

TURBIDITY METER

PCE-TUM 150



- » **Easy cleaning and straightforward maintenance**
- » **Quick and uncomplicated installation**
- » **Interface: Modbus RS485**
- » **Continuous measurement**
- » **Protection class IP65**
- » **Suitable for fresh water**

The Turbidity Meter is used for continuous online monitoring of water turbidity in drinking water systems, filtration systems and direct drinking water systems. It is used there for reliable monitoring of water quality after treatment and filtration processes.

The Turbidity Meter operates according to the nephelometric 90° scattered light method. A tungsten lamp sends light into the water sample, which is scattered by suspended matter. A silicon sensor detects the scattered light at a 90° angle and determines the turbidity in NTU.

The Turbidity Meter has a measuring range of 0.001 ... 100 NTU and enables high-resolution detection of even very low turbidity values. Measurement is carried out continuously in online mode and the measured values are transmitted cyclically to an external evaluation system via the RS485 Modbus interface.

Calibration of the Turbidity Meter is software-assisted via the RS485/Modbus interface. First, the zero point is set using pure water (0 NTU) and then a standard solution is used for adjustment.

The Turbidity Meter is characterized by repeatability of $\pm 2\%$ and protection rating IP65. It is designed for easy installation and low maintenance requirements. The flow rate is 300 ... 700 ml/min.

Specification

Turbidity

Measuring range 0,001 ... 40 NTU

Resolution 0,001 NTU

Accuracy $\pm 2\%$ v.Mw.

Turbidity

Measuring range 40 ... 100 NTU

Resolution 0,1 NTU

Accuracy $\pm 5\%$ f.s.

General technical data

Repeat accuracy $\pm 2\%$

Cable length 3 m

Connections 1/2 NPT (outlet), 1/4 NPT (inlet), 1/4 NPT (overflow)

Interface RS485

Sensor Silicon photocell

Light source tungsten lamp

Flow rate 300 ... 700 ml/min

Protection class (device) IP65

Power supply 12 V DC

Operating conditions 0 ... 45 °C , 5 ... 95 (non-condensing)% RH

Storage conditions -15 ... 60 °C , 5 ... 95 (non-condensing)% RH

Dimensions (L x W x H) 212 x 305 x 393 mm

Weight 2533 g