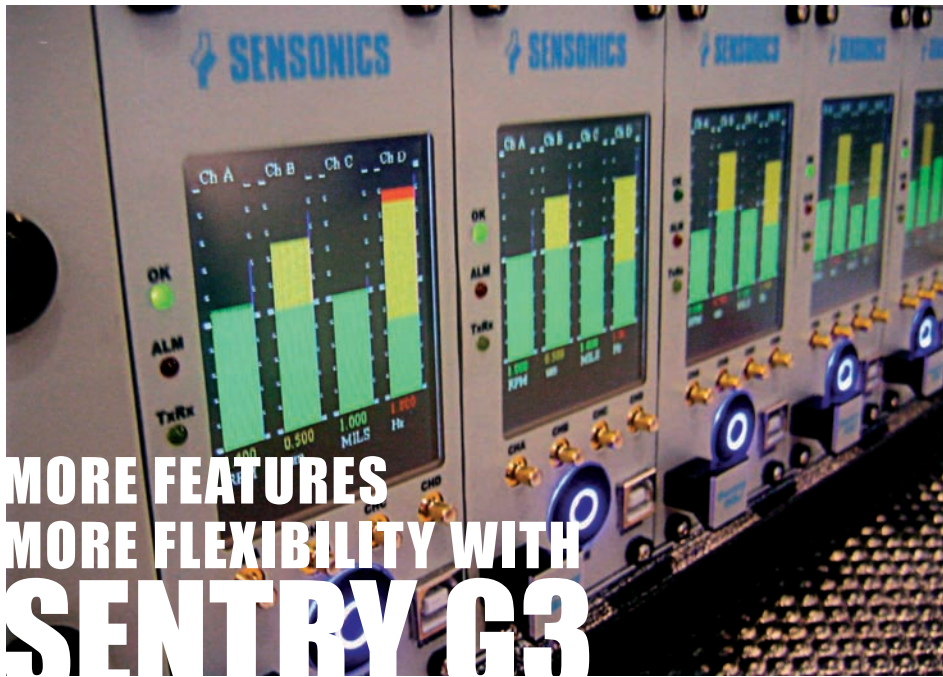




*Welcome to our latest newsletter, keeping our customers and partners up-to-date with the latest developments at Sensonics. New projects, new products and case-studies, all helping to protect your critical rotating plant.*



## MORE FEATURES MORE FLEXIBILITY WITH SENTRY G3

The latest generation of machine protection systems has arrived in the shape of the new Sentry G3, a high performance signal conditioning unit. The G3 monitor builds upon the established range of Sentry protection systems and is designed to be the most flexible and feature rich Turbine Supervisory System available. It provides a universal platform for the interfacing of various sensor types in compliance with the API 670 standard.

Each of the units four channels can be independently programmed to provide continuous monitoring and protection across a broad spectrum of measurement regimes, including vibration, expansion, temperature and speed. Sentry G3 utilises the latest DSP technology, so once a channel is set up and running, the resulting alarm relay and analogue output facilities are independent from the remaining module functionality, ensuring a scalable, high integrity configuration.

The unit has an integral intuitive colour LCD display and drive facility which provides immediate viewing and access to the machines parameters. Several modes of display are available to suit specific applications, such as

an alarm historian and parameter trending per channel. It also provides the necessary power source for the selected transducer, providing for 2 (ICP type) or 3 wire accelerometer variants,  $\pm 24V$  proximity probe systems, LVDT's and a range of speed and temperature sensors. Each transducer signal is buffered and available via the front panel analogue connection arrangement while a USB interface is provided for programming the unit and for storage of channel history and settings.

The G3 system offers excellent channel density with up to 24 measurement channels in a 3U format, also each channel can provide independent analogue outputs of current and voltage for DCS connection, in addition to an alarm relay.

Further alarm relay expansion is possible through connection to digital outputs at the rear of the module. The system is designed for mounting in a custom 19" rack assembly which also contains a dual redundant power supply option.

Sentry G3 provides state-of-the-art protection for the following modes:

**Measurement** - Absolute bearing and relative shaft vibration, displacement and thrust position, speed, phase and reverse rotation, differential and casing expansion, rod drop and temperature.

**Turbine Specialist Measurement** - Shaft eccentricity, mark - space differential expansion, rotor to stator air gap.

**Flexible Configuration** - LPF, HPF, tracking and notch filters, programmable warning and danger alarms, cross channel voting, FFT, harmonic and phase analysis, programmable transducer supply, scaleable module hardware with plug-in DSP card, up to 4 channels.

## SUCCESS IN CHINA

In conjunction with their Chinese distributor, Star Royal, Sensonics have recently completed a project for Shanghai Baosteel, the largest iron and steel company in China. Two new systems were installed which monitor bearing vibration of de-dusting and sintering fans. Commenting on the project, Leon Shi, Site Maintenance Engineer at Shanghai Baos-



teel said, "It's our first time using Sensonics Vibration and speed monitors and we worked closely with the Service Manager of Star Royal during the on-site installation and system commissioning". He continued, "It's three months since installation and start-up and as Site Engineer I am very happy with the system performance and the user-friendly features, we express our thanks to Star Royal for their professional support".



# NEW WEBSITE UP AND RUNNING

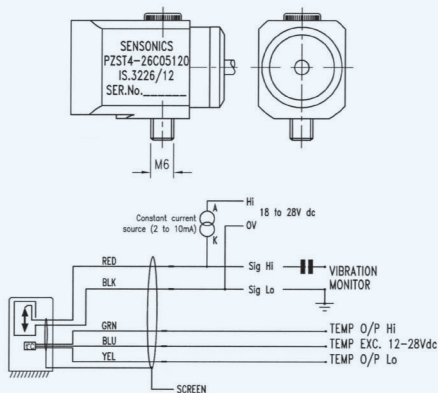
Over the past several months we have been developing an improved website for the benefit of our customers. The objective of the re-design has been to achieve a straightforward and intuitive navigation to the required product area. To facilitate this, a number of 'Quick Links' have been introduced on the home page to assist with getting straight to the right technical information, fast.



The new Technical Library offers all Sensonics Brochures, datasheets and application notes at the click of a button. Any feedback on the new site is of course welcome!  
Go to: [www.sensonics.co.uk](http://www.sensonics.co.uk)

## PRODUCT FOCUS Dual mode Vibration and Temperature Sensor

Our PZS shear mode range of accelerometers, are available with an integral temperature sensor (RTD type 10mV/°C). Ideal for sleeve bearing applications, the combination of monitoring vibration with the additional dimension of temperature can enhance the detection of early bearing failure or lubrication issues. The accelerometer offers standard ICP type functionality and a three wire interface for the RTD as illustrated in the PZST4 version below.



Available in connector or integral cable options, the sensor can be interfaced directly to the Sensonics DN2604 dual protection monitor to form a cost effective bearing monitoring solution.



## RECENT CONTRACT AWARDS

- 33 Channel Seismic Monitoring and Protection System for Nuclear Power Facility. **Location South Asia**
- Overseed (2 of 3 voted) Monitoring Systems for Gas Turbines. **Location UK**
- GE-FS602 Compressor Rod Drop Monitoring System. **Location New Zealand**
- ID Fan (qty 4) Vibration Monitoring system. **Location South Korea**

## THRUST AND ROD DROP DIRECT TO DCS

Sensonics has enhanced its range of DN monitors through the introduction of the DN8033 Thrust and Rod Drop transmitter. The unit is designed to measure shaft axial or rod position on a range of rotating plant. The 4-20mA



loop powered module offers easy integration with either the local machine PLC or a plant wide DCS since it is powered through the measurement loop.

The unit operates in conjunction with Sensonics standard range of 8mm diameter proximity probes, offering a maximum measurement range of  $\pm 1$ mm. This extended range over similar products on the market provides further scope in application, particularly for the set up and calibration of thrust measurement systems, which can be restricted by float in the shaft and physical access to the target.

Providing an output current proportional to displacement, the Din Rail mountable unit provides two miniature multi-turn potentiometers for the setting of the gain and zero point parameters. Also suitable for rod drop measurements the DN8033 is ideal for OEM applications, offering a lower cost option to existing systems without sacrificing measurement accuracy. To further compliment this product range the DN8032 variant offers similar functionality but for the measurement of shaft vibration.

Sensonics are a leading supplier of turbine supervisory and high integrity protection equipment to industry. With 30 years experience in providing vibration, displacement and speed instrumentation solutions in demanding environments, not only do they supply a full range of sensors and API 670 compliant measuring and protection equipment, but also offer design through to installation & commissioning services.

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