PRODUCT



ClariVue10 ISO 7027 Compliant, Side-Scatter Turbidity Sensor



Side-Scatter Measurements with ISO 7027 Compliance

Overview

The ClariVue™10 is an ISO 7027 compliant, submersible, sidescatter 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

Detailed 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 | $\pm 2\%$ 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 |

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

| 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 \ | |

| Quiescent | < 300 μΑ |
|-------------|----------|
| Measurement | < 35 mA |

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