## Deltares <br> Enabling Delta Life



## 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


OSLIM probe

- Exchangeable transmitter and receiver
- Electronics insulated from medium
- Immersible version available


OSLIM control unit

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Technical specifications of the probe (standard)

| Materials | - brass |
| :--- | :--- |
|  | - glass tubing |
| Dimensions | - 1.6 mm probe: $25 \times 80 \mathrm{~mm}(\mathrm{~d} \times \mathrm{I})$ |
|  | - 5.0 mm probe: $30 \times 100 \mathrm{~mm}(\mathrm{~d} \mathrm{x} \mathrm{I})$ |
|  | eable: 2.5 m |
| Weigth | - 1.6 mm probe: 0.15 kg |
|  | - 5.0 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 $>1 \mathrm{~cm}^{3} / \mathrm{s}: 5,10$, 20 and $50 \mathrm{~g} / \mathrm{l}$ (China clay) <br> - 5.0 mm type and pump-flow $>3 \mathrm{~cm}^{3} / \mathrm{s}$ : 1,2 , 5 and $10 \mathrm{~g} / \mathrm{l}$ (China clay) |
| Zero-stability | $<0.4 \% / 24$ hours of full scale |
| Response | 20 ms |
| Controls | - range selector <br> - span and zero setting <br> - overload indicator |
| Output | analogue voltage, 0-10 VDC |
| Connectors | - output (BNC) <br> - probe socket <br> - mains socket (24 VAC) |
| Mains adapter | 230 VAC/24 VAC |
| Dimensions | $120 \times 120 \times 100 \mathrm{~mm}$ |
| Weight | 1.9 kg |

More information:
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