



# QUADBEAM TECHNOLOGIES

~ Specialists in process suspended solids & turbidity ~

The MSSD53 transmitter is an advanced microprocessor based instrument for use with 'Quadbeam™' suspended solids and turbidity sensors.

The instrument is supplied as standard with typical entry level defaults in the configuration programme. Only the measurement range, probe signals, current output and alarm levels have to be entered for the unit to be commissioned.

However, with a simple menu driven operator interface the full potential of the MSSD53 can be used to quickly set up any measurement strategy.



## Configuration

Configuration data can be stored in one of two independent back up locations. The contents of either data store can be downloaded into working memory for fast reconfiguration.

## Security

A further enhancement is the multilevel security where day to day operator access can be limited to viewing data and settings only, while allowing full access to the instrument programmer.

## Online Monitoring

The MSSD53 has 'online' help facilities that consist of a series of text error messages. These are displayed when either the instrument configuration is incorrect or if the sensor is not reading a sensible value for the instrument set-up. In addition one relay can be configured as a system fault relay to bring to activate an alarm on a DCS/PLC when errors occur.

## Automatic Sensor Cleaning

For applications that require the automatic sensor cleaning option, then either one of the set point relays can be configured as the clean 'initiator'. The clean duration, recovery time and interval period are all programmable via the keypad. During the clean and recovery period it is possible for the instruments to go 'offline' which holds the current output and disables the control relays.

The clean cycle and 'offline' mode can also be initiated remotely via separate digital switch inputs.

## SPECIFICATIONS

### Measurement input:

Suspended solids or turbidity using Series 10, 20, 40 and 90 Quadbeam™ sensors.

### Measurement units:

NTU, FTU, ppm, mg/l, g/l, %, EBC or OD can be selected and displayed.

### Calibration:

Simple two point, or up to 5 point linearisations can be entered.

### Accuracy:

+/- 1%

### Linearity:

0.1% of range

### Repeatability:

0.1% of range

### Ambient operating range:

-20°C to +60°C

## MODEL NO. SELECTION GUIDE

### Basic Model No:

**MSSD53** - Surface mounted enclosure to Ip66.

### Output:

**R-X** - Two voltage free relays are standard on all models. Rated 5A at 250 Vac non inductive.

**R-I** - Fully isolated current output, software selectable to be either 0 to 20mA or 4 to 20mA into a maximum of 750 ohms.

### Supply voltage:

**U** - Universal AC supply 85 to 250 VAC, 50/60HZ 10VA.

**LV** - 18 to 36 Volt AC/DC.

Sample model no. MSSD53-R-I-U

Optional extras - SS pipe mounting kit to convert the wall mount to a 2" pipe mount

## MSSD53

Surface mounted housing manufactured from moulded polyurethane and rated to IP66.

Weight: Approx 1.5kg

EMC: Immunity to BS/EN500082-2. 1995  
Emmissions to BS/EN500081-1. 1994

