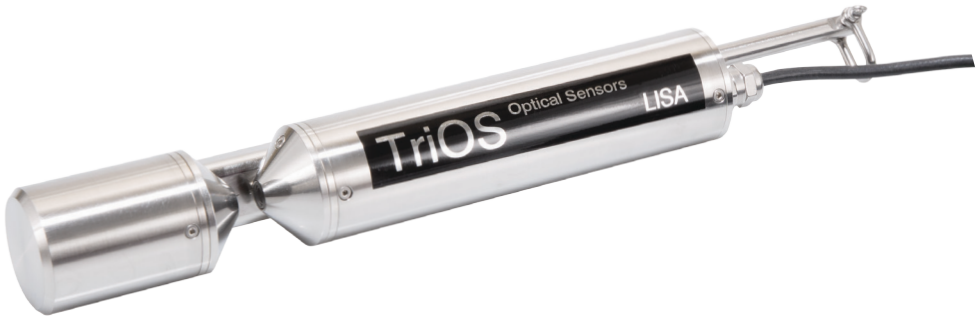
LISA UV

14SXXXXX0



LISA – The state of the art SAC_{254} sensor by TriOS

Long-lasting and energy-efficient UV-LED technology and a robust design are the core 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 TriOS G2 interface allows quick and easy integration of the sensor into existing process control systems or external data loggers. 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 lens sockets. An automatic turbidity compensation is carried out by a second measuring channel.

Through application-specific correlation LISA UV can be configured for direct output of BODeq, CODeq, TOCeq. A direct output of UVT_{254} is also possible.

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
- UV-LED technology

Applications

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

Path (mm)	Parameter	Unit	Measurng Range*	Detection Limit	Determination limit*	Precision*
1	SAC254nm	1/m	5...1500	5	15	2.5
	CODeq**	mg/L	8...2200	8	22	4.0
	BODeq**	mg/L	2.5...700	2.5	7	1.3
	TOCeq**	mg/L	3...880	3	9	1.5
	UVT	%	3...98.8	98.8	96.6	0.6
10	SAC254nm	1/m	0.5...150	0.5	1.5	0.25
	CODeq**	mg/L	0.8...220	0.8	2.2	0.4
	BODeq**	mg/L	0.25...70	0.25	0.7	0.13
	TOCeq**	mg/L	0.3...90	0.3	0.9	0.15
	UVT	%	3...98.8	98.8	96.6	0.6

* under laboratory conditions

** based on KHP (Note: 100 mg COD-standard-solution corresponds to 85 mg/l KHP)

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Technical Specifications

Measurement technology	light source	2 LED (254 nm, 530 nm)
	detector	Photo diode
Measurement principle		Attenuation, transmission
Optical path		1 mm, 2 mm, 5 mm, 10 mm, 50 mm
Parameter		SAC_{254}, CODeq, BODeq, TOCeq, UVT, Turb530
Measuring range		See parameter list p. 1
Measurement accuracy		0.2 %
Turbidity compensation		at 530 nm
Data logger		~ 2 MB
T100 response time		4 s
Measurement interval		≥ 2 s
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 %)
Maintenance effort		≤ 0.5 h/month (typical)
Calibration/maintenance interval		24 months
System compatibility		Modbus RTU
		or: Analog Out (4...20 mA)
Guarantee		1 year (EU: 2 years)

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

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