Turbidity Sensor 3612 measures scattered light. This measurement is known to have a good correlation to the amount of suspended matter in water and can be used to monitor sediment, algae, or particle pollution.

The sensor head is cylindrically shaped, molded in Durotong and installed in a foot of titanium. The sensor is furnished with a cable and a 5-pin plug for connection to the Aanderaa recorder. Two light emitting diodes and one photo diode point towards a common center at an angle of 15°. The photo diode is furnished with a daylight filter. The electronic circuitry is molded in the sensor housing.

When a measurement is taken the IR light emitting diode is switched on for half a second and sends a light beam into the water. If the surrounding water is clean and clear the photo diode will not detect this light. On the other hand, if the water is contaminated, scattered light from particles in the water will be sensed by the photo diode and a photocurrent will flow in the diode. This current gives a signal that signifies the amount of light that has been scattered. The signal is independent of the ambient light intensity. The output is in the standard Aanderaa SR-10 format.

The sensor is designed to avoid marine fouling. It is important to keep the plastic surfaces covering the IR-LED and the photo diode clean to ensure accurate measurements. When measuring in air, the sensor should read 0.1 NTU.
Specifications 3612

Turbidity range:
- 3612: 0 - 20 NTU
- 3612A: 0 - 100 NTU
- 3612B: 0 - 500 NTU
- 3612S: .................. NTU
(NTU=Nephelometric Turbidity Unit)

Accuracy: 2% of full scale.

Wavelength: 880nm

Resolution: 0.1 % of full scale

Angle of measured diffused radiation: 30°

Output signal: SR10

Time constant(63%): 30 sec

Depth capability: 2000m

Current consumption: 150µA average when read every 10 min

Weight:
- In air 385g (13.6oz)
- In water 196g (7oz)

Packing: Cardboard box

Gross weight: 425 grams (15oz)

Materials: Durotong, Acrylic, Stainless steel 316L

Electrical Connection: 5-pin plug

Specifications subject to change without prior notice.