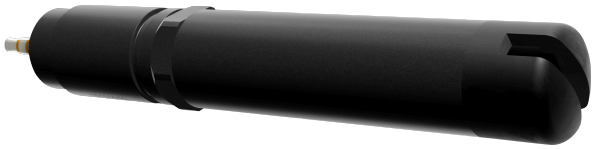
SEC-L Conductivity

XXXXXXXXX



The SEPIA immersion sensors provide precise, modular and digital water analysis in any situation - in the laboratory, in the field, mobile and directly in the process of waterworks or sewage treatment plants. They offer maximum flexibility for water management, wastewater treatment, environmental laboratories, industrial processes and aquaculture and combine all measurement tasks in a single, modular, expandable system.

The conductivity of water indicates how many dissolved ions are present in the water and thus provides information about the water quality and possible impurities.

The conductivity sensor SEC-L from the **SEPIA Series** is used for the digital measurement of electrical conductivity in ultrapure water or process water and provides precise data for monitoring and controlling technical processes. The conductive measuring sensor has two graphite electrodes positioned opposite each other. A voltage is applied to the electrodes so that a current is generated in the measured medium.

As an immersion sensor in the **SEPIA Series**, the SEC-L was specially developed for use with the TriOS multiparameter probe **FALCON**. Digital communication ensures safety and interference-free signal transmission from the sensor to the controller.

Thanks to the modular design of the SEPIA sensors, the SEC-L can be easily calibrated under laboratory conditions using the TriOS Lab Controller **LoLA**.

The system portfolio is also supplemented by a SEPIA Modbus handpiece, which transmits the measured values of individual sensors directly to any Modbus-compatible device or controller.

Advantages

- Digital, modern and ergonomic design
- Calibrate in the lab - use in the field
- High accuracy and reliability
- Cost-efficient due to modular design
- USB-C and Modbus for seamless integration
- Comparable results in the lab and in the field

Applications for

- Water suppliers
- Drinking water monitoring
- Sewage treatment plants
- Environmental laboratories
- Industrial applications
- Aquaculture

TriOS Mess- und Datentechnik GmbH · Bürgermeister-Brötje-Str. 25 · 26180 Rastede · Germany
Tel: +49 (0) 4402 69670 - 0 · Fax: +49 (0) 4402 69670 - 20 · info@trios.de · www.trios.de

Technical specifications

Measurement technology	Conductivity	
Measurement principle	Conductivity with two graphite electrodes	
Parameters	Conductivity [µS/cm], Temperature [°C,°F], TDS (Total dissolved solids) [ppm or mg/L]	
Applied standard	DIN EN ISO 27888:1993	
Measurement range	0.00 µS... 5000 µS	
Measuring accuracy	± 40 µS/cm at 1413 µS/cm	
Resolution	< 100 = 0.01 µS/cm < 1000 = 0.1 µS/cm > 1000 = 1 µS/cm	
Repeatability	± 1 µS/cm at 450 µS/cm	
Detection limit	3 µS/cm	
Response time (T90)	< 30 s (at constant 22 °C)	
Temperature compensation	Yes	
Interface	Digital, SEPIA	
Power supply	SEPIA	
Power consumption	< 120 mW	
Connection	3.5 mm jack plug, 4pin (TRRS)	
Housing material	PET with graphite measuring cell	
Dimensions (L x Ø)	112 mm x 19 mm	~ 4.4" x 0.75"
Volume/filling volume	tbd	
Weight	30 g (with o-ring)	~ 0.07 lbs

TriOS Mess- und Datentechnik GmbH · Bürgermeister-Brötje-Str. 25 · 26180 Rastede · Germany
Tel: +49 (0) 4402 69670 - 0 · Fax: +49 (0) 4402 69670 - 20 · info@trios.de · www.trios.de

Sample temperature	+0...+55 °C * +2...+40 °C (for specified measurement accuracy)	~ +32 to +131 °F * ~ +36 to +104 °F
Ambient temperature	+0...+55 °C * +2...+40 °C (for specified measuring accuracy)	~ +32 to +131 °F * ~ +36 to +104 °F
Storage temperature	-20...+60 °C	~ -4 to +140 °F
Relative humidity	0...95 %, non-condensing	
Transportation conditions	see storage temperature and relative humidity	
Max. Max. pressure	30 bar	~ 435 psi
Inflow velocity	0...3 m/s	~ 0 to 10 fps
Degree of protection	IP68	
Operating altitude	max. altitude 2000 m	~ 6562 ft

* No ice crystals in the sample water

Maintenance effort	< 0.5 h / month typical
System compatibility	SEPIA compatible
Warranty	1 year (EU&US: 2 years) on electrons; wearing parts are excluded from the warranty

TriOS Mess- und Datentechnik GmbH · Bürgermeister-Brötje-Str. 25 · 26180 Rastede · Germany
Tel: +49 (0) 4402 69670 - 0 · Fax: +49 (0) 4402 69670 - 20 · info@trios.de · www.trios.de