

## SENTRY SYSTEM

### MO8603 - DUAL CHANNEL THRUST MODULE



- \* 2 EDDY CURRENT PROBE INPUTS.
- \* MODULAR, RACK MOUNTED.
- \* INDEPENDENT MICROPROCESSOR.
- \* PROGRAMMABLE SET UP VIA RS232.
- \* INDEPENDENT POWER SUPPLY.
- \* HIGH VISIBILITY DISPLAY.
- \* 4 ALARM RELAYS PER MODULE.
- \* 6 RECORDER OUTPUTS PER MODULE.
- \* DESIGNED TO MEET API 670.

The Sensonics MO8603 Module forms one of the SENTRY Microprocessor based series and is a signal conditioning unit for monitoring the signal from two eddy current probes. The modules in the SENTRY series are designed to be housed in the Sensonics RA8600 series 19 inch 3U extended eurocard rack system.

The signal conditioning unit is fitted with a digital indicator and a dual bar graph display. The former will normally indicate displacement in the selected units (selectable on the front panel) from either channel. The bar graphs will display the levels of displacement as a percentage of the full scale range which has been set up in the software. Front panel buttons permit selected operational software settings to be viewed on the indicator/display. A "time out" function ensures that the display will revert to the normal reading after a preset time.

#### Signal Conditioning

The module accepts 2 input signals with levels proportional to displacement from the 2 probes. These are conditioned to give two independent measurements of displacement accurate to within +/- 0.5% of the true level. The inputs are conditioned to measure position and displayed in the selected units. The range of reading displayed is fully programmable in metric or imperial units.

For each channel there are 2 independent level alarms, A1 and A2 and will operate in both positive and negative directions. When the signal level exceeds an alarm level for a specified period the associated lamp will be illuminated on the display and the state of the appropriate relay changed. The module has four alarm relays as standard each of which may be set independently to be latching or non-latching, normally energised or de-energised and normally open or closed. There is provision for two extra relays to be fitted allowing the settings of the A1 and A2 alarm relays for each channel to be independent.

The A1 and A2 level alarms can be programmed for ( Chn. A and Chn. B) or (Chn. A or Chn. B) logic operation.

A channel integrity alarm A3, monitors the Transducer/PSU and Microprocessor for each channel and a common A3 alarm relay is provided. A green A3 TXD and A3 PSU "OK" LED illuminates on the front panel for each channel. If the TXD or PSU are faulty (green LED unlit) then the associated A3 relay will change state. Either channel may be defeated via the PC into a non operational state.

An A4 Channel Integrity alarm monitors the appropriate inputs for each channel and an A4 alarm tripped indicates that the reading is "not valid". A common A4 alarm relay is available, and an individual indication is available for each channel by the illumination of a red A4 LED.

Alternatively the A4 alarm can be re-assigned to other duties on request.

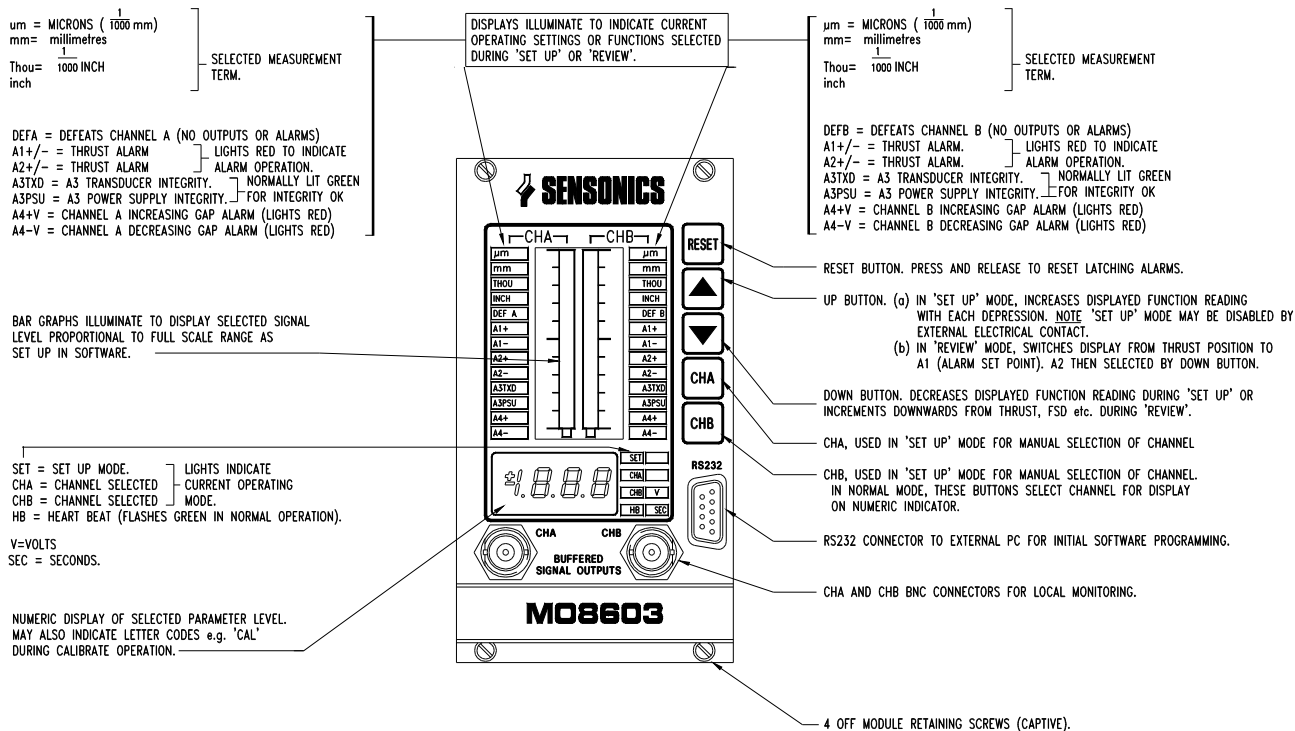
#### Signal Outputs

The module will provide up to 3 outputs per channel of a combination of current and voltage outputs as required. The range of the outputs may be set independently of the display and may also be configured for inverted operation.

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### Front Panel Facilities and Functions



## SPECIFICATIONS

### Input

Sensitivity . . . . .	Programmable to suit measurement range
Transducer Type . . . . .	Eddy current probe system
Power Supply . . . . .	110V or 240V AC 50-60 Hz
Operating temperature range . . . . .	0°C to 50°C

### Output

Displays . . . . .	21 segment bargraph and 3 1/2 digit indicator.
Meter accuracy . . . . .	+/- 5% of true value
Recorder outputs . . . . .	Up to 6 voltage or current outputs per module
Relays . . . . .	4 alarm relays per module as standard
	A1 and A2 - level alarms
	A3 - Channel integrity alarm
	A4 - Reading invalid alarm
Buffered output . . . . .	BNC connector on front of panel, and rear of rack.

### Dimensions

Height . . . . .	128.8mm (3U)
Width . . . . .	70.7mm (14HP)

DS1033



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