



CONDUCTIVITY SENSORS

Features:

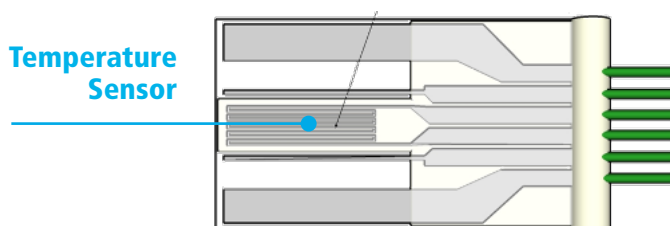
- Wide conductivity & temperature range
- Excellent long-term stability
- Fast response time (under 1 second)
- Integrated RTD for temperature measurement and/or compensation
- 2 and/or 4 electrode measurement
- Resistance to various chemicals
- Customer-specific sensors available

Easily customizable to any application

- The **cell constant** is the ratio of the distance between the electrodes and the electrodes' area
- The cell constant influences the precision and measurement range of the sensor
- Temperature influence on conductivity measurement: 2% / °C approx
- When the temperature is known, we can compensate for this influence in our calculation
- IST's conductivity chips feature an on-board PT1000 RTD element



$$\text{Cell Constant} = \frac{\text{Electrode Distance}}{\text{Electrode Surface Area}}$$



**TELL US WHAT YOU'RE LOOKING FOR IN CONDUCTIVITY MEASURING
AND WE'LL CUSTOMIZE A SENSOR FOR YOUR APPLICATION**



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PROVIDING SWISS TECHNOLOGY WORLDWIDE

At IST we offer a fast design-in-process and ideal sensor operation conditions for the development of your application. The choice of materials, technologies, size, form and capabilities of our sensors is extremely vast. Our experts help you find the right ingredients to build the ideal sensor to suit your application.



Technical data:

- **Wide conductivity range:** 10 $\mu\text{S}/\text{cm}$ to 200 mS/cm
- **Operating temperature range:** -30 °C to +100 °C
- **Optimal accuracy:** <1 $\mu\text{S}/\text{cm}$
- **Temperature sensor:** Pt1000
(TCR-3850 ppm/K)
- **Measuring current (Pt1000):** 0.3 mA
- **Temperature sensor accuracy:**
(Dependent on temperature range)
 - ◆ Class A available upon request:
IEC 60751 F0.3 B • IEC 60751 F0.6 C
- **Connection types available:**
 - ◆ Pt/Ni-wires, $\varnothing$ 0.2 mm
 - ◆ Cu/Ag-wires, PTFE-insulated, AWG 30
 - ◆ Others available on project base

Options:

- IST's LFS1107 features four round electrodes and accuracy over a wide conductivity range
- Small package size: 11.4mm x 7mm x 0.63mm / 1.2mm (L x W x H / H2).
- Custom sizes and shapes available
- LFS sensor can be offered with a housing for durability and easier installation
- Housings can help ensure proper immersion depth into conductive media



LFS1710

- Cell constant: 0.44 cm^{-1}
- Chip dimensions:
16.9 x 9.9 x 0.65 mm (LxWxH)



LFS1505

- Cell constant: 0.68 cm^{-1}
- Chip dimensions:
14.9 x 5.5 x 0.65 mm (LxWxH)



LFS1305

- Cell constant: 0.86 cm^{-1}
- Chip dimensions:
12.9 x 5.5 x 0.65 mm (LxWxH)



Offering custom sensor solutions for every application.

Metallized backside (M)



Invert welded & bent wires (U)



Direct welded insulated wires



Extended 2- to 4- wires



Shrink Tube



Connectors

