UV PHOTOMETER SENSOR

S480 UV SAC_{254}
the innovative sensor

Long-lasting and energy-efficient UV-LED technology and a robust design are the outstanding features of S480UV-SAC_{254}.

Like all Chemitec sensors S480UV-SAC_{254} uses the unique nano-coated windows in conjunction with compressed air flushing to achieve long operating times without cleaning.

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-SAC_{254} can be configured through application-specific correlation for direct output of BODeq, CODeq, TOCeq.

S480UV-SAC_{254}, Cutting-edge measurement technology at low investment and operating costs.

Benefits

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

Applications

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

Technical Specifications

Measurement technology	light source	2 LED (254 nm, 530 nm)
	detector	Photo diode + filter
Measurement principle		Attenuation, transmission
Optical path		1 mm, 2 mm, 5 mm, 10 mm, 50 mm
Parameter		SAC_{254}, CODeq, BODeq, TOCeq
Measuring range		See parameter list
Measurement accuracy		0.2 %
Turbidity compensation		at 530 nm
Data logger		~ 2 GB
T100 response time		4 s
Measurement interval		≥ 2 s

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

	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