

MD Instruments Ltd

WQM-16S

**Continuous Mixed Liquor Solids
Measurement in Eight Activated Sludge Plants**

The WQM-16S developed by MD Instruments Ltd, combining suspended solids measurement and temperature measurement, is a low cost microprocessor based monitoring unit. The WQM-16S unit is intended for continuous operation to monitor the mixed liquor suspended solids and produce the appropriate control signals.

Applications

Typical applications of the WQM-16S can be found in activated sludge plants.

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	Temp
Range: (SH2 Head)	0 - 9,999 mg/l	0 - 50 C *
Sensitivity:	10 mg/l	0.2 C
Pathlength	10mm	
Cable Length:	Standard 6 metre (18ft)	
Power:	110/240AC	50/60Hz
Current Output:	Four outputs	0/4 - 20 mA <500 ohm
Relay Output:	Up to 16 miniature relays	(optional)
Digital Interface:	RS232C	(Optional)
Power Consumption:	Min 5VA	Max. 30VA
Housing:	ABS, IP65	
Size: (Instrument Case)	380 x 280 x 180 mm	
Weight: (Instrument Case)	1.5Kg	

* Special sensor head can be manufactured as required.

Features

- * Microprocessor based dedicated mixed liquor solids unit.
- * Operational compatibility with MD-products.
- * Menu driven instructions via 2x16 Dot Matrix Display.
- * High Repeatability and Reliability.
- * Simple to use and calibrate - Low Cost of Ownership.
- * Direct mixed liquor suspended solids (mg/l) readout.
- * Permanent storage of calibration settings.
- * High and Low alarm signals (frequency or voltage)
- * Radio Telemetry Link applications (optional).
- * State-of-the-Art SMD electronics.
- * Can accept up to 8 various types of sensors.
- * Up to 8 current outputs .
- * RS232C Interface output .
- * Up to 16 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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