

Model TU8325 - TU8525 Turbidity Probes.



- * **4-20mA or RS485 Output**
- * **Optical Device**
- * **Low Maintenance**
- * **Output in NTU.**
- * **Not affected by sample colour**
- * **Infrared light source.**
- * **Submersible Assembly.**
- * **Inline Assembly.**
- * **Nozel for AutoClean (TU8325)**

These unique probes have been designed to measure turbidity based on nephelometric method. The probes are available for submersible and in-pipe installations.

The measuring system consists of:

- Infrared light source,
- 90 degree scattered light detector,
- Detector of the clean lens status,
- 2-wire 4/20 mA analog output,
- RS 485 digital output
- Nozzle for the autoclean by external pressured air (TU 8325 only).

Technical Specifications

Scale: 0 - 4.000 / 0 - 40.00 / 0 - 400.0 NTU

Sensitivity: 70 / 130 %

Zero NTU: ± 0.400 NTU all scales.

Power supply: 9/36 Vdc

Analog output: 4/20 mA isolated current Loop

Load: 600 Ω max. at 24 Vdc

Digital output: RS 485

Room Temperature: -5 - 50°C

Max Pressure: 1 bar at 25°C (TU8325);
6 bar at 25°C (TU8525)

Autoclean: by pressure air 3 bar max (TU 8325)

Dimensions TU 8325: L=165 mm total, D= 60 mm

Dimensions TU 8525: L=143 mm total, D= 40 mm

Body: PVC

Cable: 10 m (100 m max.)

Protection: IP 68



Through commands from the Personal Computer hyperterminal, the serial interface allows the measuring and check signals transmission, the scale selection, the analogue or digital operating mode selection, the zero and sensitivity calibration.

Thanks to its 4/20 mA isolated output, the probe can be directly connected to a PLC, data logger or one of the following instruments:- BC 7335, BC 7635, BC 7635.010, BC 7687 or BC 6587 each of which provide the power, the measuring readout, 2 set-points, alarm relay and the holding function for an external cleaning cycle.

The most common applications of this probe include: water quality monitoring, municipal and industrial water treatment and aquaculture.

The turbidity follows the back nephelometric method (ISO 7027 – EN 27027).

A light beam is sent to the sample through an optical lens.

The 90 degree scattered light by suspended particle is collected by the probe through a second lens and it is converted in an electric signal proportional to the turbidity of the sample.

The probe uses an infrared light and the measuring is not affected by the colour of the sample.