

pH/Temperature Recorder

**MODEL #5
CTXL-PH**



- ✓ Record pH with Automatic Temperature Compensation
- ✓ Standard BNC pH Electrode Connector
- ✓ Pt100 RTD Temperature Sensor ATC
- ✓ Benchtop or Wall Mount with Built-In Chart Lights
- ✓ Data Logging PC Software Included

The CTXL-PH is a high accuracy pH and temperature recorder, compatible with any standard pH electrode. The CTXL-PH also measures temperature from a pH electrode with built-in Pt100 RTD sensor for automatic temperature compensation for pH measurement. Standard charts feature 0 to 12 pH and 0 to 120°C ranges, while the recorder can display 0 to 14 pH and 0 to 100°C on the digital readout. The user can also scale the chart paper to show a portion of the full ranges, ie, from 6 to 8 pH and from 50 to 75°C, for greater resolution.

Specifications

(See Common Specifications on Page S-44)

pH Input:

- Connection:** BNC connector
- Display Range:** 0 to 14 pH
- Chart Scale:** 0 to 12 pH
- Accuracy:** 0.1 pH, chart and display

Resolution:

- Chart Paper:** 0.1 pH
- Display:** 0.01 pH
- Input Impedance:** 10¹² Ω, typical
- Automatic Temperature Compensation:** 0 to 100°C (32 to 212°F)

Temperature Input

- Input:** Pt100 RTD, 0.00385 curve
- Connection:** Terminal block
- Display Range:** 0 to 100°C (32 to 212°F), chart and display
- Chart Scale:** 0 to 120°C
- Accuracy:** 1°C, chart and display
- Resolution:**
 - Chart Paper:** 1°
 - Display:** 0.1



Large 200 mm (8") 2-Sided Chart

Choice of White or Gray to Meet Your Needs!

CTXL-PH, pH/temperature recorder, shown smaller than actual size.

pH electrode and buffer solution sold separately.

PATENTS PENDING

To Order		
Model No.	Description	Color
CTXL-PH-W	pH/temperature recorder	White
CTXL-PH-G	pH/temperature recorder	Gray

** To form a complete system, add pH electrode (listed in accessories).

Double-Sided Chart

Model No.	Description
CTPH-CDC	100 charts, 1 day (am/pm), 0 to 12 pH/0 to 120°C
CTPH-CWC	100 charts, 7 day, 0 to 12 pH/0 to 120°C
CTPH-CMC	100 charts, 32 day, 0 to 12 pH/0 to 120°C
CTPH-CSP	120 charts, sample pack (one included with unit)

Accessories

Model No.	Description
PHE-7352-15-PT100	Heavy-duty pH electrode with Pt100 RTD temperature sensor
PHE-6510	Submersion pH electrode, CPVC (mounting assembly required), visit newportUS.com/phe-6510
PHE-6511	Submersion pH electrode, PVDF (mounting assembly required), visit newportUS.com/phe-6510
PHE-1311	General purpose pH electrode
PHA-4	4 pH buffer solution, 475 ml bottle
PHA-7	7 pH buffer solution, 475 ml bottle
PHA-10	10 pH buffer solution, 475 ml bottle
UNIV-AC-100/240	Universal 9 Vdc adaptor
CAL-3-CTXL†	NIST-traceable calibration
CT485-PS	Pen set, one each red and blue pens
CT485-PS-6	Six pen sets, six each red and blue pens

Each unit comes complete with 120 assorted double-sided charts, 2 pen sets, wall mount kit, 4 "D" cell batteries, RS232 cable and adaptor, software CD, universal ac adaptor, temperature compensation resistor and operator's manual.

pH Electrode sold separately.

Ordering Examples: CTXL-PH-W, white pH/temperature recorder, PHE-6510, submersible pH electrode (CPVC) and PHEH-65-10-PT100, mounting assembly with 100 Ω Pt RTD automatic temperature compensation. For more information visit newportUS.com/phe-6510

Keypad Buttons

Clock – Display Time & Date for 3 seconds

°C◀▶°F – Toggle Temperature Units (Temp units)

Scale – Sets the Chart Scale for °C or °F (Temp units)

Speed – Sets Chart Speed for 1, 7 or 32 Day Operation

Config – Enter Configuration Menu

Set – Enable/Disable Alarms

▲ Yes – Increase Set Value

▼ No – Decrease Set Value

Mode – Display Min, Max, Average; also T1-T2 (thermocouple model)

Light – Chart Light and Display Backlight Switch

White Box – User Lockout

Common Specifications

Display: Custom, 4-digit, dual LCD with backlight

Display Sampling Rate: 2 sec

Display Modes: Max, min, avg, T1 – T2

Chart Response Time: 0.5, 3.5, 16 min for 1, 7, and 32 days, respectively

Keypad Response: 350 ms

Chart Paper: 203 mm (8") circular, linear radial divisions, double sided

Chart Drive:

Type: Stepper motor

Accuracy: 1% rotation

Chart Hold-Down: Magnetic hub

Pen Drive:

Type: Stepper motor, linear screw drive

Deadband: 0.5°C or °F and 3% RH

Pen Lift: Automatic on door opening—pens are door mounted and swing clear of the chart when door opens

Clock: Time (24 hr clock) and date

Clock Battery Backup: Holds clock information for 14 days when main power is removed

Audible Alarm: Piezoelectric beeper

Alarm Outputs:

Relay Contacts: Two, rated 2 A @ 30 Vdc (high alarm)

Voltage Output: Two, rated 100 mA to drive an external relay (low alarm)

Operating Ambient: 0 to 49°C

(32 to 120°F); 2 to 98% RH

Power: 4 "D" alkaline batteries and ac adaptor (included)

Battery Life: 3 months under normal conditions

AC Adaptor: 100 to 240 Vac input, 9 Vdc @ 1.7 A output

Battery Status: Indicator on LCD; shows 100, 75%



CTXL-DPR PC Application



CTXL-TRH—Temperature/Humidity Local Display



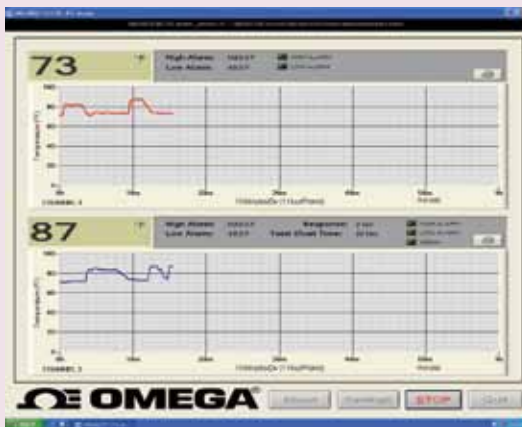
CTXL-DPR—Dual Process Local Display



CTXL-PH PC Application



CTXL-PH—pH & RTD Local Display



CTXL-DTC PC Application



CTXL-DTC—Dual Thermocouple Local Display

Serial PC Communications: RS232, 2-way, 9600 baud

Memory: 256K EEPROM (2.8 chart revolutions worth of data)

Lock/Unlock (White Box) Key: Press and hold for 3 seconds to enable/disable; when in lock mode, all keys are inactive except for the power, light, mode, clock and lock/unlock keys

Mounting: Keyhole slots for wall mounting; foot cover for bench top use

Case: ABS plastic

Dimensions: 33.5 H x 27.1 W x 6.7 cm D (13³/₁₆ x 10¹/₁₆ x 2⁵/₈")

Weight: Approx. 3.2 kg (7 lb) with batteries