

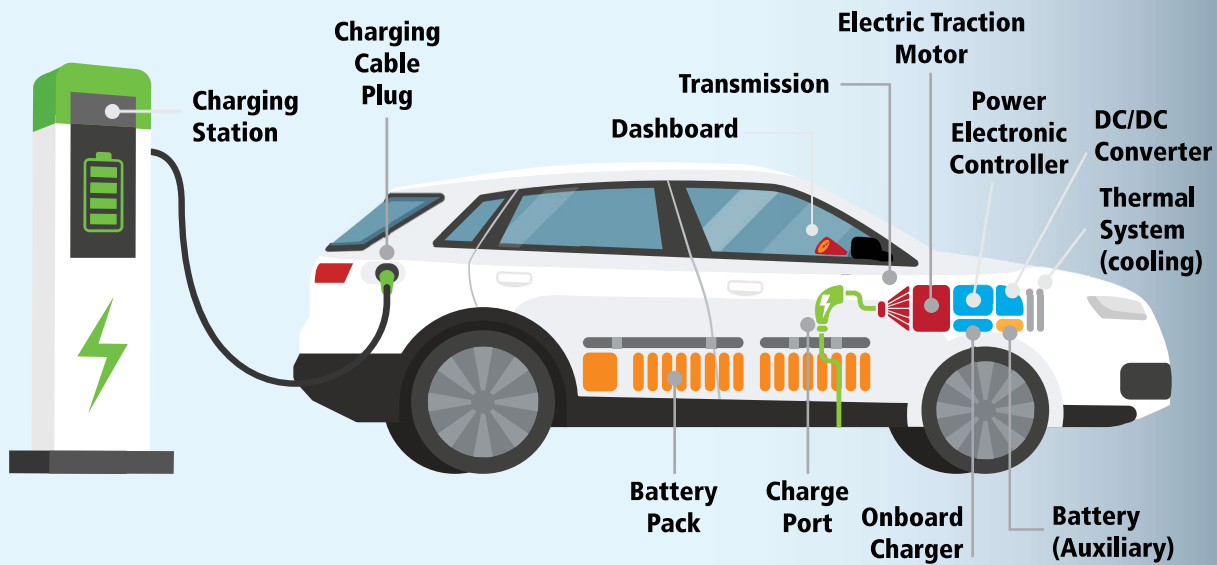


**Innovative
Sensor Technology**

physical. chemical. biological.



ELECTRIC VEHICLES THERMAL MANAGEMENT



ELECTRIC VEHICLES

Temperature sensors:

- Battery Pack: avoid thermal runaway at high temperature.
- Cell connection system to the battery management.
- Power inverter.
- Stator of the drive motor.
- High voltage charging connector.
- Dashboard.

Humidity sensors:

- Modules with temperature sensors.
- Battery coolant.

Conductivity sensors:

- Modules with temperature sensors.

Force & torque sensors:

- Miniature sensors for force pressure surface strain and torque.

Charging Cables: Optimal times

IST helps achieve optimal charging times, efficiency and safety, long-term stability and reliability, through precise temperature measurements inside the plug.

— ESD OPTIMIZED RTD SENSORS UP TO 15KV IN AIR —



Innovative Sensor Technology IST AG

USA DIVISION • 9516 W. Flamingo Rd. Suite 210, Las Vegas, NV 89147

Tel. +1 702 894 9891 • Division.us@ist-ag.com

www.ist-ag.com | MADE IN SWITZERLAND



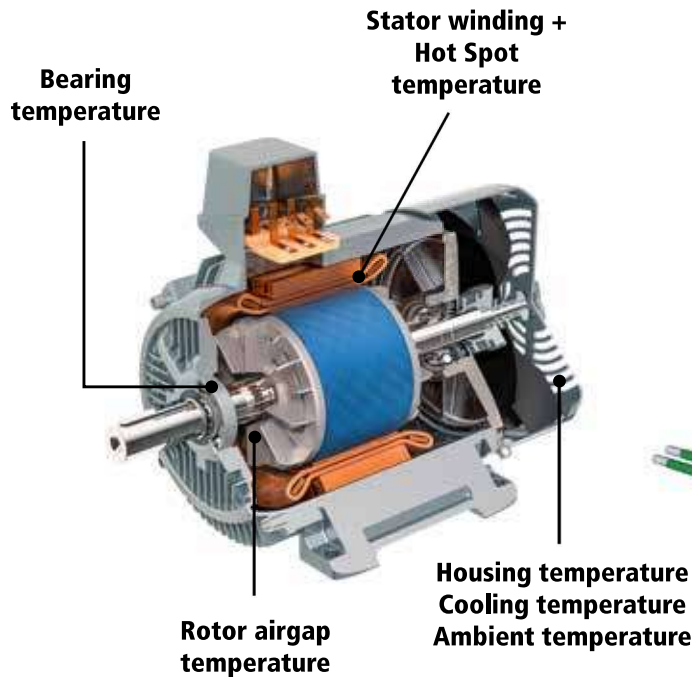
PROVIDING SWISS TECHNOLOGY WORLDWIDE

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.

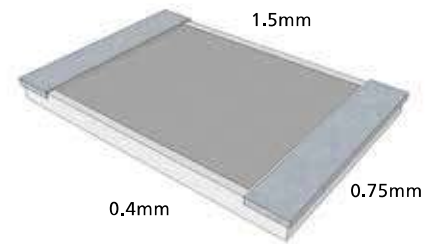


Platinum Temperature Sensors

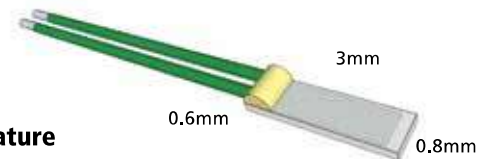
IST AG provides platinum temperature sensors for stators, bearings and housings, featuring high sensitivity and extremely small sizes. Stator measurements require high linearity at temperatures beyond 150° C. IST offers ultra high accuracy PT100s without the need for calibration.



FlipChip and SMD

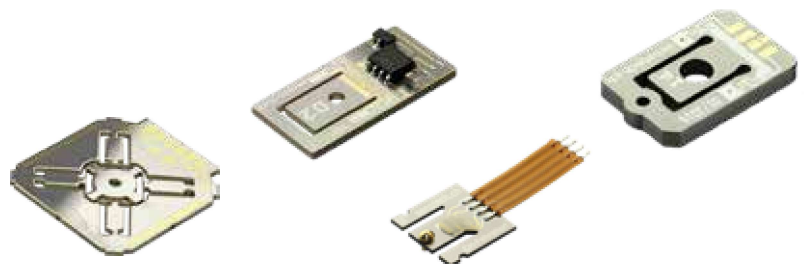


SlimSens



Force & Torque Sensors

- Manufactured with thin film technology
- Measuring ranges from approx. 0.1 bar – 0.4000 bar to 4 mm in diameter
- Temperature Range from -40 to 200°C

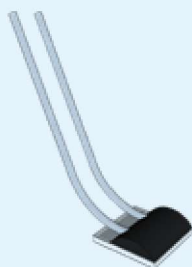


Offering custom sensor solutions for every application.

Metallized backside (M)



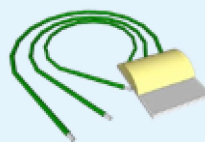
Invert welded & bent wires (U)



Direct welded insulated wires



Extended 2- to 4- wires



Shrink Tube



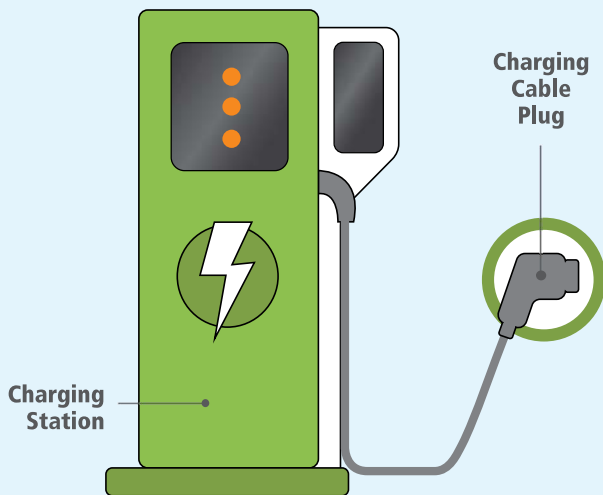
Connectors



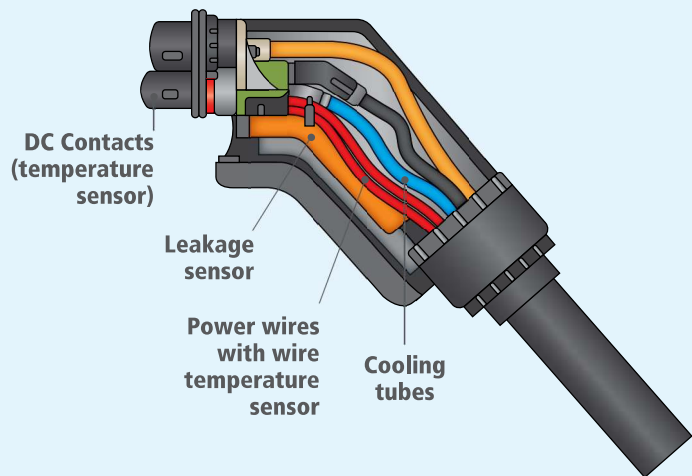


EV CHARGING WITH IST SENSORS

Charging Station

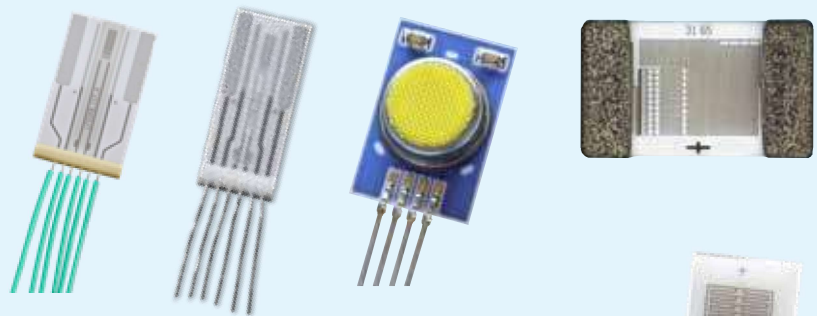


Liquid Cooled Connector



Charging Station and Liquid Cooled Connector Sensors:

- Temperature
- Out of Liquid
- Humidity
- Conductivity
- Leakage



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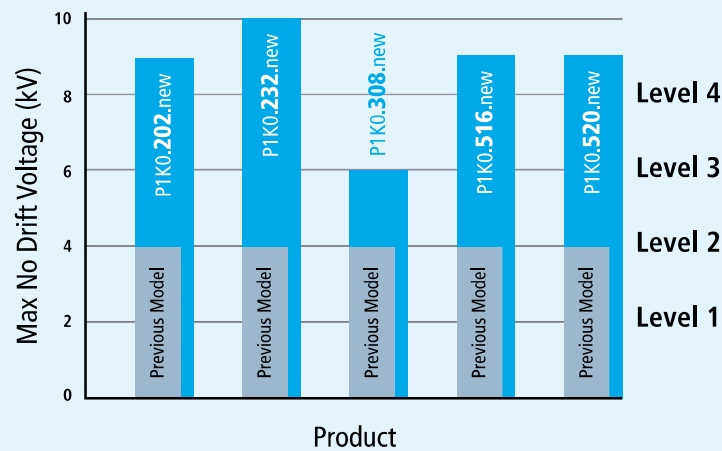
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ESD OPTIMIZED RTD SENSORS

NO DRIFT AFTER MAX. ESD VOLTAGE OF 15KV IN AIR



ESD Test Levels (IEC/EN 61000-4-2)

	Contact Discharge	Air Discharge
Level	Test Voltage	Test Voltage
1	±2 kV	±2 kV
2	±4 kV	±4 kV
3	±6 kV	±8 kV
4	±8 kV	±15 kV
x	x	x

x can be any level specified in product specific standards



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