

MD Instruments Ltd

MD-6

For Activated Sludge Plant Applications

The MD-6 developed by MD Instruments Ltd, combines Mixed Liquor Suspended Solids (MLSS), Dissolved Oxygen (DO) and Temperature (Temp) measurements, is a low cost portable microprocessor based battery operated meter.

The MD-6 meter is intended for use during routine daily inspection or trouble shooting in the wastewater plant. It is an ideal compliment to the continuous operating MLSS and DO monitors installed in activated sludge plants.

Applications

Typical applications of the MD-6 can be found in Activated Sludge, Return Activated Sludge plants.

Measurement Principle

Pulsed Infra-Red light is absorbed by the suspended solids present in the activated 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 MLSS read-out in mg/l.

The DO measurement is based on the Clarke cell, consisting of a Silver anode and a gold disc cathode. The cell chamber is filled with KCL electrolyte which is active throughout the cell life and supported with a permeable (to gases) polythene membrane. The DO probe is designed of rugged construction to incorporate the replaceable membrane. The cell is temperature compensated and displayed in mg/l.

Specifications

Parameter	Optical	DO	Temp.
Range (SHas Head)	* 0 - 6000 mg/l	0-10mg/l	0-40 o C
Sensitivity	1 mg/l	0-.02mg/l	0.2 o C
Method	Absorption	Clake Cell	
Cable Length	Standard 5 metre (16ft)		
Power	Two Alkaline PP3 9V batteries (40 hours battery life under continuous operation) (Mains Power requirement is optional)		
Digital Interface	RS232C (Includes MD_SOFT package for IBM-PC) (Optional)		
Size	(Instrument Case) 180 x 95 x 40 mm		
Weight	(Instrument Case) 350g (Sensor Head) 1.0Kg		



Features

- * True Hand-Held dedicated MLSS, DO & Temp. meter
- * Operational compatibility with MD-series meters
- * Menu driven instructions via 2x16 Dot Matrix Display
- * High Repeatability and Reliability
- * Simple to use and calibrate via front panel keypad
- * Direct MLSS, DO (mg/l) and temperature (o C) readouts
- * Permanent storage of calibration settings
- * Data Logging facilities
- * Ambient light compensation
- * State-of-the-Art SMD electronics
- * RS232C Interface output (optional)
- * Can be used for up to 5 Treatment Works
- * Mains Power supply adaptor (optional)

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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Unit 8, Newburn Centre, Dean Street, Swindon, SN1 5EW
Tel: +44 (0) 1793 433595 Fax: +44 (0) 1793 644244
sales@mdinstruments.co.uk