LISST-AOBS

SUPER-TURBIDITY SENSOR

- Suspended Sediment Concentration
 - Total Suspended Solids
 - Turbidity

The LISST-AOBS is a simple, low-cost Super-Turbidity sensor to measure suspended sediment concentration (SSC). Super-Turbidity is a new technology (Patent Pending) developed by Sequoia Scientific, Inc. It involves pairing a LISST-ABS with a turbidity sensor using a weight factor, which results in a single, combined output from the two sensors. Once paired, the LISST-AOBS retains near-constant calibration for SSC over a wide grain-size range. The LISST-AOBS Super-Turbidity sensor is supplied by Sequoia as an integrated and paired turbidity and acoustic sensor with a variety of cabling and data logger options.



Tools and Research for Particle Intelligence

FEATURES

- · Paired acoustic and optical technologies
- Near-constant calibration within a factor of two for grain-sizes from 1 μm 500 μm
- Complete, integrated package pairing a LISST-ABS and a Turner Designs Turbidity Plus™
- Includes Y-cable providing power and integrated SDI-12 communication to and from both sensors
- Tolerant to biofouling (LISST-ABS); integrated wiper (Turbidity Plus™)

SPECIFICATIONS (subject to change without notice)

Parameters Measured

- Suspended Sediment Concentration (SSC; mg/l)
- Turbidity (V)

Technology

- Combined 850 nm optical turbidity sensor and 8 MHz acoustic backscatter sensor
- Optics per ISO 7027 turbidity technique
- · Mechanical wiper for turbidity sensor
- · SDI-12 output
- Sample volume (acoustic; Ø × L): 10 mm × 15 mm @ 55 mm from transducer

Operating Concentration Range

- 1 mg·L⁻¹ to 30,000 mg·L⁻¹ (LISST-ABS) or
- 0 NTU to 3,000 NTU (Turbidity PlusTM)

(NOTE: Turbidity Plus Sensors are not factory-calibrated)

Mechanical and Electrical

- Dimensions [H × W × L]: 5.72 cm × 10.16 cm × 33.65 cm (2.25" × 4" × 13.25")
- Weight, air: 0.7 kg (1.54 lbs)
- Transducer Ø: 8 mm ceramic
- Power supply: 9 VDC to 15 VDC (12 VDC nominal)
- · Current drain: 200 mA
- · Depth rating: 100 m



