

## Precise Conductivity Measurement For Enhanced Process Control



### Wide Measurement Range

Measures conductivity from 0.1 to 100 mS and temperature from 2 to 50°C, accommodating a variety of applications.



### Real-Time Data Processing

Calculates a normalized conductivity value at 25°C and transmits it via a linear 4-20 mA signal.



### User-Friendly Installation

Features a DIN rail mounting design and includes a conductivity sensor cable for easy setup.



### Effective Temperature Compensation

Utilizes actual temperature readings from the sensor with a compensation coefficient of 2.1% per °C to ensure accuracy.



### CT-2 Conductivity Sensor Transmitter For Reliable Process Monitoring

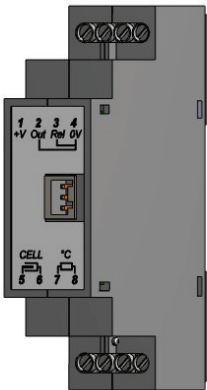
The METTLER TOLEDO Pendotech CT-2 Conductivity Sensor Transmitter is designed to provide dependable performance for process monitoring across various applications. It easily integrates with the METTLER TOLEDO Pendotech Single-Use Conductivity Sensors, ensuring accurate conductivity readings. The CT-2 features a DIN rail mounting design, compatible with any 35 mm rail that meets EN50022 standards. It also operates on a standard 24 VDC power supply typically used in instrumentation setups, making installation straightforward. The CT-2 leverages actual temperature readings from the conductivity sensor and calculates the normalized value at 25°C to ensure measurement accuracy. This transmitter is the ideal solution for efficient and precise conductivity measurement and monitoring tasks.

| Power/ Output |                  |
|---------------|------------------|
| Terminals     | Function         |
| 1             | 24 VDC Power +   |
| 2             | 4-20 mA output + |
| 3             | Not used         |
| 4             | Power/ mA -      |

| Sensor Cable |                     |
|--------------|---------------------|
| Terminals    | Function            |
| 5            | Conductivity: White |
| 6            | Conductivity: Green |
| 7            | Temperature: Red    |
| 8            | Temperature: Black  |

| Specifications  |  |
|---|--|
| Conductivity Input Signal                                 | 0.1 mS/cm to 150 mS/cm   |
| Cell Constant   | 0.5 to 3 (see sensor label)  |
| Temperature Input   | Pendotech Single Use Temperature Sensor Thermistor (NTC 2.252K)  |
| Temperature Compensation                                  | 2.1%/°C  |
| Output Signal   | 4 to 20 mA range of 0 mS to 150 mS   |
| Admissible Current Load                                   | Max. 500 Ω at 20 mA  |
| Admissible Voltage Load                                   | Max. 2 kΩ at 10 V  |
| Power Supply  | 24 VDC +/- 20%, max. 100 mA  |
| Input Isolation   | 1500 VAC for 1 min   |
| Conductivity Measurement Accuracy (with sensor connected) | 0.1 to 2 mS/cm: +/- 0.1 mS/cm;<br>2 to 50 mS/cm: +/- 5% of reading;<br>50 to 100 mS/cm: typically, +/- 5% of reading |
| Temperature Measurement Accuracy (with sensor connected)  | 2 to 50°C: +/- 0.2°C (35.24°F to 122.36°F: ±0.36°F)  |
| Ambient Temperature / Humidity                            | -20 to 85°C (-4°F to 185°F) / 0 to 85% RH, non-condensing  |
| Protection Class  | IP20   |
| Mounting Specification                                    | DIN rail   |

| Ordering Information   | Order Number |
|--|--------------|
| Pendotech Conductivity Sensor Transmitter with 4-20 mA output, 0-100 mS operating range, 24 VDC, with quality certificate and 10 ft sensor cable | CT-2         |
| RS232 to USB serial communications cable for DIN rail conductivity transmitter CT-2  | CT-2-RS232   |



CT-2 shown with  
CT-2-RS232 cable