Seapoint Turbidity Meter

Features

wVery low power requirements

wSmall size

w6000 m depth capability

wOptically confined sensing volume

wInsensitive to ambient light

wLinear output over more than 5 decades

wFour programmable sensitivity options

wOptical feedback compensates for temperature coefficient and aging of optical components

wVery low offset voltage does not require adjustment

wInterfaces easily with data acquisition systems

wRugged, corrosion-free materials

wPin compatible with Seapoint Chlorophyll Fluorometer

Applications

wPollution Monitoring

wWater and Wastewater Quality

wSediment Transport

wOcean Profiling

wRiver 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 which 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; a 5 ft pigtail is supplied. Custom configurations are available.

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Specifications

wPower Requirements:	7-20 VDC, 3.5 mA avg, 6 mA pk
wOutput	0-5.0 VDC
wOutput Time Constant	0.1 sec
wRMS Noise	< 1 mV
wPower-up Transient Period	< 1 sec
wLight Source Wavelength	880 nm
wSensing Distance (from windows)	< 5 cm (approx.)
wLinearity	< 2% deviation 0-750 FTU
wSensitivity/Range	

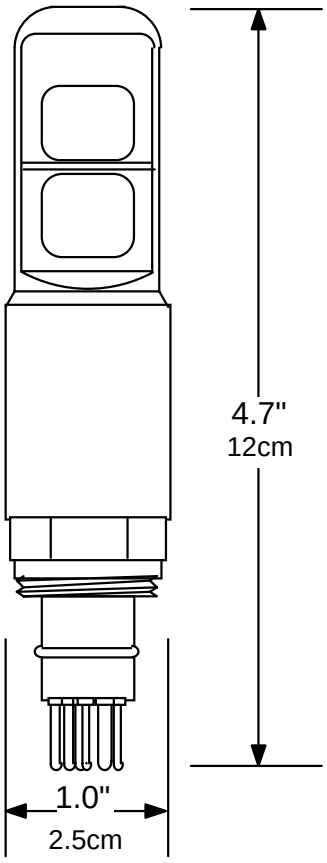
Gain	Sensitivity (mV/FTU)	Range (FTU)
100x	200	25
20x	40	125
5x	10	500
1x	2	**

(** output is non-linear above 750 FTU)

wTemperature Coefficient	< 0.05%/°C
wDepth Capability	6000 m (19,685 ft)
wWeight (dry)	86 g (3.0 oz)
wOperating Temperature	0°C to 65°C (32°F to 149°F)
wMaterial	ABS plastic, epoxy
wUnderwater Connector	Impulse AG-306/206 (others available on request)

Dimensions

Connector Version



Bulkhead Version