

LISST-SL2

STREAMLINED ISOKINETIC SEDIMENT SENSOR

- **Particle Size Distribution**
- **Sediment Concentration**
 - **Current Velocity**
 - **Sediment Flux**
 - **Depth**
 - **Temperature**

The LISST-SL2 is designed exclusively for river sediment monitoring. The sensor is deployed from a bridge or boat with a small winch. A topside box with rechargeable batteries provides power to the sensor. The LISST-SL2 then returns real-time data of all parameters. Data are transmitted from the topside box to a PC or tablet via Bluetooth for immediate processing and display.



FEATURES

- Small angle forward scattering laser diffraction technology
- Measures particle size distribution, sediment concentration, current velocity, depth, temperature
- Iso-kinetic sampling using feedback-controlled pump operation
- 2-wire communication protocol consistent with USGS B-reel use
- Topside box with rechargeable batteries for LISST-SL2 power and Bluetooth for real-time data transfer to PC / tablet
- Data processed and displayed in real-time on PC / tablet
- Software delivers point-integrated and depth-integrated sediment data
- Change units from ft and ft·s⁻¹ to m and m·s⁻¹

SPECIFICATIONS subject to change without notice

Parameters Measured

- Particle size and concentration in 36 size ranges.
- Depth @ 0.02 m resolution.
- Velocity @ 0.03 m·s⁻¹ resolution.
- Water temperature @ 0.1 °C resolution.

Measuring Ranges

- Sediment concentration from ~10 mg·L⁻¹ to 44,000 mg·L⁻¹ for 120 µm particles. NOTE: The actual concentration limits are highly grain-size dependent
- Particle size from 1 µm to 500 µm
- Depth from 0.15 m to 30 m
- Velocity from 0 m·s⁻¹ to 3.5 m·s⁻¹
- Iso-kinetic control from 0.5 m·s⁻¹ to 3.5 m·s⁻¹
- Water temperature from 0 °C to 25 °C

Mechanical and Electrical

- Dimensions: LISST-SL2 [Ø × L]: 17 cm × 87 cm (6.7" × 34.2")
- Weight: LISST-SL2 [air / submerged]: 19.5 kg / 8.2 kg (43 lbs / 18 lbs)
- Dimensions: topside box [H × L × W]: 41.7 cm × 33.4 cm × 22.1 cm (16.4" × 13.2" × 8.7")
- Weight; topside box: 8.6 kg (19 lbs)
- Rechargeable battery life: 6 hours continuous sampling



LISST-SL2 with Topside Control Box and USGS B-reel
(computer & reel not included)



LISST-SL2 Topside Box