# LISST-AOBS

## Super-Turbidity Sensor

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.





# **LISST-AOBS**

## **Super-Turbidity Sensor**

## **FEATURES**

- Paired acoustic and optical technologies
- Near-constant calibration within a factor of two for grain-sizes from 1 500 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)
- NTU

### **Concentration range**

- 1 30,000 mg/l (LISST-ABS) or
- $0 3,000 \text{ NTU (Turbidity Plus}^{TM})$

### **Technology**

- Combined optical and 8 MHz acoustic backscatter
- Optics per ISO 7027 Turbidity Technique
- Mechanical wiper for optical backscatter
- SDI-12 output
- Sample volume (acoustic): 10 mmØ x 15 mmL @ 55 mm from transducer

#### **Mechanical and Electrical**

- 5.72 cm (2.25") H x 10.16 cm (4") W x 33.65 cm (13.25") L
- Weight 0.7 kg (1.54 lb) in air
- Transducer: 8 mmØ ceramic
- Wavelength: 850 nm
- Power supply: 9-15 VDC (12 VDC nominal); 200 mA
- Depth rating: 100 m
- Material: ABS plastic and Delrin







