Complete Water Treatment Controller Systems

CDCN13 Series

1 YEAR WARRANTY

- Conductivity/TDS Control with Choice of Bleed Programs
- Temperature Monitoring
- Make Up and Bleed Watermeter Totalizers
- Langelier Saturation Index for Water Balance
- Six Feed Programs for 4 Chemical Additives
- "Booster" Chemical Feed to Schedule a Delayed One Time Feed Event
- Time Based Low Chemical Level Alarm
- Probe Failure Indication and Alarm
- Automatic Probe Rinse to Clean Sensors
- Integral Data Logging for up to 999 Points with RS232 Communications
- NEMA 4X Wall Mount Enclosure
- Water Test for Alkalinity and Hardness
- Remote Computer Operation with Windows Software
- Quick Release Enclosure Design for Fast Access and Wiring

Options Include

- pH Control
- ORP Monitoring and Control
- 4 to 20 mA Analog Outputs
- RS485 Communications

CDCN13 shown smaller than actual size.

The CDCN13 has 8 control relay outputs, for up to 4 chemical additives, fill valve, bleed valve, probe rinse, and remote alarm. Standard features also include dynamic probe failure testing for pH/ORP sensors, allowing the controller to detect a probe failure quickly after it occurs, so the user can avoid dangerous out-of-range conditions. The automatic probe rinse can be used for either manual or automatic cleaning of pH or ORP electrodes.

The CDCN13 is a fully programmable controller designed for complete chemical automation (conductivity, pH and ORP) as well as control of chemical additives, all with data logging, RS232 communications, and available RS485. This controller can easily handle cooling tower, boiler, industrial process water, food processing, drinking water and wastewater treatment applications. Featuring high accuracy and easy installation and operation, engineering units can be displayed in either US or metric values using the 16-button keypad and the large, 8-line LCD readout with simple scroll-through menus. Standard features include conductivity control, with the ability to control 4 additive feed programs. You can get a readout of the probe temperature. pH and ORP measurement and control is available, as is a safety flow switch contact, and RS485 communications.

Specifications

Measurement Range:
Conductivity: 0 to 20000 µS/cm or ppm; conversion factor for TDS
pH: 0 to 14 pH; setpoint for acid or base feed
ORP: 0 to 999 mV; programmable shock treatment
Accuracy:
Conductivity: ±1% rdg
pH: ±0.1 pH
ORP: ±10 mV
Resolution:
Conductivity: 1µS
pH: 0.01 pH
ORP: 1 mV

Our Industrial pH Instrumentation and Electrodes product line continues to expand, visit omega.com for new details!

Temperature Range: -18 to 60°C (0 to 140°F)
Watermeter Input: For totalizer function
Sensor Calibration: 1, 2 or 3 points
Control Modes: Off, manual, auto, timer, bleed and feed, bleed-then-feed, daily schedule
Langelier Index: Water balance display calculated from pH, temp, total alkalinity and calcium hardness
Alarms: High/Low, out-of-range, overfeed and total run time; visual, audible and external (5 A) alarms
Data Logging: On-board memory for 999 tests; RS232 communication port for local download and printing
Networking: RS485 port for multiple connections (optional)
Remote Operation: Software and graphical display for Windows
Power: 115/230 Vac, 10 A
Control Outputs: 5 A relays, SPST; 4 chemical additive, one each: bleed, fill, probe rinse and alarm
Probe Sensor Failure: For pH or ORP electrode
Mechanical: NEMA 4X enclosure
Display: Eight line LCD; 16-button keypad
Dimensions: 336 x 285 x 167 mm (13.21 x 11.21 x 6.59")
Shipping Weight: 8.2 kg (18 lb)

To Order

Model No.	Input	Communications
CDCN13	Conductivity	RS232
CDCN13-PH	Conductivity/pH	RS232
CDCN13-485	Conductivity	RS232, RS485
CDCN13-PH-485	Conductivity/pH	RS232, RS485
CDCN13-ORP	Conductivity/ORP	RS232
CDCN13-PH-ORP	Conductivity/pH/ORP	RS232
CDCN13-ORP-485	Conductivity/ORP	RS232, RS485
CDCN13-PH-ORP-485	Conductivity/pH/ORP	RS232, RS485
CDCN13-A	Conductivity	RS232, 4 to 20 mA
CDCN13-PH-A	Conductivity/pH	RS232, 4 to 20 mA
CDCN13-ORP-A	Conductivity/ORP	RS232, 4 to 20 mA
CDCN13-PH-ORP-A	Conductivity/pH/ORP	RS232, 4 to 20 mA

Accessories (Recommended Buffer and Conductivity Solutions)

Model No.	Description
CDE10	Conductivity sensor
CDE10HP	High pressure conductivity sensor
PHE10	pH electrode
PHE10HP	High pressure pH electrode
ORE10	ORP sensor
ORE10HP	High pressure ORP sensor
FSW10S	Shuttle style flow switch
FSW10B	Blade style flow switch
PHA-4	4.00 pH buffer solution 500 mL (1 pt) bottle
PHA-7	7.00 pH buffer solution 500 mL (1 pt) bottle
PHA-10	10.00 pH buffer solution 500 mL (1 pt) bottle
CDSA-45	45 µS conductivity solution
CDSA-1413	1413 µS conductivity solution
CDSA-1500	1500 µS conductivity solution

Comes complete with operator's manual and 3V lithium battery. Probes sold separately.
Note: *When ordering the conductivty or pH controller, it is recommended to purchase pH buffer solution, such as* ***PHA-7,*** *pH buffer 7 and conductivity standard solution, such as* ***CDSA-1413,*** *1413 µS/cm.*
Ordering Examples: CDCN13, *conductivity controller,* ***CDE10,*** *conductivity sensor,* ***CDSA-1413,*** *conductivity standard solution, 1413 µS/cm.*
CDCN13-PH-A, *conductivity/pH controller with 4 to 20 output,* ***PHE10,*** *pH electrode,* ***PHA-7,*** *pH 7 buffer solution.*