

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



Technical Specifications

| | | | |
|---|--|-------------------------------|---------------------------------|
| Measurement technology | Light source | 2 LEDs | |
| | Detector | Photodiode | |
| Measurement principle | Attenuation, transmission | | |
| Optical path | 50 mm, 100 mm, 150 mm, 250 mm | | |
| Parameters | 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) | | |
| Measurement range | see parameter list (chapter 7.2) | | |
| Measurement accuracy | 0.5 % | | |
| Turbidity compensation | yes, 740 nm | | |
| Data logger | ~ 2 MB | | |
| Reaction time T100 | 4 s | | |
| Measurement interval | ≥ 2 s | | |
| Housing material | Stainless steel (1.4571/1.4404) or titanium (3.7035) | | |
| Dimensions (L x Ø) | 340 mm x 48 mm (for 50-mm path) | | ~ 13.4" x 1.9" (for 50-mm path) |
| Weight | 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) |
| Interface | digital | Ethernet (TCP/IP) | |
| | | RS232 or RS485 (Modbus RTU) | |
| | analog | Ethernet (TCP/IP) | |
| | | 4...20 mA, max. load: 500 Ohm | |
| Power consumption | ≤ 1 W | | |
| Power supply | 12...24 VDC (± 10 %) | | |
| Required supervision | typically ≤ 0,5 hours per month | | |
| Calibration/maintenance interval | 24 months | | |
| System compatibility | Modbus RTU | | |
| | Analog out (4...20 mA) | | |
| Warranty | 1 year (EU & US: 2 years) | | |
| Max. pressure | with Subconn | 30 bars | ~ 435 psig |
| | 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 |
| 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 | |

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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 |

