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Parameters:

COD (total and soluble)

BOD

UVT-254

TOC

DOC

SAC 254 (total and soluble)

TSS (optional)

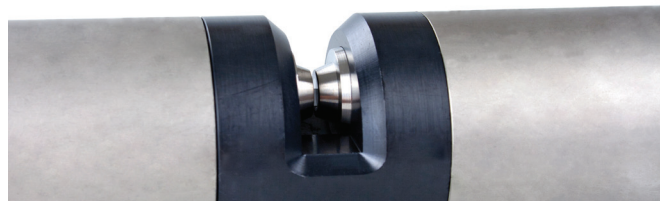
YSI 701/705 IQ CarboVis® UV/VIS Sensor Carbon/TSS UV/VIS Measurement for the IQ SensorNet System

The CarboVis® is a reagentless, optical-based spectrophotometer built into a rugged, corrosion-resistant field probe for the IQ SensorNet system. The CarboVis can report up to 5 parameters including: COD (total and soluble), BOD, UVT-254, TOC, DOC, SAC (total and soluble) and TSS (optional). The CarboVis probe scans 256 wavelengths per measurement between 200 and 720 nm to provide the most accurate measurements with precise compensation for interferences such as turbidity. The CarboVis provides continuous data to help operational improvement decisions. The probe's built-in UltraClean ultrasonic cleaning technology reduces routine maintenance requirements.

- 256 wavelength scans per measurement results in better accuracy and better compensation for interferences
- UVT-254 measurement used to determine required UV light intensity and contact time for disinfection, lowering a facility's disinfection costs
- Factory calibrated
- 2-year warranty
- Two options available - one ideal for effluent applications and one ideal for influent/aeration/effluent applications
- Maintenance free ultrasonic cleaning with UltraClean technology built-in; prevents biofouling from taking place. Built-in air holes for added air cleaning in high fouling applications.



A 5 mm gap YSI UV/VIS sensor deployed after one week with UltraClean technology. No fouling observed.



UV/VIS probes are rugged, accurate and designed to withstand field conditions. The optics are kept clean with UltraClean technology and the sensor's 256 wavelength scan provides unmatched accuracy. A 1 mm gap sensor is pictured.

CarboVis 701/705 IQ Technical Specifications

Measurement Method	UV/VIS spectral measurement (200-720 nm)	
Measurement Range	CarboVis 701 (influent/aeration/effluent)	CarboVis 705 (effluent)
COD (total)	0 to 20,000 mg/L (influent) 0 to 4,000 mg/L (effluent)	0.0 to 800.0 mg/L
COD (soluble)	0 to 12,500 mg/L (influent/aeration) 0 to 4,000 mg/L (effluent)	0.0 to 800.0 mg/L
BOD	0 to 8,000 mg/L (influent) 0 to 2,500 mg/L (effluent)	0.0 to 500.0 mg/L
TOC	0 to 20,000 mg/L (influent) 0 to 2,500 mg/L (effluent)	0.0 to 500.0 mg/L
DOC	0 to 12,500 mg/L (influent/aeration) 0 to 2,500 mg/L (effluent)	0.0 to 500.0 mg/L
UVT-254	0.0 to 100.0 % (influent/aeration/effluent)	0.0 to 100.0 %
SAC 254 (total)	0 to 5,000 1/m (influent/aeration) 0 to 3,000 1/m (effluent)	0.0 to 600.0 1/m
SAC 254 (soluble)	0 to 3,000 1/m (influent/aeration/effluent)	0.0 to 600.0 1/m
TSS (optional)	0.00 to 15.00 g/L (influent) 0 to 4,500 mg/L (effluent)	0.0 to 900.0 mg/L
Resolution (range dependent)	1 mg/L, 1 1/m, 0.1 %, 0.01 g/L (TSS), 1 mg/L (TSS)	0.1 mg/L, 0.1 1/m, 0.1 % 0.1 mg/L (TSS)
Measuring gap	1 mm	5 mm
Operating Temperature	0 to 45 °C (32 to 113 °F)	Storage Temperature -10 to 50 °C (14 to 122 °F)
Warranty	2-years	
Flow Rate	≤ 3 m/s (~1 ft/s)	
pH range	4 to 12 units	
Cleaning System	UltraClean, ultrasonic cleaning system built directly into the sensors; air cleaning also available	
Dimensions	Length 802 mm (31.5 in); diameter 59.9 mm (2.35 in); weight ~ 4 kg (8.8 lbs)	
Certifications	CE, cETLus	
Protection Class	Sensor with SACIQ cable connected: IP68	
Pressure Resistance	1 bar (14.5 psi)	
Lightning/Voltage Protection	Yes	
Electrical	Power Consumption: 8 W, Two wire shielded IQ cable provides power and communication	
Materials	Housing: Titanium 3.7035, PEEK Window: Sapphire glass	

CarboVis 701/705 IQ Digital Sensor Ordering Information (must be used with the YSI IQ SensorNet, sensor cable sold separately)

CarboVis 701 IQ Item #481 048Y	1 mm gap UV/VIS spectral carbon sensor for water/wastewater monitoring and control; influent, aeration tank or effluent; integrated UltraClean technology provides ultrasonic cleaning; includes protective guards
CarboVis 701 IQ TS Item #481 049Y	1 mm gap UV/VIS spectral carbon and TSS sensor for water/wastewater monitoring and control; influent, aeration tank or effluent; integrated UltraClean technology provides ultrasonic cleaning; includes protective guards
CarboVis 705 IQ Item #481 050Y	5 mm gap UV/VIS spectral carbon sensor for water/wastewater monitoring and control; effluent; integrated UltraClean technology provides ultrasonic cleaning; includes protective guards
CarboVis 705 IQ TS Item #481 051Y	5 mm gap UV/VIS carbon and TSS sensor for water/wastewater monitoring and control; effluent; integrated UltraClean technology provides ultrasonic cleaning; includes protective guards

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

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