



Side-Scatter Measurements with ISO 7027 Compliance

Overview

The ClariVue™10 is an ISO 7027 compliant, submersible, side-scatter turbidity sensor. It outputs an SDI-12, digitally processed signal that all modern Campbell Scientific data

loggers can measure. The side-scatter turbidity measurement can be used as a surrogate for suspended sediment concentration in aquatic ecosystems.

Benefits and Features

- › Measures suspended solids and turbidity for up to 4000 FNUs
- › Provides a compact, low-power probe that is field proven
- › Compatible with modern Campbell Scientific data loggers
- › Accurate and rugged

Technical Description

The ClariVue 10 is an ISO 7027 compliant, side-scatter turbidity sensor. It returns data via SDI-12 to a data logger. Turbidity is a common surrogate measurement for suspended sediment concentration in aquatic systems. The ClariVue 10 is designed to operate in fresh and saline

environments. It will require regular maintenance to keep the optical window clean in high bio-fouling environments. The face of the sensor is made from copper to slow biological growth over the optical windows.

Specifications

Standards	Meets ISO 7027-1:2016 (side scatter) standard for turbidity measurements.	Accuracy	±2% or 0.5 FNU (whichever is greater)
Compliance	SDI-12 v1.4 compliant	Power Requirements	9.6 to 18 Vdc
Operating Temperature Range	-2° to +40°C	Measurement Time	9 s (with an M! instruction)
Measurement Range	0 to 4000 FNU	Housing Material	Delrin® plastic
Resolution	0.2 FNU	Head Material	Marine-grade bronze
		Optics	Sapphire lens
		Connector Descriptions	Marine-grade bronze, gold-plated pins

Connector Description	Bronze 3-pin wet-mate
Cable Type	3-conductor, polyurethane jacket with water block
Optical Assembly	Sealed with double O-rings
Temperature Accuracy	±0.2°C
Maximum Submersion Depth	30.48 m (100 ft) for the plastic

Diameter	30.1 mm (1.185 in.)
Length	166 mm (6.54 in.)
Weight	158.76 g (0.35 lb)

Power Consumption

Quiescent	< 300 µA
Measurement	< 35 mA

For comprehensive details, visit: www.campbellsci.eu/clarivue10 



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