The CTXL Series circular chart recorders from OMEGA combine form and function in an easy to use two-channel circular chart recorder with a large, 200 mm (8") diameter chart, and dual channel LCD readout. Depending on your application, the CTXL is available to measure ambient temperature and humidity (with an available wireless option capable of up to 90 m (300') line of sight), dual thermocouple, dual process (1 V, 5 V, 10 V, or 0/4 to 20 mA), or pH/temperature.

The CTXL has a custom LCD readout that displays the current values of both channels, and can indicate the min, max or average input values as well. The display also indicates the chart speed (1, 7 or 32 day), battery status, high and low alarm indication, keypad lockout status, and battery life.

Additional features of the CTXL include dual relays with contact closures for high alarms, and dual voltage outputs for low alarms to drive external relays. A built-in audible buzzer also informs the user of an alarm condition. A hidden key (White Box) can lockout unauthorized access to the front keypad, preventing changes to the recorder settings.

The CTXL features a rugged, ABS enclosure, suitable for industrial environments, but it’s also intended to fit right in to other environments, such as museums, art galleries, computer rooms, labs, clean rooms, even hospitals. The CTXL is designed for both benchtop and wall mount operation; a convenient base rotates out of the way, and is hidden by a decorative foot cover for wall mount use.

Each unit comes complete with 120 assorted double-sided charts, 2 pen sets, extra chart light, universal ac adapator, 4 “D” cell alkaline batteries, RS232 cable and adaptor, wall mounting kit, and quick start manual. CTXL-TRH models are also supplied with sensor probe and clip, and 1.8 m (6’) probe extension cable.

† Refer to accessories chart for NIST calibration ordering information.
Temperature/Relative Humidity Recorder

MODEL #1
CTXL-TRH

-17 to 49°C (2 to 120°F) and 2 to 98% RH Ranges
Detachable Sensor Probe for Direct Attachment or Remote Mounting
Available Wireless Sensor Model
Windows-Based PC Data Logging Software Available Online
Specialty Chart Papers Available for Custom Applications
Benchtop or Wall Mount with Built-In Chart Lights
RoHS 2 Compliant

The CTXL–TRH recorder is designed for both local and remote monitoring of temperature and relative humidity. The standard sensor probe clips to the side of the unit, or may be detached and mounted up to 12 m (40') away, using available extension cables. For even longer distances, the recorder is available with a wireless probe, which can be placed up to 90 m (300') line of sight, or 33 m (110') indoors away from the recorder. Simply plug-in the wireless receiver in place of the probe into the recorder, and you're ready to go.

The CTXL-TRH is available with specialty paper charts, with optimal ranges marked right on the chart, so you can easily see from a distance that the temperature and humidity readings are within range.

A Windows-based application program allows the user to monitor the temperature and relative humidity using their PC (software is available online). You can log the data to a file, as well as display the information on a custom on-screen chart; set the alarms on the recorder, and display their status on-screen. You can also re-scale the recorder chart paper, setting temperature and %RH limits anywhere within the range of the unit. This allows you to use the 8" chart to display narrow temperature and humidity bands, for greater resolution.

Specifications
(See Common Specifications on Page S-44)
Temperature:
Range: -17.7 to 49°C (0 to 120°F)
Display Accuracy: ±1°C (2°F)
Chart Accuracy: ±1.5°C (3°F)
Display Resolution: 0.1° (F or C)

Relative Humidity:
Range: 0 to 98% RH
Display Accuracy: ±3% RH, 15 to 90% RH @ room temperature; ±5% RH, <15 or > 90% RH @ room temperature
Chart Accuracy: ±4% RH, 15 to 90% RH, ±6% RH, <15 or >90% RH
Display Resolution: 1% RH
Remote Probe:
12.2 m (40') max distance

Temperature/Humidity Sensor:
Digital sensor

Probe Disconnect:
Pens will go to the Home position; Display will show “Prb Err”. Chart motor will continue to run

Alarm Set Point Resolution:
Temperature: 0.5°C or °F
Humidity: 1%RH
Alarm Deadband:
Temperature: 0.5°C or °F
Humidity: 3% RH
† Refer to accessories chart for NIST calibration ordering information.

PATENTS PENDING

CTXL-TRH recorder, shown smaller than actual size.

† Refer to accessories chart for NIST calibration ordering information.
Specifications
(See Common Specifications on Page S-44)

Transmitter
- Transmit Sample Rate: 2 sec up to 2 min
- Radio Frequency: ISM 915 MHz or ISM 868 MHz
- Approvals: CTXL-TRH-(*)-W9: FCC, Class A
- RF Link Range:
  - Outdoor Line of Sight: Up to 90 m (300')
  - Indoor/Urban: Up to 33.5 m (110')
- Computer Interface: USB, to change transmit interval, frequency and channel ID
- Operating Ambient: -18 to 49°C (0 to 120°F), 2 to 98% RH
- LED Indicators: Red LED for Low Battery and other communication error indications; Green LED for transmit indication
- Power: One 3.6 Vdc “AA” Lithium Battery, 2400 mAH capacity, or optional ac adaptor, UNI-AC-100/240-5V

Receiver
- Computer Interface: USB, to change receive interval, frequency and channel ID
- Operating Ambient: -18 to 49°C (0 to 120°F), 2 to 98% RH
- LED indicators: Red LED for comm. error indications, Green LED for receive indication
- Power: From the CTXL recorder through the round DIN connector
  † Refer to accessories chart for NIST calibration ordering information.

Application Software Available Online!
- Monitors Temperature and Humidity
- Line Graph and Store of Readings in Real Time and Download of Recorded Data
- Set the Line Graph Scales to Auto, Logarithmic, or Manual
- Re-Scale the Recorder Chart Paper
- Print Line Graphs to a Printer
Double-sided chart paper provides twice the graphical information. See below for additional chart information.

CTXL-TRH Units Include 120 Double-Sided Charts FREE! (20 each of 1-day, °F; 1-day, °C; 7-day, °F; 7-day, °C; 32-day, °F; 32-day °C).

Additional charts can be ordered as 1 pack of 100 or 6 packs of 100 (see “Charts” table below left).

To Order

### Model No. | Description | Color | Wireless
--- | --- | --- | ---
CTXL-TRH-W | Temperature/RH recorder | White | —
CTXL-TRH-G | Temperature/RH recorder | Gray | —
CTXL-TRH-W-(*) | Temperature/RH recorder | White | Y
CTXL-TRH-G-(*) | Temperature/RH recorder | Gray | Y

* Specify wireless type: “W9” for USA/Canada (915 MHz) or “W8” for Europe (868 MHz)

### Double-Sided Charts†

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT485-CDF</td>
<td>100 charts, 1 day (am/pm), °F</td>
</tr>
<tr>
<td>CT485-CDC</td>
<td>100 charts, 1 day (am/pm), °C</td>
</tr>
<tr>
<td>CT485-C24F</td>
<td>100 charts, 1 day (24 hr), °F</td>
</tr>
<tr>
<td>CT485-C24C</td>
<td>100 charts, 1 day (24 hr), °C</td>
</tr>
<tr>
<td>CT485-CWF</td>
<td>100 charts, 7 day, °F</td>
</tr>
<tr>
<td>CT485-CWC</td>
<td>100 charts, 7 day, °C</td>
</tr>
<tr>
<td>CT485-CMF</td>
<td>100 charts, 32 day, °F</td>
</tr>
<tr>
<td>CT485-CMC</td>
<td>100 charts, 32 day, °C</td>
</tr>
<tr>
<td>CT485-CSP</td>
<td>120 charts, 20 each, 1 day (am/pm), 7 day, 32 day, °F and °C (one included with unit)</td>
</tr>
</tbody>
</table>

†† To order a package of 600 double sided charts, add suffix “-6” to model number for additional cost.

### To Order

### Model No. | Description | Optimal Band Range
--- | --- | ---
CT485-MW(*) | Museum/art gallery, 7 day | 18.3 to 22.2°C (65 to 72°F), 40 to 50% RH
CT485-MM(*) | Museum/art gallery, 32 day | 18.3 to 22.2°C (65 to 72°F), 40 to 50% RH
CT485-HW(*) | Hospital, 7 day | 20 to 23.3°C (68 to 74°F), 40 to 50% RH
CT485-HM(*) | Hospital, 32 day | 20 to 23.3°C (68 to 74°F), 40 to 50% RH
CT485-LW(*) | Lab/clean room, 7 day | 20 to 23.9°C (68 to 75°F), 40 to 55% RH
CT485-LM(*) | Lab/clean room, 32 day | 20 to 23.9°C (68 to 75°F), 40 to 55% RH
CT485-PW(*) | Computer room/office, 7 day | 18.3 to 23.9°C (65 to 75°F), 45 to 60% RH
CT485-PM(*) | Computer room/office, 32 day | 18.3 to 23.9°C (65 to 75°F), 45 to 60% RH

* Specify temperature units, “C” for °C or “F” for °F.

### Accessories

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTXL-PT-(*</td>
<td>Wireless Temperature/Humidity probe transmitter, to retrofit a CTXL-TRH unit</td>
</tr>
<tr>
<td>CTXL-PR-(*</td>
<td>Wireless Temperature/Humidity receiver, to retrofit a CTXL-TRH unit</td>
</tr>
<tr>
<td>UNIV-AC-100/240-5V</td>
<td>Universal (110/240 Vac, 50/60 Hz) 5 Vdc adaptor, to power CTXL-PT externally</td>
</tr>
<tr>
<td>UNIV-AC-100/240</td>
<td>Universal (110/240 Vac, 50/60 Hz) 9 Vdc adaptor</td>
</tr>
<tr>
<td>CTXL-CABLE-6</td>
<td>1.8 m (6’) sensor extension cable (replacement)</td>
</tr>
<tr>
<td>CTXL-CABLE-10</td>
<td>3 m (10’) sensor extension cable</td>
</tr>
<tr>
<td>CTXL-CABLE-25</td>
<td>7.6 m (25’) sensor extension cable</td>
</tr>
<tr>
<td>CTXL-CABLE-6-S</td>
<td>3 m (10’) sensor extension cable</td>
</tr>
<tr>
<td>CT485B-CAL-KIT</td>
<td>RH calibration kit, 33 and 75% RH salt solutions</td>
</tr>
<tr>
<td>CAL-3-CTXL†</td>
<td>NIST-traceable calibration</td>
</tr>
<tr>
<td>CT485B-MAG</td>
<td>Chart magnetic hub</td>
</tr>
<tr>
<td>CT485-PS</td>
<td>Pen set, one each red and blue pens</td>
</tr>
<tr>
<td>CT485-PS-6</td>
<td>Six pen sets, six each red and blue pens</td>
</tr>
<tr>
<td>CTXL-RP-W-CAL-3</td>
<td>Temperature/humidity sensor probe (white) with CAL-3 certificate</td>
</tr>
<tr>
<td>CTXL-RP-G-CAL-3</td>
<td>Temperature/humidity sensor probe (gray) with CAL-3 certificate</td>
</tr>
<tr>
<td>CTXL-RP-W</td>
<td>Temperature/Humidity sensor probe (white)</td>
</tr>
<tr>
<td>CTXL-RP-G</td>
<td>Temperature/Humidity sensor probe (gray)</td>
</tr>
<tr>
<td>CT485B-CLIP-KIT</td>
<td>Sensor clip kit</td>
</tr>
<tr>
<td>OM-NOMAD-BATT</td>
<td>3.6V “AA” lithium replacement battery for CTXL-PT wireless transmitter</td>
</tr>
</tbody>
</table>

* Specify wireless type: “W9” for USA/Canada (915 MHz) or “W8” for Europe (868 MHz). To retrofit a CTXL-TRH recorder with wireless capability, one transmitter (CTXL-PT) and one receiver (CTXL-PR) are required. Each unit comes complete with sensor probe and clip, 120 assorted double-sided charts, 2 pen sets, 1.8 m (6’) remote sensor cable, wall mount kit, 4 “D” cell batteries, RS232 cable and adaptor, universal (110/240 Vac, 50/60 Hz) 9 Vdc adaptor, and quick start manual.

Ordering Example: CTXL-TRH-W-W9, white temperature/relative humidity recorder with remote/wireless probe, CT485-CWF, chart paper (100 double sided sheets, 7 day, °F), and OCW-3, OMEGACARE* extends standard 2-year warranty to a total of 5 years.
Dual Input Process Recorder

MODEL #3
CTXL-DPR

- Models Available for Voltage or Current Input
- Voltage Models Selectable for 1, 5 or 10V Inputs
- Current Models Selectable for 0 to 20 or 4 to 20 mA Inputs
- ±1% FS Display Accuracy
- Windows® Based PC Data Logging Software Available Online
- Benchtop or Wall Mount with Built-In Chart Lights
- RoHS 2 Compliant

The CTXL-DPR is a dual input process recorder, available with either voltage or current inputs. Both input channels are set to the same input range; the voltage input model has selectable ranges of 0 to 1, 0 to 5 and 0 to 10V, while the current model is selectable between 0 to 20 and 4 to 20 mA ranges. Standard charts are scaled for 0 to 100%; the user can also scale the chart paper to show a portion of the full range.

Specifications
(See Common Specifications on Page S-44)
- Input Types: Process voltage (DPR-V) or current (DPR-I)
- Input Connection: mini DIN connector
- Input Ranges: Both input channels configured to same input range
  - CTXL-DPR-V: 0 to 1V, 0 to 5V or 0 to 10V
  - CTXL-DPR-I: 4 to 20 mA or 0 to 20 mA
- Display Accuracy: ±1.0%FS
- Standard Chart Scale: 0 to 100%
- Out of Range Input: Display will flash. Chart motor will continue to run
- Alarm set point Resolution: 1%
- Alarm Deadband: 3%
- Excitation Voltage: 15Vdc @ 50 mA

To Order

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Color</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTXL-DPR-W-V</td>
<td>Dual input process recorder</td>
<td>White</td>
<td>Voltage</td>
</tr>
<tr>
<td>CTXL-DPR-G-V</td>
<td>Dual input process recorder</td>
<td>Gray</td>
<td>Voltage</td>
</tr>
<tr>
<td>CTXL-DPR-W-I</td>
<td>Dual input process recorder</td>
<td>White</td>
<td>Current</td>
</tr>
<tr>
<td>CTXL-DPR-G-I</td>
<td>Dual input process recorder</td>
<td>Gray</td>
<td>Current</td>
</tr>
</tbody>
</table>

Double-Sided Charts

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTXL-DPR-CD</td>
<td>100 charts, 1 day (am/pm), 0 to 100%</td>
</tr>
<tr>
<td>CTXL-DPR-CW</td>
<td>100 charts, 7 day, 0 to 100%</td>
</tr>
<tr>
<td>CTXL-DPR-CM</td>
<td>100 charts, 32 day, 0 to 100%</td>
</tr>
<tr>
<td>CTXL-CSP-P</td>
<td>120 charts, sample pack (one included with unit)</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAL-3-CTXL†</td>
<td>NIST-traceable calibration</td>
</tr>
<tr>
<td>UNIV-AC-100/240</td>
<td>Universal 9 Vdc adaptor</td>
</tr>
<tr>
<td>CTXL-CABLE-6-S</td>
<td>1.8 m (6') analog input extension cable, stripped leads termination</td>
</tr>
<tr>
<td>CT485-PS</td>
<td>Pen set, one each red and blue pens</td>
</tr>
<tr>
<td>CT485-PS-6</td>
<td>Six pen sets, six each red and blue pens</td>
</tr>
</tbody>
</table>

Each unit comes complete with 120 assorted double-sided charts, 2 pen sets, 1.8 m (6’) input cable, wall mount kit, 4 “D” cell batteries, RS232 cable and adaptor, universal ac adaptor, and quick start manual.

Ordering Example: CTXL-DPR-W-V, white dual voltage input recorder, CTXL-DPR-CW, chart paper (100 double-sided sheets, 7 day, 0 to 100%).
Dual Input Thermocouple Recorder

The CTXL-DTC is a dual input thermocouple recorder, both input channels are set to the same calibration; the user can select either J, K or T type thermocouple calibration. Input connections are via UST type universal thermocouple connector that is compatible with both standard (type OST) and miniature (type SMP) thermocouple connectors.

The recorder comes with standard chart papers for J, K, and T Type thermocouple inputs. The blank chart paper can be used to re-scale the chart paper within the operating chart scale.

Specifications
(See Common Specifications on Page S-44)

Input Types: Dual J, K, or T thermocouple; user programmable from PC

Input Connection: Universal connector, compatible with both standard (type OST) and miniature size (type SMP) thermocouple connectors

Display Range:
- Type J: -100 to 700°C (-148 to 1292°F)
- Type K: -100 to 1000°C (-148 to 1832°F)
- Type T: -100 to 300°C (-148 to 572°F)

RoHS 2 Compliant

The CTXL-DTC-W Dual input thermocouple recorder White
The CTXL-DTC-G Dual input thermocouple recorder Gray

To Order

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTXL-DTC-W</td>
<td>Dual input thermocouple recorder</td>
<td>White</td>
</tr>
<tr>
<td>CTXL-DTC-G</td>
<td>Dual input thermocouple recorder</td>
<td>Gray</td>
</tr>
</tbody>
</table>

Double-Sided Charts

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTXL-DTC-(*)-CD</td>
<td>100 charts, 1 day (am/pm)</td>
</tr>
<tr>
<td>CTXL-DTC-(*)-CW</td>
<td>100 charts, 7 day</td>
</tr>
<tr>
<td>CTXL-DTC-(*)-CM</td>
<td>100 charts, 32 day</td>
</tr>
<tr>
<td>CTXL-CSP-T</td>
<td>120 charts, sample pack (one included with unit)</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAL-3-CTXL†</td>
<td>NIST-traceable calibration</td>
</tr>
<tr>
<td>UNIV-AC-100/240</td>
<td>Universal 9 Vdc adaptor</td>
</tr>
<tr>
<td>CT485-PS</td>
<td>Pen set, one each red and blue pens</td>
</tr>
<tr>
<td>CT485-PS-6</td>
<td>Six pen sets, six each red and blue pens</td>
</tr>
</tbody>
</table>

* Specify chart range: “R1” for -40 to 560°C (-40 to 1040°F), “R2” for -40 to 260°C (-40 to 500°F), or “R3” for -40 to 160°C (-40 to 320°F)

Each unit comes complete with two SC-GG-K-30-36-PP thermocouples, 120 assorted double-sided charts, 2 pen sets, wall mount kit, 4 “D” cell batteries, RS232 cable and adaptor, universal ac adaptor, and quick start manual.

Ordering Example: CTXL-DTC-R1-CW, chart paper [100 double-sided sheets, 7 day, -40 to 560°F (-40 to 1040°F) range].
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:** 10$^{12}$ 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°C
  - **Display:** 0.1

**To Order**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTXL-PH-W</td>
<td>pH/temperature recorder</td>
<td>White</td>
</tr>
<tr>
<td>CTXL-PH-G</td>
<td>pH/temperature recorder</td>
<td>Gray</td>
</tr>
</tbody>
</table>

**Double-Sided Chart**

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

**Accessories**

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

Each unit comes complete with 120 assorted double-sided charts, 2 pen sets, wall mount kit, 4 “D” cell batteries, RS232 cable and adaptor, universal ac adaptor, temperature compensation resistor and quick start 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.
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%

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

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 (13⅜ x 10⅝ x 2⅜")
Weight: Approx. 3.2 kg (7 lb) with batteries