

# OBS-3A<sup>®</sup>

*Sediment Instruments for all Environments*

## FEATURES

- Measures sediment concentrations to 5000 mg/l & turbidity to 4000 NTU
- Log pressure, temperature, and salinity
- Records 7000 scans of data with programmable sampling scheme
- Compact package - 75 mm (3") by 422 mm (16.6")
- Depth limit - 300 m

## APPLICATIONS

- Record turbidity at remote sites
- Monitor dredging & mining operations
- Wastewater and effluent measurements
- Sediment transport research
- River and stream gauging
- Permit compliance
- Control settling ponds

## DESCRIPTION

The OBS-3A combines our field-proven optical backscatter sensor for measuring suspended solids and turbidity (U.S. Patent No. 4,841,157) with pressure, temperature, and conductivity sensors in a recording instrument which features nearly linear response to particle concentrations spanning more than three orders of magnitude. An OBS-3A can log one scan of data per hour for nine months on lithium batteries. Easy-to-use, software that runs in Windows<sup>®</sup> is provided with the instrument.

## OPERATION

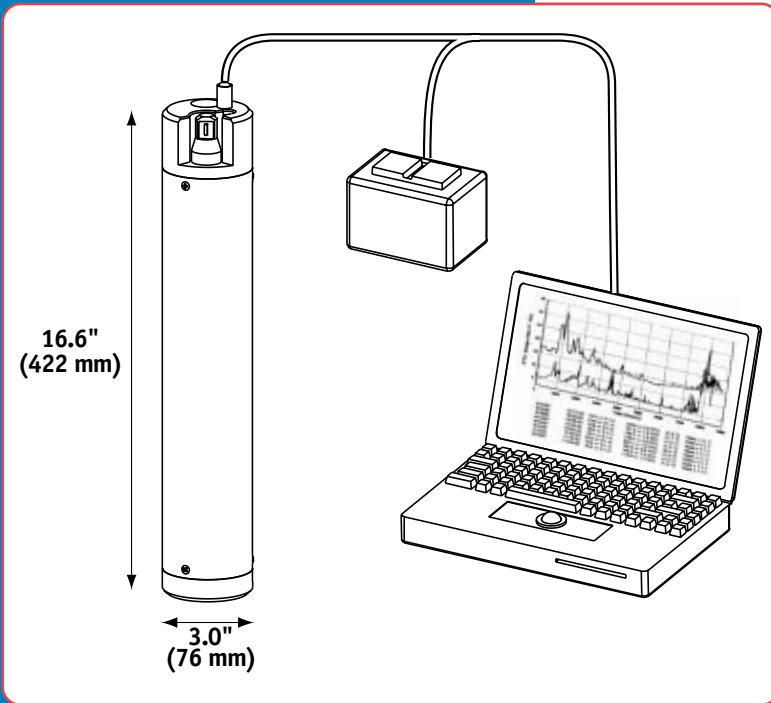
Users can test and calibrate sensors, program sampling schedules, and select a sampling mode with a PC. When surveying, data are displayed in real time as they are recorded. During autonomous operation, the unit records ASCII data in RAM which are downloaded for post processing and graphical display with spreadsheet programs such as EXCEL or LOTUS.

Innovative logger of suspended solids, pressure, temperature, and salinity.



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# OBS-3A<sup>®</sup>



## RANGES

Turbidity		0 to 4000 NTU
Concentration <sup>1</sup>	Mud	0 to 5000 mg/l
	Sand	0 to 50 g/l
Pressure		0 to 200 dBar <sup>2</sup>
Temperature		0 - 40° C
Conductivity		0 - 65 mS/cm

<sup>1</sup> Range depends on sediment type.

<sup>2</sup> 1 dBar is equivalent to about 1 meter of water.

## ACCURACY

Turbidity <sup>3</sup>	0-100	+/- 0.1 NTU
	100 - 500	+/- 1 NTU
	500 - 4000	+/- 5 NTU
Concentration <sup>3</sup>	Mud	+/- 0.1 mg/l
	Sand	+/- 0.1 g/l

Pressure 0.2% of f.s.<sup>4</sup>

Temperature	0.05° C
Conductivity	0.65 mS/cm

<sup>3</sup> With 2nd-order polynomial. <sup>4</sup> f.s. = 50, 100, or 200 dBar

## OTHER DATA

PC interface	RS-232 / 19.2 kbps
Maximum data rate	10 Hz
IR Wave length	875 nm
Maximum depth	300 m
Drift	< 5% / year

## ORDERING INFORMATION

- Consult the manufacturer about your application.
- Specify cable length.
- Choose sensor options for application.

## PAYMENT AND SHIPPING TERMS

VISA and Master Cards accepted. COD, prepay, or LC without credit approval; Net 30 Days otherwise. F.O.B. Port Townsend, Washington, USA

Represented by:



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