

## 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 cutting-edge G2 interface not only enables quick integration into third-party systems, but also the use of a wide range of accessories for our devices.

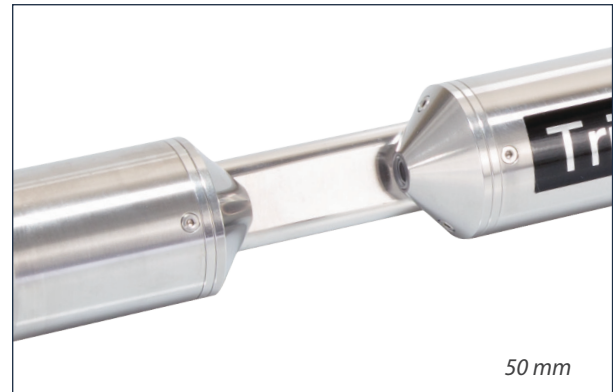
### Applications

- Environmental monitoring
- Drinking water monitoring
- Industrial applications



## 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



## Technical Specifications

<b>Measurement technology</b>	light source	2 LEDs
	detector	Photo diode
<b>Measurement principle</b>		Attenuation, transmission
<b>Optical path</b>		50 mm, 100 mm, 150 mm, 250 mm
<b>Parameter</b>	SAC <sub>436</sub>	
	Colouring (based on DIN EN ISO 7887 (410 nm, 436 nm, 525 nm, 620 nm))	
	Pt-Co color number (APHA/Hazen) (390 nm or 455 nm)	
	Cr-Co color number (390 nm or 413 nm)	
<b>Measuring range</b>		see parameter list p. 2
<b>Measurement accuracy</b>		0.5 %
<b>Turbidity compensation</b>		Yes, 740 nm
<b>Data logger</b>		~ 2 MB
<b>T100 response time</b>		4 s
<b>Measurement interval</b>		≥ 2s
<b>Housing material</b>		Stainless steel (1.4571/1.4404) or titanium (3.7035)
<b>Dimensions (L x Ø)</b>		340 mm x 48 mm (with 50 mm path)
<b>Weight</b>	stainless steel	~ 2.4 kg (with 50 mm path)
	titanium	~ 1.3 kg (with 50 mm path)
<b>Interface</b>	digital	Ethernet (TCP/IP) RS-232 or RS-485 (Modbus RTU)
	analog	Ethernet (TCP/IP) 4...20 mA
<b>Power consumption</b>		≤ 1 W
<b>Power supply</b>		12...24 VDC (± 10 %)
<b>Maintenance effort</b>		≤ 0.5 h/month (typical)
<b>Calibration/maintenance interval</b>		24 months
<b>System compatibility</b>		Modbus RTU Analog Out (4...20 mA)
<b>Guarantee</b>		1 year (EU: 2 years)
<b>INSTALLATION</b>		
<b>Max. pressure</b>	with SubConn	30 bar
	with fixed cable	3 bar
	in FlowCell	1 bar, 2...4 L/min
<b>Protection type</b>		IP68
<b>Sample temperature</b>		+2...+40 °C
<b>Ambient temperature</b>		+2...+40 °C
<b>Storage temperature</b>		-20...+80 °C
<b>Inflow velocity</b>		0.1...10 m/s