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Parameters:

Total Suspended Solids

Turbidity

YSI IQ SensorNet VisoTurb®

Total Suspended Solids & Turbidity Sensor

The VisoTurb is an optical based turbidity or TSS (total suspended solids) sensor for the IQ SensorNet process monitoring and control system. At the effluent of a wastewater treatment plant, turbidity is a quantitative measure of any remaining undissolved solids that can help indicate problems during the treatment process. Turbidity can be measured relatively simply online with optical methodology. This is why turbidity is extremely suitable for measuring the cleaning efficiency of wastewater treatment plants.

• **Factory Calibration**

The VisoTurb sensors are precisely calibrated with a multi-point factory calibration. The calibration is extremely stable and there is no need to calibrate on-site. A matrix adjustment is possible as needed.

• **UltraClean™ Ultrasonic Cleaning**

The ultrasound source is integrated in the sensor and generates high-frequency vibrations of the optical windows. Ultrasonic cleaning prevents biofouling resulting in maintenance free operation with accurate measurements everytime.

• **Measurement Principle**

Utilizes nephelometric measurement technology in accordance with EN ISO 7027 (DIN EN 27027 or ISO 7027). Sample discoloration does not affect measurements.

• **2-year Warranty**



A VisoTurb sensor with UltraClean technology remains clean after a 30-day deployment.

Watch the UltraClean™ technology cleaning in action:

bit.ly/IQclean



IQ SensorNet VisoTurb TSS & Turbidity Sensor General Specifications

Calibration Capability	Factory calibrated; user calibration available	
Typical Applications	VisoTurb® 700 IQ: Water & Wastewater applications /VisoTurb® 700 IQ SW: Seawater, Brackish Water, Aquaculture	
Cleaning System	UltraClean™ ultrasonic clean technology; Non-mechanical	
Signal Output	Digital	
Lightning Protection	Yes; when used with IQ SensorNet components	
SensCheck	Detects optic contamination or failure of cleaning system for early malfunction detection	
Power Consumption	1.5 watts	
Maximum Pressure	10 bars (145 psi); with sensor connection cable	
Electrical Connections	2-wire shield cable with quick sensor connection	
Process Variation Coefficient	According to DIN 38402 part 51; <1% (up to 2000 FNU)	
Repeatability	According to DIN ISO 5725 or DIN 1319; <0.015% or ≥0.006 FNU	
Sensor	Material:	Housing - V4A stainless steel 1.4571 (SW version Titanium, POM (Polyoxmethylen)); Sapphire window
	Rating:	IP68; waterproof
	Dimensions :	365 L x 40 D mm (14.37 L x 1.57 D in) / SW version, 365 L x 59.5 D mm (14.37 L x 2.34 D in) (length x diameter)
	Weight:	990 g (2.18 lbs)/ SW version, 1420 g (3.13 lbs)
	Warranty:	2 years

IQ SensorNet VisoTurb TSS & Turbidity Sensor Technical Specifications

TSS Range	Concentration	0 to 0.400 mg/L; 0 to 4.00 mg/L; 0 to 40.0 mg/L; 0 to 400 mg/L; 0 to 4.00 g/L; 0 to 40.0 g/L; 0 to 400 g/L
TSS Resolution	Auto-Ranging	0.001 mg/L to 1 g/L
FNU, NTU, TEF	Concentration	0 to 0.400; 0 to 4.00; 0 to 40.0; 0 to 400; 0 to 4000
FNU, NTU, TEF Resolution	Auto-Ranging	0.001 to 1
Temperature	Operating	32 to 140 °F (0 to 60 °C)
	Storage	23 to 149 °F (-5 to 65 °C)

IQ SensorNet VisoTurb TSS & Turbidity Sensor Ordering Information

(order terminals, modules, cables, sensors and mounting separately)

Name	Item #	Description
VisoTurb 700 IQ	600 010Y	Digital turbidity sensor with UltraClean™ cleaning for the IQ system ideal for water, wastewater, sludge applications
VisoTurb 700 IQ SW	600 011Y	Digital turbidity sensor with UltraClean™ cleaning for the IQ system ideal for industrial or corrosive applications
SACIQ-1.5	480 040Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 4.9 ft (1.5 m)
SACIQ-7.0	480 042Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 23 ft (7 m)
SACIQ-15.0	480 044Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 49 ft (15 m)
SACIQ-50	480 041VY	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length special order up to 330 ft (100 m)
SACIQ-20.0 SW	480 045Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 65 ft (20 m) with screwable SACIQ-Plug
SACIQ-25.0 SW	480 066Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 82 ft (25 m) with screwable SACIQ-Plug
SACIQ-50.0 SW	480 060Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 162 ft (50 m) with screwable SACIQ-Plug
SACIQ-75.0 SW	480 067Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 243 ft (75 m) with screwable SACIQ-Plug
SACIQ-100.0 SW	480 062Y	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length 330 ft (100 m) with screwable SACIQ-Plug
SACIQ-50 SW	480 064VY	Sensor cable for all IQ SensorNet sensors, IP-68 waterproof connection; cable length special order up to 330 ft (100 m) with screwable SACIQ-Plug
SACIQ-Plug	480 065Y	Screwable plug for all SACIQ sensor cables for IQ sensors

Visit YSI.com/IQ for additional information on the entire IQ SensorNet system

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