

**xylem**
Utility Solutions

ViSolid 700 IQ

OPTICAL TOTAL SUSPENDED SOLIDS SENSOR FOR IQ SENSORNET



ViSolid 700 IQ SW

ViSolid 700 IQ

Rugged TSS sensor for accurate, continuous monitoring

The ViSolid® is an optical-based TSS (total suspended solids) sensor for YSI IQ SensorNet's continuous monitoring system. A sufficient sludge age must be maintained in order to get an adequate degree of nitrification. Monitoring TSS allows for direct calculation of sludge age and optimal control of nitrification, denitrification, and bio-P removal.



UltraClean™ Cleaning Technology

Ultrasonic cleaning generates high-frequency vibrations over the sensor's optical windows, minimizing sensor downtime, preventing biofouling, and ensuring accurate measurements.



Wide-Range Measurement Capabilities

Two measurement methods - backscatter for higher concentrations or scattered light for lower concentrations.



Factory Calibrated

Factory calibrated for two different sludge types (activated and primary). User calibration is also available.



Protected Investment

Backed by a standard two-year sensor warranty or an optional 5-year extended warranty.



a xylem brand

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ViSolid Sensor Options

Sensor options are available for salt water applications and Class I, Div 2 hazardous locations.

ViSolid 700 IQ
Optical TSS

ViSolid 700 IQ H
Class I, Division 2 optical TSS (certified for use in hazardous locations)

ViSolid 700 IQ SW
Salt water optical TSS



ViSolid sensor **with UltraClean™** technology remains clean after a 30-day deployment.



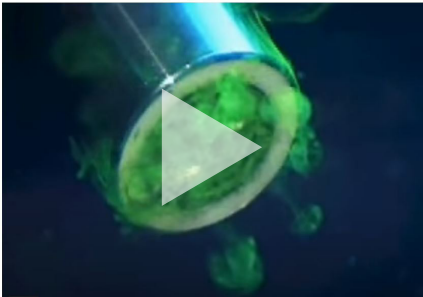
Dirty ViSolid sensor **without UltraClean™** technology after a 30-day deployment.

ViSolid 700 IQ General Specifications

Calibration Capability	Factory calibrated; User calibration available: 1-8 points
Typical Applications	Matrix Type 1: Aeration basin of wastewater plants with >3,000 mg/L (3%) TSS; return line Matrix Type 2: Digested sludge
Cleaning System	UltraClean ultrasonic cleaning 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
Conformance Certifications	UL 61010-1, CAN/CSA 22.2 #61010.1 ViSolid 700 IQ H: Conforms to ANSI/ISA-12.12.01, CAN/CSA C22.2 #213 for location rating Class 1 Division 2, Group D T6, Class 1 Zone 2, Group IIA T6 (must be used with IQ SensorNet cable and MIQ/BB2 barrier box)
Temperature Conditions	Operating: 32 to 140 °F (0 to 60 °C) Storage: 23 to 149 °F (-5 to 65 °C)
Process Variation Coefficient	According to DIN 38402 part 51; <2% for matrix type 1, <4% for matrix type 2
Material	Housing: V4A stainless steel 1.4571 ViSolid 700 IQ SW: Titanium, POM (Polyoxymethylene); Sapphire window
Protection Class	IP68; waterproof
Dimensions	365 L x 40 D mm (14.37 L x 1.57 D in)
Weight	990 g (2.18 lbs)
Warranty	2 years (optional 5 years)

ViSolid 700 IQ Technical Specifications

TSS Range	Concentration: 0 to 400 mg/L; 0 to 4000 mg/L; 0 to 25,000 mg/L; 0 to 40,000 mg/L Saturation: 0.0003 to 100% (practical limit: 4%)
TSS Resolution	Auto-Ranging: 0.1 mg/L to 1 mg/L, 0.001%, 0.01% or 0.1%



Watch UltraClean technology cleaning in action



bit.ly/IQultraclean

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Water



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