Organics • Process Instruments

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. Operators can use the continuous readings of UV absorbance or transmission to watch for sudden changes in organic load that would require alternate treatment procedures.

Control Activated Sludge Processes

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

Self-cleaning Wiper System

With the UVAS plus sc sensor submerged in the sample stream, the detector windows are automatically cleaned by a built-in wiper that eliminates surface films or particles that can diminish accuracy.

Order Information

The following sensors include the Hach SC4500 Multi-parameter Controller.			
LXV525.97KTO027	1 mm UVAS plus sc sensor with SC4500 Controller		
LXV525.97KT0030	2 mm UVAS plus sc sensor with SC4500 Controller		
LXV525.97KT0021	5 mm UVAS plus sc sensor with SC4500 Controller		
LXV525.97KTO017	50 mm UVAS plus sc sensor with SC4500 Controller		
UVAS plus sc Sensor			
LXV418.99.10002	1 mm UVAS plus sc Sensor		
LXV418.99.20002	2 mm UVAS plus sc Sensor		
LXV418.99.50002	5 mm UVAS plus sc Sensor		
LXV418.99.90002	50 mm UVAS plus sc Sensor		
A Hach SC controller is required to operate the UVAS plus sc sensor, controller must be			
purchased separately.			
Bypass Panel			
LZX869	Flow through unit, 1/2 mm		
LZX867	Flow through unit, 5 mm		
LZX868	Bypass Panel for 50 mm sensor		
LZX450	Sedimenter for Sensor		
Mounting Hardware			
LZY714.99.53120	Stainless Steel Pole Mounting Kit for Sensors, 10 cm		
LZY714.99.52120	Stainless Steel Pole Mounting Kit for Sensors, 24 cm		
Accessories			
LZX148	Spare wiper blades for 1 mm sc sensor, pk/5		
LZX012	Spare wiper blades for 2 mm sc sensor, pk/5		
LZX117	Spare wiper blades for 5 mm Nitratax, pk/5		
LZX119	Spare wiper blades for 50 mm UVAS sc, pk/5		
Part numbers may vary by	Part numbers may varv by country.		

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Monitor Efficiency of UV Disinfection Process

UV light transmittance (UVT) is critical in the delivery of dose in a UV reactor. The delivered dose is determined by, among other things, the UVT of the source water, the intensity of the UV lamps, and the flow rate of the water source. UVT can be affected by many factors, from a simple change in the seasons to storm events. Potential changes in UVT should be considered in a UV disinfection system for optimized dose delivery. Hach's UVAS plus sc is designed to provide continuous UVT measurement of pre-disinfected source water. Operational costs related to sampling for UVT may be reduced with continuous online measurement. Data can immediately be incorporated into the operation in real time.

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 and seals is needed.

Technical Data*

	Principal of Operation		
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	
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	
Reference Wavelength	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		
Sample Flow Rate	N/A	Bypass: 0.5 L/h minimum	
Connections	N/A	Bypass: 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		
Controller Compatibility	SC4500, SC1000, SC200		
Dimensions	70 x 333 mm (2.75 x 13.11 in.) approx.		
Weight 3.6 kg (7.94 l)		4 lb) approx.	
	*Su	bject to change without notice.	

