unique cost effective Condition Based Maintenance (CBM) solution that integrates all Condition Monitoring techniques and data, to enable effective maintenance planning and management reporting.

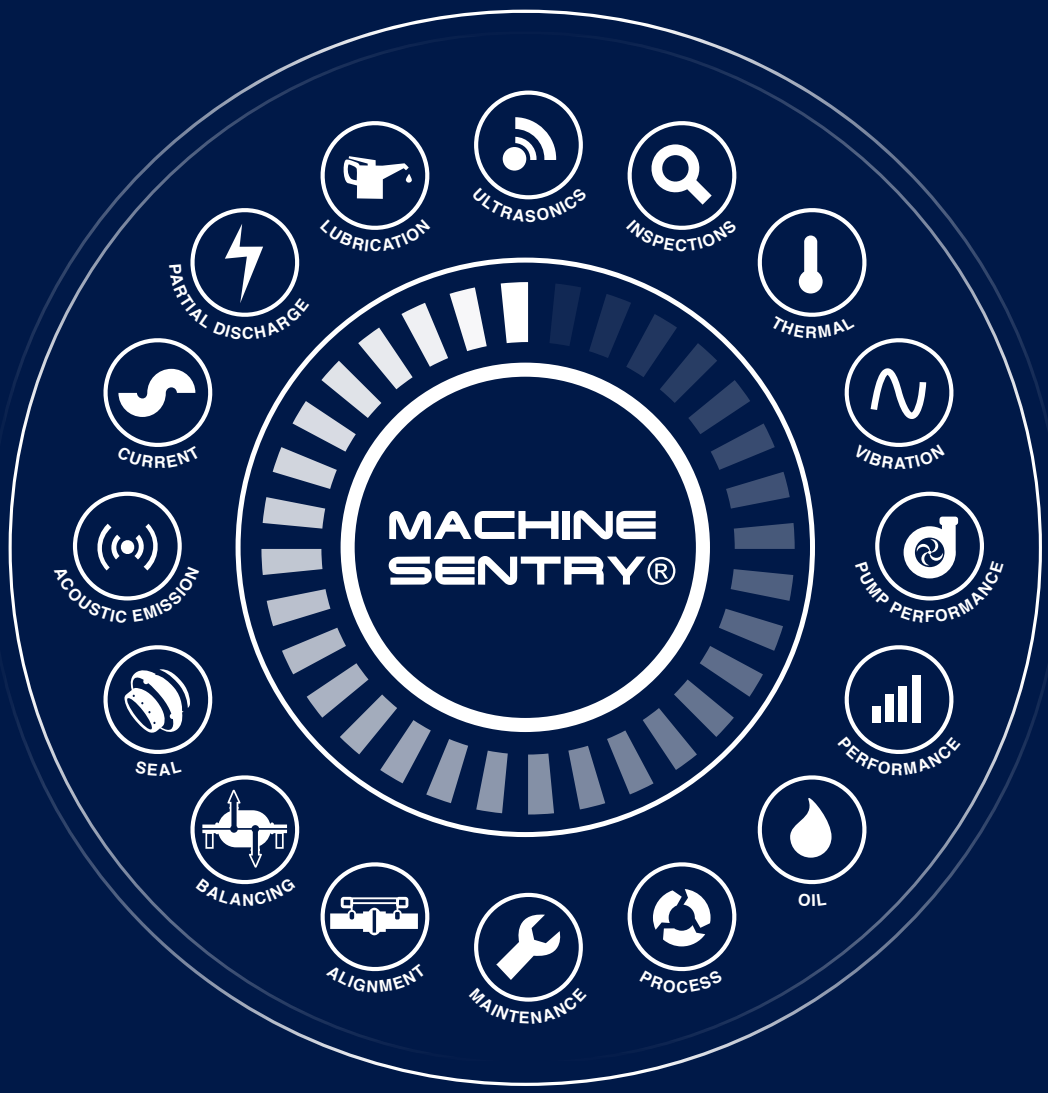
Benefits

- Suits the needs of both expert and novice users
- Up to 5 times faster than other condition monitoring systems
- Can be used either as a standalone tool or alongside an existing enterprise system (e.g. SAP, Maximo, PEMAC, etc.
- Access to world leading condition monitoring engineers – providing detailed diagnosis and advice
- Easily configurable and scalable for future expansion

> Machine Sentry® provides condition monitoring solutions for many blue-chip clients, on hundreds of sites.

Typical Applications

- Continuous monitoring
- Highly critical asset management
- Troubleshooting



Machine Sentry® Vibration and Process Sensor Type: MSO-1

Machine Sentry® vibration and process sensor type MSO-1 is the ultimate condition monitoring solution.

Machine Sentry® MSO-1 is idealy suited for monitoring of pumps, fans, gearboxes, cranes, compressors, wind turbines, gas and steam turbines, electric motors and many more. It is perfect for your most critical assets.

The Machine Sentry® web platform provides access to detailed condition monitoring data, with no historical restriction, which can be supported by world leading condition monitoring engineers.

Secure access is available from anywhere in the world via a standard web browser. In addition, the mobile software operates on industry standard AndroidTM tablets or smartphones including ATEX certified versions.

Machine Sentry® MSO-1 has eight high speed dynamic inputs, with an additional four static inputs available as an option.

The Machine Sentry® MSO-1 is available with either WiFi or GPRS antenna as standard. This allows the system to continuously connect to the web and enable the data to be viewed via a web portal. The enclosure can also be upgraded for ATEX environments.

Its small size, low power consumption, high storage capability, make the system very easy to install, operate and maintain, while delivering the functions required by expert analysts or plant operators.

> “Protect your most valuable critical assets.”

Machine Sentry® Features

Modular cloud based Machine Sentry® software – Features include: action tracking, watchkeeping, process measurements, thermal imaging integration, inspections, lubrication management, intuitive dashboard and reporting.

Vibration analysis – With intelligent tri-axial vibration measurement capability and temperature sensor (patent pending).

Lubrication management – Plan, track and manage lubrication activities and usage.

Oil analysis – Laboratory oil analysis data is automatically* mapped and integrated into the Machine Sentry® database for easy access by all users enabling better trending and analysis.

ADA™ Automated Diagnosis Assistant – Can predict stage 2, 3 and 4 bearing failure and detect a wide range of other common fault conditions.

Key Performance Indicators (KPIs) – To systematically measure the effectiveness of the condition-based maintenance program from schedule compliance to asset health and bad actor management.

Suitable for both fixed assets and rotating machinery – The Pipework Vibration Compliance feature allows a plant operator to quickly screen all process pipework and small bore connections in order to identify lines that have the greatest risk of failure.

IP67 rated and ATEX certified – Certified for use in hazardous areas (Zone 1 and Zone 2).

* Supported labs only

Specification

	MSO-1	MSO-1E
High speed inputs Sample rate 512 to 51200Hz, DC input range +/-24v, AC input range 24V ptop, 16 bit resolution, accuracy 1%	8	8
Auxiliary inputs: Sample rate up to 200Hz, DC input range +/-24v, 16 bit resolution, accuracy 0.5%		4
Signal processing: Spectral lines Time waveform samples	100, 200, 400, 800, 1600, 3200, 6400, 12800 128 up to 8192	
Internal memory storage	4GB	
Analog channels indication	8 x red/green LED	8 x red/green LEDs
Network communications	IEEE 1588 Ethernet Gigabit, Wireless Ethernet, GPRS	
Power supply	20 to 26Vdc	
Power consumption	<7W	
Size	TDB	
Mounting	TBD	
Weight	TBD	
Temperature range	-30 to 65°C / -22 to 149°F	
Approvals	CE	

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