

## LISA color

5XSXXXXX0



Colorimetry – LISA enables reliable low-cost colour measurements. The LISA color uses two different LEDs for long-term stable measurement of the SAC or color 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.

With the optional titanium housing, the LISA color can also be used for applications in aggressive media (e.g. high chloride concentrations).

Equipped with our innovative G2 interface with a web browser configuration, internal data logger, flexible protocols and data outputs, the LISA color possesses equipment attributes that are significantly greater than the devices currently available on the market

The unified platform of all TriOS photometers also facilitates a standardized spare parts and consumables system, which means the broad range of our device accessories can be implemented. The cutting-edge G2 interface also enables quick integration into third-party systems.

**NEW!** The TriOS pressure cleaning is now available for the path lengths 100 mm, 150 mm and 250 mm!

### Benefits

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

### Applications

- Environmental monitoring
- Drinking water monitoring
- Industrial applications



# LISA color

## Technical Specifications

<b>Measurement technology</b>	Light source Detector	
<b>Measurement principle</b>	Attenuation, transmission	
<b>Optical path</b>	50 mm, 100 mm, 150 mm, 250 mm	
<b>Parameters</b>	$SAC_{436}$ , $SAC_{525}$ , $SAC_{620}$ Color (based on DIN EN ISO 7887 (410 nm, 436nm, 525 nm, 620 nm) Pt-Co color number (APHA/Hazen) (390 nm or 455 nm) Cr-Co color number (380 nm or 413 nm)	
<b>Measurement range</b>	see parameter list (chapter 7.2)	
<b>Measurement accuracy</b>	0.5 %	
<b>Turbidity compensation</b>	yes, 740 nm	
<b>Data logger</b>	~ 2 MB	
<b>Reaction time T100</b>	4 s	
<b>Measurement interval</b>	$\geq 2$ s	
<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 (for 50-mm path)   ~ 13.4" x 1.9" (for 50-mm path)	
<b>Weight</b>	stainless steel	~ 2.4 kg (for 50-mm path)   ~ 5.3 lbs (for 50-mm path)
	titanium	~ 1.3 kg (for 50-mm path)   ~ 2.9 lbs (for 50-mm path)
<b>Interface</b>	digital	Ethernet (TCP/IP)
	analog	RS232 or RS485 (Modbus RTU)
<b>Power consumption</b>	Ethernet (TCP/IP)	
	4...20 mA	
<b>Power supply</b>	$\leq 1$ W	
<b>Required supervision</b>	12...24 VDC ( $\pm 10$ %)	
<b>Calibration/maintenance interval</b>	typically $\leq 0,5$ hours per month	
<b>System compatibility</b>	24 months	
<b>Warranty</b>	Modbus RTU	
<b>Max. pressure</b>	Analog out (4...20 mA)	
	1 year (EU & US: 2 years)	
	with Subconn	30 bars   ~ 435 psig
<b>Protection type</b>	with fixed cable	3 bars   ~ 43.5 psig
	in flow cell	1 bar, 2...4 L/min   ~ 14.5 psig, 0.5 to 1 gpm
<b>IP68</b>	NEMA 6P	
<b>Sample temperature</b>	+2...+40 °C   ~ +36 °F to +104 °F	
<b>Ambient temperature</b>	+2...+40 °C   ~ +36 °F to +104 °F	
<b>Storage temperature</b>	-20...+80 °C   ~ -4 °F to +176 °F	
<b>Inflow velocity</b>	0.1...10 m/s   ~ 0.33 fps to 33 fps	

# LISA color

## Measurement range

Parameters	Unit	Measurement range			
		50 mm	100 mm	150 mm	250 mm
SAC 436 nm	1/m	0.1...30	0.05...15	0.03...10	0.02...6
SAC 525 nm	1/m	0.1...30	0.05...15	0.03...10	0.02...6
SAC 620 nm	1/m	0.1...30	0.05...15	0.03...10	0.02...6
True color 410 nm	mg/L Pt	2...560	1...280	0.6...185	0.4...110
Hazen 390 nm	mg/L Pt	0.8...220	0.4...110	0.3...75	0.2...45
Hazen 455 nm	mg/L Pt	4...1100	2...550	1.5...360	0.8...220
Cr-Co 380 nm	° (degree of color)	1...300	0.5...150	0.3...100	0.2...60
Cr-Co 413 nm	° (degree of color)	4...1100	2...550	1.5...360	0.8...220

