



# 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.
Compliance	SDI-12 v1.4 compliant
Operating Temperature Range	-2° to +40°C
Measurement Range	0 to 4000 FNU
Resolution	0.2 FNU

Accuracy	±2% or 0.5 FNU (whichever is greater)
Power Requirements	9.6 to 18 Vdc
Measurement Time	9 s (with an M! instruction)
Housing Material	Delrin® plastic
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](http://www.campbellsci.eu/clarivue10) 



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