

# turbidity sensor model 2600



## Features

- optical backscatter technology
- unique Lens Protection Device — keeps optics clean
- linearity better than 2% of FS
- large dynamic range 0 to 2000 NTU
- excellent temperature stability
- low power compact design with infra-red optics

## Applications

- River and stream turbidity data logging
- Suspended solids studies
- Dam, tank and reservoir water quality monitoring
- Sediment transportation studies

The ES&S 2600 Turbidity Sensor is a miniature backscatter nephelometer that detects turbidity and suspended solids in water. It responds linearly to turbidity levels spanning more than three decades, from potable water to sediment-laden rivers.

An innovative Lens Protection Device (LPD) included in the 2600 design covers the optical lens between readings and greatly reduce lens contamination. Substantially less frequent maintenance is required.

The 2600 is factory calibrated in Nephelometric Turbidity Units (NTU) to a range specified on order. The electrical output is an industry standard 4-20mA signal.

Rugged and simple in design, now reliable turbidity measurement can be undertaken without a large investment



MET



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## Technical Specifications

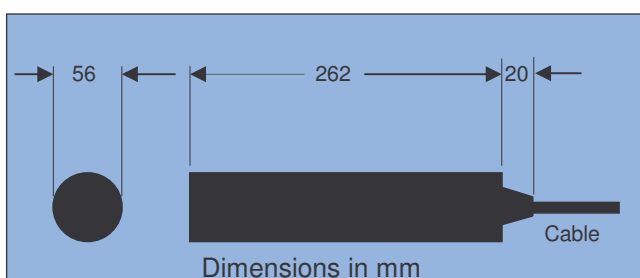
<b>Range</b>	Standard choice of 0 to 250, 500, 1000 and 2000 NTU. Other ranges are available.	<b>Accuracy</b>	Linearity / hysteresis +/-2% of full scale Temperature <0.05%/°C of FS over the range 0 to 30°C.
<b>Zero &amp; Full Scale Setting</b>	+/-0.05% of full scale setting	<b>Response Time</b>	2 seconds to full accuracy
<b>Type</b>	Optical backscatter, 880nm	<b>Output Options</b>	Analogue 4-20mA current loop (3 wire current loop, 600ohms max)
<b>Resolution</b>	10-15 volts unregulated 500mA or 0.3mAh per reading	<b>Surge Protection</b>	Secondary surge protection—can absorb 0.6J of energy

## Operating Principle

The ES&S 2600 Turbidity Sensor transmits a divergent infrared light beam into the water. The proportion of light reflected by suspended solids is measured by the sensor and output as a proportional 4-20mA signal. Sophisticated temperature compensation and ambient light filtering are performed to provide an accurate and stable output.

When the sensor is powered by switched 12 volts, the Lens Protection Device is automatically opened to expose the optical lens to the water.

The lens is covered ALL OTHER TIMES. Typically, the lens is exposed for less than 1% of total exposure time.



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