

## Innovative Single-Use Conductivity Sensor For Accurate Measurement



### No Calibration Needed

Provides precise conductivity and temperature measurements without the need for calibration.



### Temperature Normalization

Temperature measurement is used by the monitor to perform normalization of readings to 25°C.



### Data Integration

4–20 mA outputs for both conductivity and temperature, allowing data transmission to advanced control systems like PLC or DeltaV, along with an RS-232 output for PC data collection.



### Durable Construction

Sensors are made from gamma/X-ray compatible and NaOH-resistant materials, compliant with USP Class VI standards.



### Efficient Conductivity and Temperature Measurement

#### With Single-Use Conductivity Sensor

METTLER TOLEDO Pendotech's Single-Use Conductivity Sensor provides highly accurate conductivity and temperature measurements without needing sensor calibration. Each sensor has a pre-set cell constant entered into the monitor, which reads data from two sensors. The sensors measure conductivity within a range of 0.1 to 100 mS/cm and temperature from 2°C to 50°C (35.6°F to 122°F). These sensors do not require calibration due to the pre-determined cell constant, although users have the option for a one-point calibration if desired.

**Sensor Specifications**

Manufacturing Testing	Each product was leak tested to confirm integral assembly Each product was tested to determine its cell constant
Accuracy	0.1 to 2 mS/cm      +/- 0.1 mS/cm 2 to 50 mS/cm      +/- 5% of reading 50 to 100 mS/cm    +/- 5% of reading
Pressure Range	75 psi max
Biocompatibility	All materials in contact with product fluid path meet USP Class VI requirements, both pre- and post-gamma exposure
Regulatory and Compliance Testing	<ul style="list-style-type: none"> <li>• USP Class VI</li> <li>• ISO 10993-5</li> <li>• ADCF</li> <li>• Particulates</li> <li>• Bioburden</li> <li>• Endotoxin</li> <li>• REACH Compliant</li> <li>• RoHS Compliant</li> <li>• Bacteriostatis and Fungistatis (B&amp;F)</li> </ul>
Manufacturing Environment	ISO 9001 certified facility; Class 5
Operating Temperature	2°C to 50°C (35.6°F to 122°F) (other ranges with process qualification because thermistor reads to 70°C (158°F))
Temperature Accuracy	Better than +/- 0.2°C (+/-0.36°F) (typical better than 0.1°C (0.18°F))
Temperature Element	Thermistor with resistance @ 25°C (77°F) of 2,252 ohm
Gamma Irradiation	Up to 50 kiloGrays
X-ray Irradiation	Up to 50 kiloGrays
ADCF Status	All fluid path materials are animal-derived component-free
Connector	Custom molded watertight 4-pin connector Rating: IP67 when connected to reusable cable and dust cover
Shelf Life	3 years
Packaging	Sealed in vapor barrier bag inside polybag
Storage Temp	-25°C to 65°C (-13°F to 149°F)

**Ordering Information****Order Number**

Single-Use Conductivity Sensor, non-sterile, polysulfone 1/8 inch hose barb	CONDS-N-012
Single-Use Conductivity Sensor, non-sterile, polysulfone 1/4 inch hose barb	CONDS-N-025
Single-Use Conductivity Sensor, non-sterile, polysulfone 1/2 inch hose barb	CONDS-N-050
Individual Certificate of Analysis for single use conductivity sensor (ea.)	CONDS2-COA

Each user should test the sensor in their specific application to ensure it is suitable before using it. The sensors are not meant for life support or safety-critical uses where failure could cause injury, death, or property damage. Appropriate safety measures must be implemented when using these sensors.