

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.



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; $\text{Ø} \times \text{L}$): 10 mm \times 15 mm @ 55 mm from transducer

Operating Concentration Range

- 1 $\text{mg}\cdot\text{L}^{-1}$ to 30,000 $\text{mg}\cdot\text{L}^{-1}$ (LISST-ABS) or
 - 0 NTU to 3,000 NTU (Turbidity Plus™)
- (NOTE: Turbidity Plus Sensors are not factory-calibrated)

Mechanical and Electrical

- Dimensions [H \times W \times L]: 5.72 cm \times 10.16 cm \times 33.65 cm (2.25" \times 4" \times 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

