

# MCS-2S



## for Continuous SS & Desludging Control

The MCS-2S developed by MD Instruments Ltd, combines suspended solids measurement and sludge interface detection, is a LOW COST microprocessor based control unit.

The MCS-2S unit is intended for continuous operation to check the sludge blanket interface and produce the appropriate control signals for continuous desludging.

### Applications

Typical applications of the MCS-2S can be found in Primary, Secondary Settlement and Consolidation tanks.

### Measurement Principle

Pulsed Infra-Red light is absorbed by the suspended solids present in the sludge sample and received by a sensitive silicon photodiode. The detected signal is conditioned, to eliminate the presence of ambient light, and fed to the microprocessor for further analysis and display to provide a direct solids read-out in mg/l. (Ultrasonic sensor heads can be supplied on request).

## Specifications

Parameter	Optical	Ultrasonic
Range:	* 0 - 9,999 mg/l	0 - 15.0 % *
Sensitivity:	10 mg/l	0.1 %
Pathlength:	10 mm	250 mm
Cable Length:	Standard 6 metre (18ft)	
Power	110/240AC 50/60Hz	
Current Output	programmable 0/4 - 20 mA	<500 ohm
Relay Output	Up to 2 miniature relays	
Digital Interface	RS232C	
Power Consumption:	< 5VA	
Housing:	Polycarbonate, IP65	
Size:	(Instrument Case) 280 x 180 x 130 mm with transparent cover.	
Weight:	(Instrument Case) 1.0Kg	

\* different ranges can be provided (enquire)

## Features

- \* Microprocessor-based dedicated Sludge Blanket Detection Unit
- \* Operational compatibility with MD-products
- \* Menu driven instructions via 2x16 Dot Matrix Display
- \* High Repeatability and Reliability
- \* Simple to use and calibrate via front panel keypad
- \* Direct Suspended Solids (mg/l) readout
- \* Permanent storage of calibration settings
- \* High and Low alarm signals (programmable threshold limits)
- \* Radio Telemetry Link applications (optional)
- \* State-of-the-Art SMD electronics
- \* Can accept up to two sensor heads
- \* Up to two current outputs (programmable)
- \* RS232C Interface output
- \* Up to two miniature relay outputs

In the interests of improving and updating its equipment, MD Instruments Ltd reserves the right to alter the specifications to equipment at any time.

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