

LISA UV

14SXXXXX0



LISA – The innovative SAC₂₅₄ sensor by TriOS

Long-lasting and energy-efficient UV-LED technology and a robust design are the outstanding features of LISA UV. Like all TriOS sensors LISA uses the unique nanocoated windows combined with compressed air flushing to achieve long operating times without cleaning.

The innovative TriOS G2 interface allows quick and easy integration of the sensor into existing process control systems or external data logger. In addition to the integrated network interface, LISA UV is available with digital or analog output. The sensor can easily be configured through any standard web browser on a PC, tablet or Smartphone.

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.

Through application-specific correlation LISA UV can be configured for direct output of BOD_{eq}, COD_{eq}, TOC_{eq} and UVT.

LISA – 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

Path length	Parameter	Measuring range	Detection limit
1 mm	SAC254nm	0-1500 /m	5 /m
	COD _{eq}	0-2200 mg/L	8 mg/L
	BOD _{eq}	0-700 mg/L	2.5 mg/L
	TOC _{eq}	0-880 mg/L	3 mg/L
	UVT	3-100 %	98.8 %
10 mm	SAC254nm	0-150 /m	0.5 /m
	COD _{eq}	0-220 mg/L	0.8 mg/L
	BOD _{eq}	0-70 mg/L	0.25 mg/L
	TOC _{eq}	0-90 mg/L	0.3 mg/L
	UVT	3-100 %	98.8 %

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Technical Specifications

Measure- ment technology	Light source Detector	2 LED (254 nm, 530 nm) Photodiode
Measurement principle		Attenuation, transmission
Optical path		1 mm, 2 mm, 5 mm, 10 mm, 50 mm
Parameters		SAC ₂₅₄ , CODeq, BODeq, TOCeq, UVT, Turb 530
Measurement range		see parameter list p.46
Measurement accuracy		0.2%
Turbidity compensation		at 530 nm
Data logger		~ 2 MB
Reaction time T100		4 s
Measurement interval		≥ 2s
Housing material		Stainless steel (1.4571/1.4404) or titanium (3.7035)
Dimensions (L x Ø)		300 mm x 48 mm (with 10 mm path)
Weight	stainless steel	~ 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)
	analog	Ethernet (TCP/IP) 4...20 mA
Power consumption		≤ 1 W
Power supply		12...24 VDC (± 10 %)
Required supervision		≤ 0.5 h/month (typical)
Calibration/maintenance interval		24 months
System compatibility		Modbus RTU or: Analog Out (4...20 mA)
Warranty		1 year (EU & US: 2 years)
pressure	with Subconn	30 bars
	with fixed cable	3 bar
	in flow cell	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
		~ 435 psig
		~ 43.5 psig
		~ 14.5 psig at 0.5 to 1.0 gpm
		NEMA 6P
		~ +36 °F to +104 °F
		~ +36 °F to +104 °F
		~ -4 °F to +176 °F
		~ 0.33 fps to 33 fps