

Applications

- Drinking Water
- Wastewater
- Industrial

UVAS plus sc Sensor







Continuously monitor plant treatment processes of organic loads.

Continuous, automatic early warning systems

Use the Hach® UVAS plus sc UV Absorbance/Transmittance sensor to continuously protect plant treatment processes from high influent organic loads.

Control activated sludge processes

Activated sludge processes require precise balancing of organic load, aeration, and nutrients. Continuous trending of the organics using the UVAS plus sc sensor can help operators learn how to balance other factors resulting in cost and time savings.

Suitable for quaternary treatment

The combination of two Hach UVAS plus sc sensors allows continuous monitoring of micropollutants reduction in advanced treatment stages.

Self-cleaning wiper system

The detector windows are automatically cleaned by a built-in wiper that eliminates surface films or particles that can reduce accuracy.

Monitor effciency of UV disinfection process

Hach's UVAS plus sc is designed to provide continuous UV light transmittance (UVT) measurement of pre-disinfected source water. Operational costs related to sampling for UVT may be reduced with continuous on-line measurement.

Self-diagnostics and easy maintenance

Diagnostic routines built into the UVAS plus sc sensor reduce the need for extensive calibration and maintenance. Only semi-yearly inspection and replacement of the wiper is needed.

This sensor requires a Hach SC4500 or SC1000 Digital Controller.

Technical Data*

	UVAS plus sc Tank Sensors	UVAS plus sc Bypass Sensors
Measurement method	UV absorption measurement (unique 2-beam technique) SAC254 in accordance with DIN 38404 C3	
Path length	1, 2, 5 and 50 mm	2, 5, and 50 mm
Measuring range	Choice of: 0.01 - 60 m ¹ at 50 mm 0.1 - 600 m ¹ at 5 mm 0 - 1500 m ¹ at 2 mm 2 - 3000 m ¹ at 1 mm	Choice of: 0.01 - 60 m ¹ at 50 mm 0.1 - 600 m ¹ at 5 mm 0 - 1500 m ¹ at 2 mm
Compensation	550 nm	
Measuring interval	≥ 1 min	
Operating temperature range	2 - 40°C (35.6 - 104°F)	
pH range	4.5 - 9 pH	
Pressure range	0.5 bar (7.25 psi) maximum	
Flow rate	n/a	0.5 L / hour minimum
Connections	n/a	4 mm ID / 6 mm OD hose
Cable length	10 m fixed cable at sensor	
Control	Control Function: PID, time control, 2-point controller (with sc controller)	
Service interval	6 months	
User maintenance	1 h / month, typical	
Dimensions	70 x 333 mm (2.75 x 13.11 in.) approximate	
Weight	3.6 kg (7.9 lb.) approximate	

*Subject to change without notice.

The UVAS plus sc probes cannot be used in sea water.

Principle of Operation

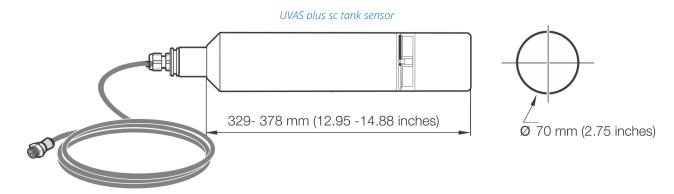
The Hach UVAS plus sc UV Absorbance/Transmittance sensor determines the Spectral Absorption Coefficient (SAC) at a wavelength of 254 nm. Measurements can be expressed in absorption units (1/m), mE, AU, %T, T/cm, mg/L, or ppm.

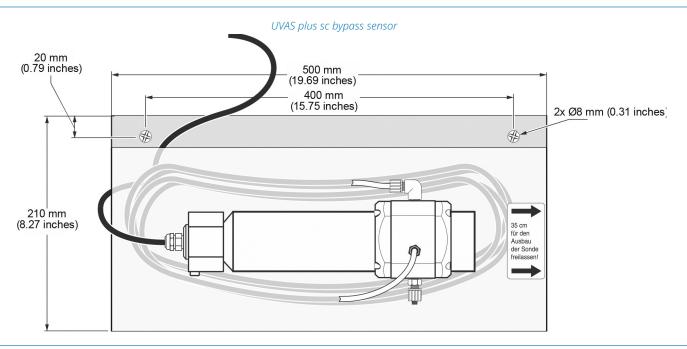


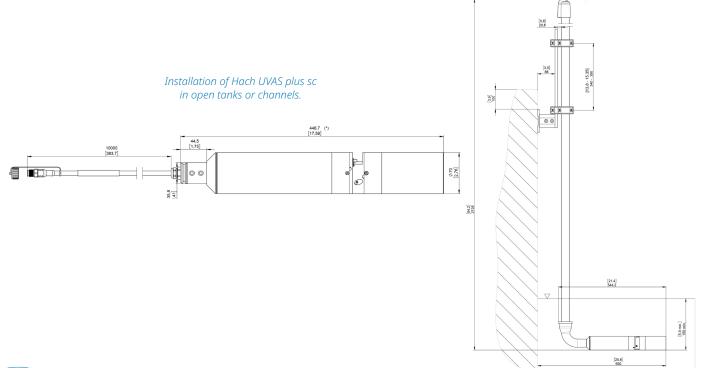
UVAS plus sc Sensor

Dimensions

Hach UVAS plus sc UV Absorbance / Transmittance Sensors can be installed using a fixed-point installation kit as shown in the bottom illustration. The bypass panel below can be used for non-immersion applications. With the cable supplied, the sensor can be used in a sample stream within 10 meters (32.8 feet) of the controller.









Order Information

UVAS plus sc Sensor

LXV418.99.10001 1 mm UVAS plus sc sensor
 LXV418.99.20001 2 mm UVAS plus sc sensor
 LXV418.99.50001 5 mm UVAS plus sc sensor
 LXV418.99.90001 50 mm UVAS plus sc sensor

Bypass Panel

LZX869 Flow through unit, 2 mm
LZX867 Flow through unit, 5 mm
LZX868 Flow through unit, 50 mm
LZX450 Sedimenter for UVAS sc sensor

Mounting Hardware

LZY714.99.53520 Mounting Hardware with 90 degree adapter

Extension Cables

LZX848Digital Extension Cable, 5 mLZX849Digital Extension Cable, 10 mLZX850Digital Extension Cable, 15 mLZX851Digital Extension Cable, 20 mLZX852Digital Extension Cable, 30 mLZX853Digital Extension Cable, 50 m

Wear Parts

LZX148Wiper blades 1 mm (5 pcs)LZX012Wiper blades 2 mm (5 pcs)LZX117Wiper blades 5 mm (5 pcs)LZX119Wiper blades 50 mm (10 pcs)



This instrument connects to Claros, Hach's innovative Water Intelligence System. Claros allows you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiencies in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.



With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

