Environmental

Conductivity and Temperature Monitor and Controller

OTE OMEGA



- On/Off Relay Outputs
- Economical
- Automatic or ManualTemperature Compensation
- ✓ Selectable Zero and Span Analog Output



Industrial process conductivity/temperature controllers CDTX-111 and CDTX-112 are panel instruments for in-process monitoring of conductivity. Range switch over and cell constant checks can both be freely set and adjusted during operation. Unique signal collection and processing technology, and a special thick film circuit are employed to ensure accurate measurements and stable operation. Other features include linearized data, automatic temperature compensation, and maintenance-free cells. The control functions trigger relays based on conductivity setpoints. The CDTX-111 and CDTX-112 are ideal auxiliary instruments for many types of water testing applications.

SPECIFICATIONS **Display Type** CDTX-111: LED, 13 mm height CDTX-112: LCD, 13 mm height Measurement: 0 to 18 M Ω or 0 to 19.99 μ S/cm Range (Depending upon cell constant) CDTX-111: 0 to 199.9 µS/cm; 0 to 1999 µS/cm CDTX-112: 0 to 999.9 µS/cm; 0 to 9999 µS/cm, 0 to 100mS/cm, 0 to 600 mS/cm Temperature: 0 to 100°C (32 to 212°F) **Resolution:** 0.01 M Ω CDTX-111: 0.01 to 1 µS/cm CDTX-112: 0.01 to 0.01 mS/cm Temperature: 0.1°C (32.1°F) Accuracy: ±1% FS, ± 0.2°C Temperature: Automatic/manual Compensation: 0 to 100°C (32 to 212°F) Output Relays: 2 programmable, 10 A Control Type: On/off Relay Set Point Hysteresis: User programmable **Current Output** Type: Isolated 4 to 20 mA Range: Selectable zero and span Accuracy: ±0.02 mA Maximum Load: 750 Ω Power Supply: AC 110V to 220V ±10%, 50/60 Hz Both models shown smaller than actual size.



Weight CDTX-111: 580 g (20.4 oz) CDTX-112: 650 g (22.9 oz) Dimensions CDTX-111: 96 × 48 × 110 mm (3.78 x 1.89 x 4.33") **CDTX-112:** 96 × 96 × 110 mm (3.78 x 3.78 x 4.33") Mount Type: Panel Cut-Out Size CDTX-111: 92 × 44 mm (3.6 x 1.73") **CDTX-112:** 92 × 92 mm (3.6 x 3.6") Enclosure Rating: IP54 Environmental Operating Ambient Temperature: -10 to 55°C (14 to 131°F) Requirements Relative Humidity: 5 to 95% non-condensing Maximum Operating Altitude: 3000 m (10,000')

Environmental



Accessory Specifications

Model No.	CDE-100-001	CDE-100-01	CDE-100-1	CDE-100-10	CDE-100-30
Cell Constant	K = 0.01	K = 0.1	K = 1	K = 10	K = 30
Measurement	0 to 18 MΩ or 0 to 19.99 μS/cm	0 to 999.9 μS/cm	0 to 9999 μS/cm	0 to 100 mS/cm	0 to 600 mS/cm
Range	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)
Accuracy	±1% FS	±1% FS	±1% FS	±1% FS	±1% FS
Temperature Accuracy	±0.2°C	±0.2°C	±0.2°C	±0.2°C	±0.2°C
Temperature Sensor	10 k	10 k	10 k	10 k	10 k
Operating Temperature	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)	0 to 80°C (32 to 176°F)
Operating Pressure	0.6 MPa	0.6 MPa	0.6 MPa	0.6 MPa	0.6 MPa
Thread Size	¾ NPT	¾ NPT	3⁄4 NPT	³ ⁄ ₄ NPT	3⁄4 NPT
Cables Length	5 m (16.4')	5 m (16.4')	5 m (16.4')	5 m (16.4')	5 m (16.4')
Enclosure Rating	IP68	IP68	IP68	IP68	IP68
Sensor Diameter/Length	16 x 65 mm (0.63 x 2.5")	16 x 65 mm (0.63 x 2.5")	16 x 65 mm (0.63 x 2.5")	23 x 40 mm (0.9 x 1.6")	23 x 135 mm (0.9 x 5.3")
Outer Tube Material	316 SS	316 SS	316 SS	ABS	PPS
Sensor Material	316 SS	316 SS	316 SS	Platinum and Glass	Platinum

To Order

Model No.	Description (Sensors Sold Separately)	
CDTX-111	Conductivity monitor and controller, 1/8 DIN	
CDTX-112	Conductivity monitor and controller, 1/4 DIN	

Comes complete with operator's manual.

Accessories

Model No.	Description (Electronics Sold Separately)	
CDE-100-001	Conductivity cell, constant = 0.01 for 0 to 600 mS/cm	
CDE-100-01	Conductivity cell, constant = 0.1 for 0 to 600 mS/cm	
CDE-100-1	Conductivity cell, constant = 1.0 for 0 to 600 mS/cm	
CDE-100-10	Conductivity cell, constant = 10.0 for 0 to 600 mS/cm	
CDE-100-30	Conductivity cell, constant = 30.0 for 0 to 600 mS/cm	