

UV PHOTOMETER SENSOR



S480 UV SAC₂₅₄ the innovative sensor

Long-lasting and energy-efficient UV-LED technology and a robust design are the outstanding features of S480UV-SAC₂₅₄.

Like all Chemitec sensors S480UV-SAC₂₅₄ uses the unique nano-coated windows in conjunction with compressed air flushing to achieve long operating times without cleaning.

Benefits

- Without sampling and preparation of test samples
- Real-time sensor
- Without reagents
- Optical window with nano coating
- LED technology

Technical Specifications

Measurement technology	light source
	detector
Measurement principle	
Optical path	
Parameter	
Measuring range	
Measurement accuracy	
Turbidity compensation	
Data logger	
T100 response time	
Measurement interval	

2 LED (254 nm, 530 nm)
Photo diode + filter
Attenuation, transmission
1 mm, 2 mm, 5 mm, 10 mm, 50 mm
SAC ₂₅₄ , CODEq, BODEq, TOCeq
See parameter list
0.2 %
at 530 nm
~ 2 GB
4 s
≥ 2 s

The optical path length can be adapted to the application at any time by various adapters. An automatic turbidity compensation is carried out via a second measuring channel.

S480UV-SAC₂₅₄ can be configured through application-specific correlation for direct output of BODEq, CODEq, TOCeq.

S480UV-SAC₂₅₄, Cutting-edge measurement technology at low investment and operating costs.

Applications

- Sewage treatment plants
- Environmental monitoring
- Drinking water
- Monitoring of UV-disinfection systems

Controllers

Sensors

Analysers

Samplers

Flow

Level

Pressure

Web remote control

Data logging

Accessories

Technical Specifications

Housing material	SS (1.4571 / 1.4404) or titanium (3.7035)	
Dimensions (L x Ø)	300 mm x 48 mm (with 10 mm path)	
Weight	SS	~ 2.3 kg (with 10 mm path)
	titanium	~ 2.1 kg (with 10 mm path)
Interface	digital	Ethernet (TCP/IP) RS-232 or RS-485 (Modbus RTU, ASCII)
	analog	Ethernet (TCP/IP)
		4...20 mA
Power consumption	≤ 1 W	
Power supply	12-24 VDC (± 10 %)	
Maintenance effort	≤ 0.5 h/month (typical)	
Calibration/maintenance interval	24 months	
Signal interface	Modbus RTU Standard Protocol	

Installation

Max. pressure	with SubConn	30 bar
	with fixed cable	3 bar
	in FlowCell	1 bar, 2...4 l/min
Protection type	IP68	
Sample temperature	2...40 °C	
Ambient temperature	2...40 °C	
Storage temperature	20...80 °C	
Inflow velocity	0.1...10 m/s	

Measuring range

Parameter	Path (mm)	1		10	
		Measuring range	Detection limit	Measuring range	Detection limit
Parameter	SAC254nm	5...1500/m	5 /m	0.5...150 /m	0.4 /m
	CODeq	8...2200 mg/l	8 mg/l	0.8...220 mg/l	0.8 mg/l
	BODeq	2.5...700 mg/l	2.5 mg/l	0.25...70 mg/l	0.25 mg/l
	TOCeq	3...880 mg/l	3 mg/l	0.3...90 mg/l	0.3 mg/l