



NTU: NEPHELOMETRIC TURBIDITY, Optical technology for optimized measures

Optical technology: The measure principle is based on IR nephelometry ISO 7027 / 850 nm. The sensor can be calibrated with a formazine standard solution. The NTU sensor integrates a low-cost optical technology, with a very few maintenance and no consumables.

Applications

- Urban wastewater treatment (inlet/ outlet controls)
- Sanitation network
- Industrial effluent treatment
- Surface water monitoring
- Drinking water



Accessory

Hydroclean : Anti-fouling system for numerical sensor NTU

Technical specifications measures	
Measure principle	Diffusion IR at 90°
Measure ranges	5 - 50 NTU ; 5 – 200 NTU ; 5 – 1000 NTU ; 5 – 4000 NTU ; AUTOMATIC RANGE 0 to 4500 mg/L Calibration: Range 0-500 mg/L according to NF EN 872 Range >500 mg/L according to NF T 90 105 2
Resolution	0,01 to 1 NTU - mg/L
Accuracy	< 5% of the reading
Working temperature	0°C to + 50°C
Measure of temperature	Via NTC
Stocking temperature	-10°C to + 60°C
Signal interface	Modbus RS-485 and SDI-12
Maximum refreshing time	< 1 second
Sensor power-supply	5 to 12 volts
Electric consumption	Standby: 40 µA / Average RS485 (1 measure/second): 820 µA / Average SDI12 (1 measure/second): 4,2 mA / Current pulse: 500 mA
Consumption	<ul style="list-style-type: none"> • Standby : 40 µA • RS485 average (1 measure / sec) : 820 µA • SDI12 average (1 measure / sec) : 4,2 mA • Heating time : 100 mS • Current pulse : 500 mA
Technical specifications sensor	
Dimensions	Diameter : 27 mm; length : 170 mm
Weight	300 g (sensor + cable 3 meters)
Material	PVC, DELRIN, Quartz, PMMA, Polyamide
Maximum pressure	5 bars
Connection	9 armoured connectors, polyurethane jacket, bare-wires or waterproof Fisher connector
Degree of protection	IP68

ADVANTAGES



- IR optical sensor with optical fibre
- Range : 0 to 4000 NTU or 0-4500 mg/L
- Rugged and waterproof (IP68)
- Ultra low-power consumption
- Digital output Modbus RS-485 / SDI-12
- Nephelometry measurement

References

NTU sensor, 3 meters cable, bare wire	PF-CAP-C-00173
NTU sensor, 7 meters cable, bare wire	PF-CAP-C-00174
NTU sensor, 15 meters cable, bare wire	PF-CAP-C-00166
Turbidity/T Digital Probe Fischer Connector - 3 m cable	PF-CAP-C-00146
Turbidity/T Digital Probe Fischer Connector - 7 m cable	PF-CAP-C-00147
Turbidity/T Digital Probe Fischer Connector - 15 m cable	PF-CAP-C-00165

HYDROCLEAN BRUSH CLEANING SYSTEM

HYDROCLEAN : Mechanical wiper for Ponsel Turbidity sensor (Maximum depth 30 M)	PF-ACC-C-00353
HYDROCLEAN : Mechanical wiper for Ponsel Turbidity sensor (Maximum depth 100 M)	PF-ACC-C-00354
Mechanical wiper for Ponsel Turbidity sensor to integrate (Maximum depth 30 M)	PF-ACC-C-00355
Supplement of cable for hydroclean system (price for 1 meter)	PF-ACC-C-00356



Rental available