

Instrument

OSLIM optical silt measuring instrument

The OSLIM optical silt measuring system is an instrument to measure concentrations of suspended particles. The measuring principle is based on the attenuation of the intensity of light passing through the measuring volume. The light is absorbed and scattered on suspended silt particles. The output is presented as an analogue voltage.

The OSLIM system consists of a probe and a control unit. The control unit provides the system with power, controls and switches for setting the zero, span, out-of-range detection and analogue output. The particle suspension is to pass the OSLIM probe, e.g. by pumping.

Applications

Fields of application for this instrument are:

- Analysis of suspended sediment samples
- Monitoring of suspended matter in liquids

Features

- Two probe types, 1.6 and 5.0 mm (ID) tubing
- Easy to clean probe parts
- Exchangeable transmitter and receiver
- · Electronics insulated from medium
- Immersible version available



OSLIM probe



OSLIM control unit

Deltares

Technical specifications of the probe (standard)

| Materials | brassglass tubing |
|------------|---|
| Dimensions | 1.6 mm probe: 25 x 80 mm (d x l) 5.0 mm probe: 30 x 100 mm (d x l) cable: 2.5 m |
| Weigth | 1.6 mm probe: 0.15 kg5.0 mm probe: 0.25 kg |

Technical specifications of the control unit

| Housing | the OSLIM control unit is housed in an IP60 protected aluminum box with separate mains adapter |
|----------------|--|
| Range | 1.6 mm type and pump-flow > 1 cm³/s: 5, 10, 20 and 50 g/l (China clay) 5.0 mm type and pump-flow > 3 cm³/s: 1, 2, 5 and 10 g/l (China clay) |
| Zero-stability | < 0.4%/24 hours of full scale |
| Response | 20 ms |
| Controls | range selectorspan and zero settingoverload indicator |
| Output | analogue voltage, 0-10 VDC |
| Connectors | output (BNC) probe socket mains socket (24 VAC) |
| Mains adapter | 230 VAC/24 VAC |
| Dimensions | 120 x 120 x 100 mm |
| Weight | 1.9 kg |

More information: instrumentation@deltares.nl

Deltares

Innovative solutions for water and subsurface issues Rotterdamseweg 185, P.O. Box 177 2600 MH Delft, The Netherlands T +31 (0)88 355 82 73 F +31 (0)88 335 85 82