

# Seapoint Turbidity Meter



## Features

- Very low power requirements
- Small size
- 6000 meters depth capability
- Optically confined sensing volume
- Insensitive to ambient light
- Linear output over more than 5 decades
- Four programmable sensitivity options
- Optical feedback compensates for temperature coefficient and aging of optical components
- Very low offset voltage does not require adjustment
- Interfaces easily with data acquisition systems
- Rugged, corrosion-free materials
- Pin compatible with Seapoint fluorimeters

## Applications

- Pollution Monitoring
- Water and Wastewater Quality
- Sediment Transport
- Ocean Profiling
- River and Stream Monitoring

## Description

The Seapoint Turbidity Meter detects light scattered by particles suspended in water, generating an output voltage proportional to turbidity or suspended solids. The low power requirements make it ideal for applications where battery drain is a concern. Sensitivity is selected by two digital lines that can be hard-wired or microprocessor controlled, thereby choosing the appropriate range and resolution for measurement of extremely clean to very turbid waters. The offset voltage is within 1 mV of zero and requires no adjustment across gains. The unique optical design confines the sensing volume to within 5 cm of the sensor allowing near-bottom measurements and minimizing errant reflections in restricted spaces. The sensor is easily interfaced with data acquisition packages. Custom configurations are available.

## Ordering Information

Part number	Description
STM/AG306	Connector version, Impulse AG306 connector
STM/MCBH6M(**)	Connector version. MCBH6M connector
** Ti , SS (316), or Br (brass) connector shell	
STM/bh	Bulkhead mounted version, 24AWG leads

*Please contact us for other connector options and sensor customizations*



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## Specifications

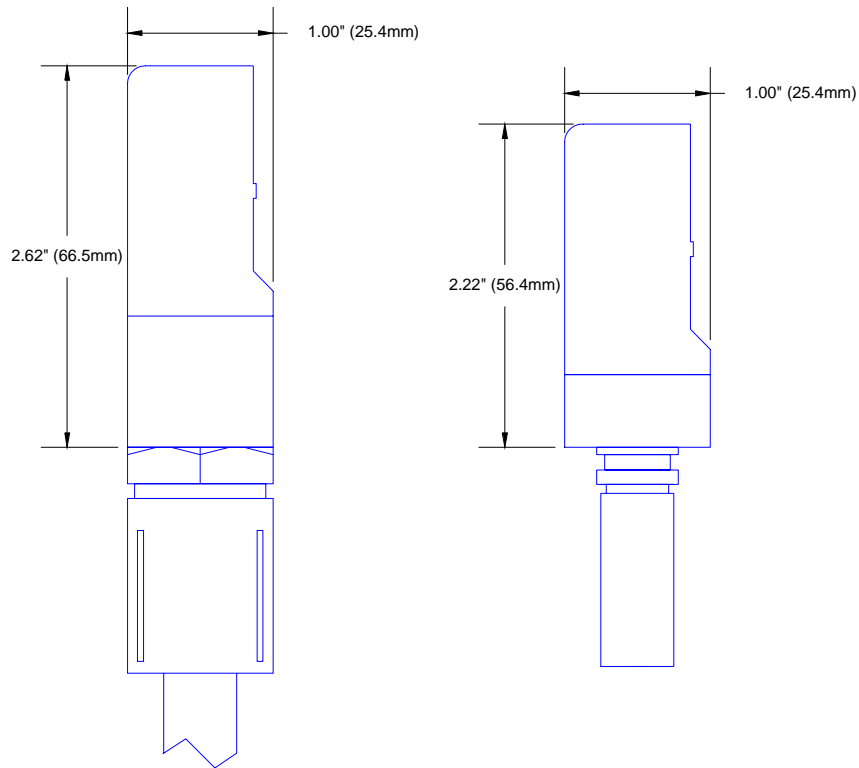
- Power Requirements: 7-20 VDC, 3 mA avg, 5 mA pk
- Output: 0-5.0 VDC
- Output Time Constant: 0.1 sec
- Output Impedance: 1000 ohms
- RMS Noise: < 1 mV
- Power-up Transient Period: < 1 sec
- Light Source Wavelength: 880 nm
- Sensing Distance (from windows): < 5 cm (approx.)
- Linearity:  $\pm 2\%$  deviation 0-1250 FTU;  $\pm 5\%$  deviation 0-1600 FTU
- Sensitivity/Range:

Gain	Sensitivity (mV/FTU)	Range (FTU)
100x	200	25
20x	40	125
5x	10	500
1x	2	4000*

(\*\* output is non-linear above 1250 FTU)

- Temperature Coefficient: < 0.05%/°C
- Depth Capability: 6000 m (19,685 ft)
- Weight (dry): 80g (3 oz)
- Operating Temperature: 0°C to 65°C (32°F to 149°F)
- Material: rigid polyurethane, epoxy

## Dimensions



Connector versions

Bulkhead version



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