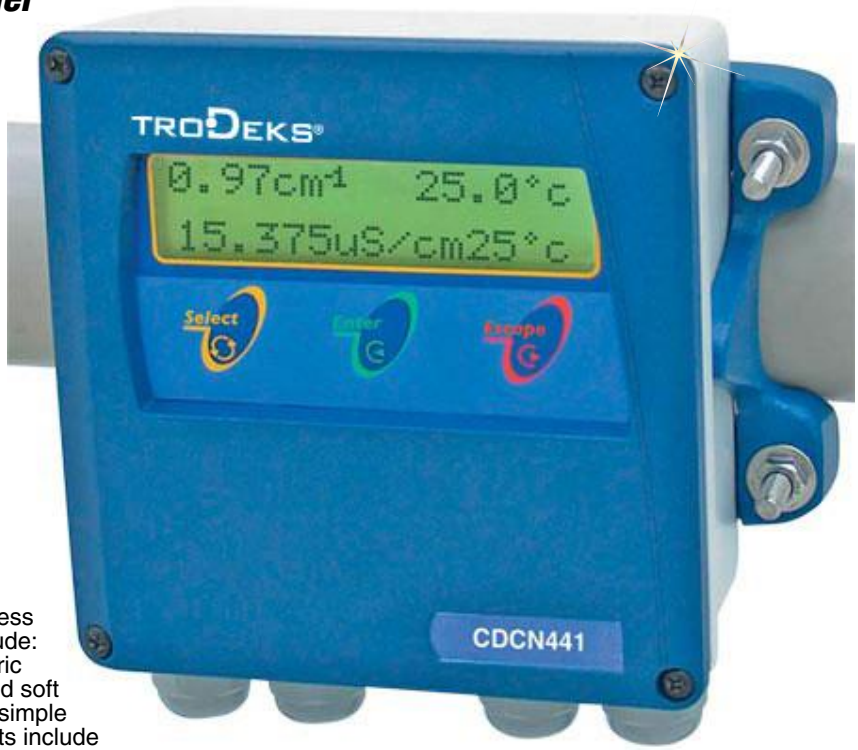
Conductivity or Resistivity Controller

CDCN441

3 YEAR WARRANTY

- **Analyzer/Transmitter/Controller**
- **Self-Guided Menu**
- **Auto-Range Scales**
- **Automatic Calibration and Check**
- **Recognizes Standard and Cell**
- **Automatic Temperature Compensation**
- **On-Off/PWM Control**
- **Programmable Transmitter Output**
- **RS485 Output**



CDCN441 shown smaller than actual size.

The CDCN441 conductance/resistance analyzer-controller is designed for online monitoring of process solutions and water applications. Applications include: waste water treatment, power plants, thermo electric plants, pharmaceutical, photographic industries and soft drinks industries. The menus are self guiding with simple three button programming. Available control outputs include ON-OFF or pulse width modulation. The transmitter output is also programmable from the keypad eliminating the need for potentiometer or dip-switch settings. The calibration function automatically recognizes the cell used and the buffer solution resulting in a simple and straight forward system calibration.

Equipment is built with solid state technology, electronic contacts and not electrical contacts, avoiding mechanical movement and off course no sparks.

Specifications

General

Construction/Materials:
Case: Aluminum (SAE323)
Faceplate: ABS
Anti-Corrosion Treatment: Finished with electrostatic epoxy paint
Case Rating: NEMA 4 (IP68)
Power Consumption: 3.5 VA
Power: 90/240 Vac; 50/60Hz
LCD Readout: 2 lines x 16 characters
Reading Modes: Continuous, average or hold
Assembly in 51 mm (2") Tube or Flat Surface or Panel: 144 x 144 x 100 mm DIN (5.7 x 5.7 x 4")
Weight: 1.3 kg (2.8 lb)
RS485 Output: MODBUS® and proprietary communication protocol

Analyzer

Conductivity Range: 1µS/cm to 2S/cm
Resistivity Range: 10 MΩ/cm to infinity
Resolution: 0.1 or 0.01
Automatic or Manual Temperature Compensation: 0 to 100°C (32 to 212°F)
Temperature Compensation: NTC-R typical 5 Ω at 25°C (77°F)
Operating Temperature: 5 to 40°C (41 to 104°F)
Cell Constants Offered: K = 0.01/0.1/5/5/10

Transmitter

Analog Output: 4 to 20 mA (2), this output can be programmed for transmission
Impedance: 600 Ω
Optical Galvanic Isolation: 2000 Vac
Controller Outputs: 2 N.O. (1A/240 Vac) on/off alarm or PWM; 4 to 20 mA for PID control or retransmission

Cells

CDE-440-001:
Range: 0.01 µS to 2mS, K = 0.01, 0 to 100°C (32 to 212°F), 10 kg/cm²
Insertion Length: 54 mm (2.1")
Thread: 316 SS, ¾ NPT

CDE-440-01:
Range: 0.1 µS to 20 mS, K = 0.1, 0 to 130°C (32 to 266°F), 10 kg/cm²
Insertion Length: 42 mm (1.7")
Thread: 316 SS, ¾ NPT

CDE-440-1:
Range: 0.1 µS to 100 mS, K = 1, 0 to 130°C (32 to 266°F), 10 kg/cm²
Insertion Length: 60 mm (2.4")
Thread: 316 SS, ¾ NPT

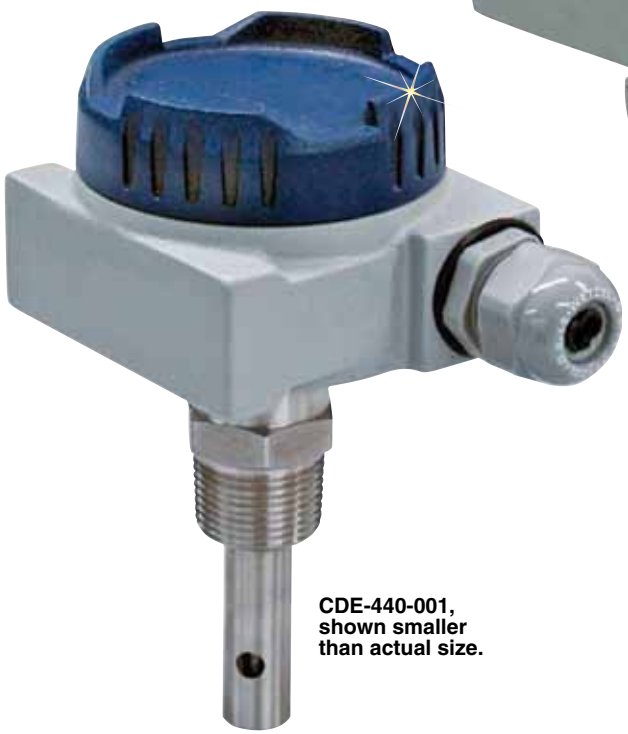
CDE-440-5:
Range: 1 µS to 150 mS, K = 5, 0 to 130°C (32 to 266°F), 10 kg/cm²
Insertion Length: 60 mm (2.4")
Thread: 316 SS, ¾ NPT (PVDF body)

CDE-440-01T:
Range: 0.1 µS to 20 mS, K = 0.1, 0 to 200°C (32 to 392°F), 10 kg/cm²
Insertion Length: 90 mm (3.5")
Thread: 316 SS, ¾ NPT

CDSA calibration solutions, see accessories chart below.

CDE-440-01T shown smaller than actual size.

CDE-440-5 shown smaller than actual size.



CDE-440-001, shown smaller than actual size.

To Order

Model No.	Description
CDCN441	Conductivity/resistivity controller with relay and 4 to 20 mA outputs
CDE-440-001	Conductivity sensor, K = 0.01, 0.01 µS to 2 mS, 0 to 100°C (32 to 212°F)
CDE-440-01	Conductivity sensor, K = 0.1, 0.1 µS to 20 mS, 0 to 130°C (32 to 266°F)
CDE-440-1	Conductivity sensor, K = 1, 0.1 µS to 100 mS, 0 to 130°C (32 to 266°F)
CDE-440-5	Conductivity sensor, K = 5, 0.1 µS to 150 mS, 0 to 130°C (32 to 266°F)
CDE-440-01T	Conductivity sensor, K = 0.1 heavy duty, 0.1 µS to 20 mS, 0 to 200°C (32 to 392°F)

Accessories

Model No.	Description
CDSA-10	10 µS calibration solution 940 mL (1 qt)
CDSA-45	45 µS calibration solution 940 mL (1 qt)
CDSA-450	450 µS calibration solution 940 mL (1 qt)
CDSA-1500	1500 µS calibration solution 940 mL (1 qt)
CDSA-4500	4500 µS calibration solution 940 mL (1 qt)
CDSA-45000	45000 µS calibration solution 940 mL (1 qt)

Comes complete with 316 SS hardware for 51 mm (2") tube installation and wall mount brackets and operator's manual. Sensors sold separately.
***Ordering Examples: CDCN441,** conductivity/resistivity controller.*
***CDE-440-5,** sensor K = 5 (PVDF material).*