> TURBIDITY SENSOR

Tethys turbidity sensor is based on nephelometric method (ISO 7027 - EN 27027). A light beam from a laser diode is sent to the sample through an optical lens. The 90 degree scattered light by suspended particles is collected by a photo detector and converted to an electric signal proportional to the turbidity of the sample.

The sensor uses a 650 nm red laser light or on request a 860 nm infrared laser light so that the measuring is not affected by the color of the sample (ISO7027). It is suitable for measurement of turbidity in drinking water and aquaculture as well as for the outlet of municipal or industrial water treatment plants.

A integrated bubble trap avoid the effect of bubbles on the measurement.

The sensor can be easily opened for calibration on a formazine solution. A valve at the bottom allows to empty the cylinder during calibration operations or for a manual cleaning.

The turbidity sensor must be connected to the EL200 controller for display, calibration and measurement transmission though RS232/RS485 under Modbus protocol or by analog 4-20 mA output.



specifications

Measurement method Nephelometric

Measurement range: 0 - 100 NTU (other ranges on request)

Detection limit: 0.015 NTU

Repeatability: +/- 0.01 NTU

Accuracy: +/-2% or +/-0.015 NTU whichever is greater up to 20 NTU, +/-5% above 20 NTU

Detector: 90° scattered light detector

Light source: visible laser diode (or infrared laser diode on request), lifetime > 5 years

Bubble Trap: integrated Capacity: 250 ml

Inlet/outlet fittings: for 9.6 mm external diameter plastic tubing

Ambient temperature range: -5 to 60 °C

Working pressure: 6 Bar maximum at 25 °C

Body material: POM

Wet material: POM, PP, FKM, quartz

Sensor cable Length: 3 meters (to EL200 controller)
Associated controller: EL200 (to order separately)

Mounting: on wall by 4 screws

Sensor warrantee: 1 Year

