

LISA color

5XSXXXXX0



Colorimetry – LISA enables reliable low-cost color measurements. LISA color uses two different LEDs for long-term stable measurements of SAC or colors at different wavelengths. The second channel is used for turbidity/background correction. The cutting-edge device platform, used in all other TriOS photometers, enables optical path lengths of 50, 100, 150 and 250 mm, so that almost any application can be easily implemented.

LISA color also enables applications in aggressive media (e.g. high chloride concentrations) thanks to the optional titanium housing.

Benefits

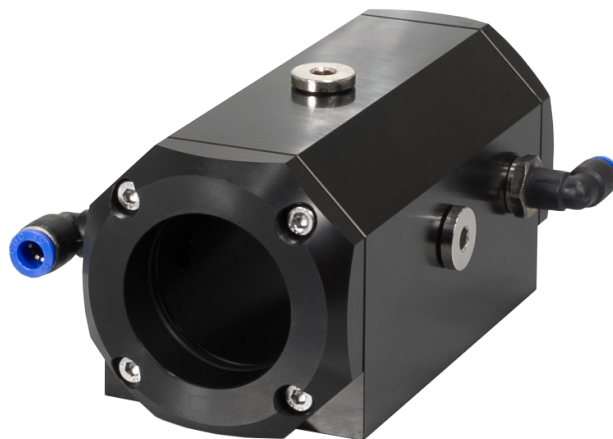
- Low investment
- Low maintenance (nano coating, air blast cleaning)
- Simple integrations into third-party systems
- Robust housing

Equipped with our G2 interface with web browser configuration, internal data logger, flexible protocols and data outputs, LISA color includes features that are much more advanced than those of comparable devices currently available on the market.

The unified platform of all TriOS photometers also facilitates a standardized spare parts and consumables system, which allows the use of a wide range of accessories for our devices. Furthermore the cutting-edge G2 interface enables quick integration into third-party systems.

Applications

- Environmental monitoring
- Drinking water monitoring
- Industrial applications



Technical Specifications

Measurement technology	light source	2 LEDs	
	detector	Photo diode	
Measurement principle		Attenuation, transmission	
Optical path		50 mm, 100 mm, 150 mm, 250 mm	
Parameter		SAC ₄₃₆ or Colouring (based on DIN EN ISO 7887 (410 nm, 436 nm, 525 nm or 620 nm)) or Pt-Co color number (APHA/Hazen) (390 nm or 455 nm) or Cr-Co color number (390 nm or 413 nm)	
Measuring range		see parameter list p. 3	
Measurement accuracy		0.5 %	
Turbidity compensation		Yes, 740 nm	
Data logger		~ 2 MB	
T100 response time		4 s	
Measurement interval		≥ 2s	
Housing material		Stainless steel (1.4571/1.4404) or titanium (3.7035)	
Dimensions (L x Ø)		340 mm x 48 mm (with 50 mm path)	~ 13.4" x 1.9" (with 50 mm path)
Weight	stainless steel	~ 2.4 kg (with 50 mm path)	~ 5.3 lbs (with 50 mm path)
	titanium	~ 1.3 kg (with 50 mm path)	~ 2.9 lbs (with 50 mm path)
Interface	digital version	Ethernet (TCP/IP) RS-232 or RS-485 (Modbus RTU)	
	analog version	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 Analog Out (4...20 mA)	
Warranty		1 year (EU: 2 years)	US: 2 years

INSTALLATION

Max. pressure	with SubConn	30 bar	~ 435 psig
	with fixed cable	3 bar	~ 43.5 psig
	in FlowCell	1 bar, 2...4 L/min	~ 14.5 psig, 0.5 to 1.0 gpm
Protection type		IP68	NEMA 6P
Sample temperature		+2...+40 °C	~ +36 °F to +104 °F
Ambient temperature		+2...+40 °C	~ +36 °F to +104 °F
Storage temperature		-20...+80 °C	~ -4 °F to +176 °F
Inflow velocity		0.1...10 m/s	~ 0.33 fps to 33 fps

Measuring range

Parameter variations	According to the standard	Unit	Measuring range	
			10 mm	50 mm
SAC 436 nm	DIN EN ISO 7887:2012-04_method B	1/m	0.5...150	0.1...30
SAC 525 nm	DIN EN ISO 7887:2012-04_method B	1/m	0.5...150	0.1...30
SAC 620 nm	DIN EN ISO 7887:2012-04_method B	1/m	0.5...150	0.1...30
True Color 410 nm	DIN EN ISO 7887:2012-04_method C	mg/L Pt	10...2800	2...560
Hazen 390 nm	DIN EN ISO 6271-2:2005-03	mg/L Pt	4...1100	0.8...220
Hazen 455 nm	DIN EN ISO 6271-2:2005-03	mg/L Pt	20...5500	4...1100
Cr-Co 380 nm	None	° (color grade)	5...1500	1...300
Cr-Co 413 nm	GOST 3351:1974	° (color grade)	20...5500	4...1100

