

PREDICTIVE  
MAINTENANCE  
SYSTEMS

PROTECTING  
YOUR  
INVESTMENT

# Sentry

## Machinery Protection System



# SENSONICS

Sentry  
Machinery  
Protection System





# SENTRY MACHINERY

Effective and Unobtrusive Machinery Protection D

## Effective And Unobtrusive Machinery Protection

The Sentry Monitoring and Protection System has been designed using the latest technology to give maximum warning of impending machine failure without producing costly spurious alarms. It is intended to be permanently installed and requires little or no intervention from operators until a real event occurs.

## Designed To Have The Flexibility To Suit Any Monitoring Requirement

Because each Sentry Monitor Module has its own microprocessor controller it is almost entirely user configurable, offering the most flexibility available whilst retaining the levels of reliability that Sensonics is renowned for.

## Racking System

- Available in 19" or 10.5" versions to hold 6 or 3 modules.
- Panel mount facility
- High integrity design
- Detachable connector blocks for ease of maintenance
- Standard module mating connectors with polarity keys

## System Set-Up

- Standard PC compatibility
- Logical, user friendly, multiple choice question/answer format
- Library facility to record standard set-up configurations
- Protected configuration
- High speed downloading of information via RS232 link to module front panel

## Sentry Monitoring Series Standard Features

- High visibility LED display with wide viewing angle
- Modular self contained conditioning units
- Completely configurable via front panel or PC based software
- Independent power supplies for increased system integrity
- Individual Intel microprocessor in each module
- Bargraph and digital display on applicable modules
- Conforms to API 670 and GDCD 96
- Compact 3U racking system
- Up to 6 independent current or voltage outputs per module
- Individual dual level alarms
- System integrity alarm
- Transducer/PSU integrity alarm
- Up to 6 alarm relays per module
- Transducer power supply
- Raw transducer signal via front panel
- BNC connectors
- Networkable serial outputs





# PROTECTION SYSTEM

Designed For Flexibility Suits Any Monitoring Regime



## MO8601 Dual Channel Absolute Vibration

- 2 off accelerometer or velocity transducer inputs
- Display selectable between acceleration, velocity or displacement with peak, peak to peak or RMS detection
- Programmable transducer sensitivity
- Channel defeat function

For more information see Data Sheet DS1031



## MO8603 Dual Channel Thrust

- 2 off Eddy current probes inputs
- Dual positive & negative going alarms
- Zero and calibration adjustment
- Out-of-range indication
- Programmable transducer sensitivity
- Channel defeat facility

For more information see Data Sheet DS1033



## MO8607 Single Channel Eccentricity

- Dual mode high & low speed detection with automatic changeover from peak to RMS detection via speed input
- Zero speed alarm
- Gap alarm

For more information see Data Sheet DS1037

## MO8609 Single Channel LVDT

- Any LVDT accepted
- Positive & negative going alarms
- Choice of engineering units or % full scale
- Imperial or metric units

For more information see Data Sheet DS1039



## MO8602 Dual Channel Relative Vibration

- 2 off eddy current probe input
- Peak, peak to peak or RMS detection
- Fixed or tracking filters
- Programmable transducer sensitivity
- Gap alarm
- Zero speed alarm
- Channel defeat function

For more information see Data Sheet DS1032



## MO8604 Dual Channel Rod Drop

- 2 off Eddy Current Probe inputs
- Averaging or instantaneous point monitoring
- Dual alarms
- Shaft vibration monitoring
- Out-of-range indication and alarm
- Zero adjustment
- Channel defeat facility

For more information see Data Sheet DS1034



## Digital Data Transfer

Vibration and other parameters can be remotely monitored via a serial link which can be networked.

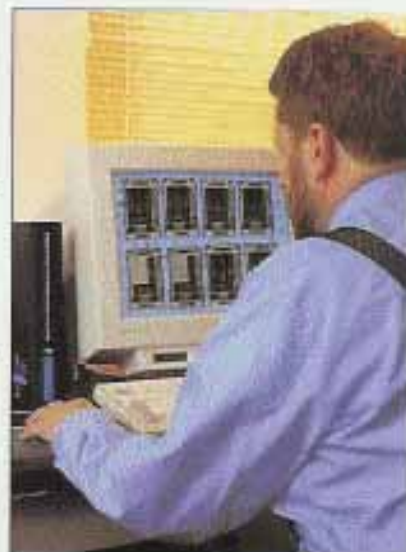
A system control module MO8701 is required in the Sentry system to perform this task.

Because of its flexible design, the Sentry system is able to communicate with many proprietary SCADA, PLC and DCS systems in their own language.

Many different protocols are accommodated by the Sentry system and more are being added.

The many individual Sentry module configurations can be set up remotely via the network serial interface.

The integrity of the Sentry Protection System is in no way compromised by the inclusion of the serial link.





## PREDICTIVE MAINTENANCE SYSTEMS

KEEPING  
INDUSTRY  
TURNING



**Sentry  
Machinery  
Protection System**



### Other Monitor Modules

#### MO8605 Four Channel Temperature

- RTD or Thermocouple input
- Digital display for any channel or scan facility
- 2 Channel version available
- Channel defeat facility

For more information see Data Sheet DS1035

#### MO8606 Reverse Rotation

- 2 off Eddy Current Probe inputs
- Reverse rotation alarm
- Transducer integrity alarms

For more information see Data Sheet DS1036



#### MO8608 Speed Monitor

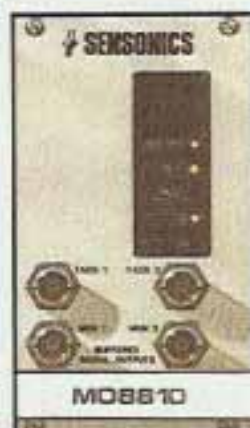
- Eddy Current Probe or TTL input
- 4.5 digit LCD display
- Positive & Negative going alarms
- Transducer integrity alarms
- Suitable for overspeed trip

For more information see Data Sheet DS1038

#### MO8610 Phase Marker

- Single Eddy Current Probe input
- TTL or other pulse output
- Zero speed alarm and calibration check facility

For more information see Data Sheet DS1040



Due to Sensonics policy of constant improvement, designs may be subject to alteration without notice.

To order or request a sample or further information

Call Sensonics NOW on:

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#### Also Available From Sensonics

- Eddy current probes
- Accelerometers
- LVDT's & RVDT's
- Portable vibration meters
- Other signal conditioning systems
- On line vibration monitoring
- Seismic monitors and sensors

#### Sensonics Can Also Undertake

- Feasibility studies
- System integration
- Installation and commissioning (turnkey projects)
- Condition monitoring surveys and contracts
- Diagnostic services
- Product & application training

**SENSONICS**



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If you are at all unsure about any application of the Sentry system please do not hesitate to call our technical sales department, who will be delighted to offer advice without