



Microprocessor-Based Portable Universal Circular Chart SUPERRECORDER™

CTXL Series

\$795

All Models



NEW FEATURES!

- ✓ 3 Models Offered
 - Temperature and Relative Humidity
 - Dual Thermocouple Input
 - Dual Process Input
- ✓ Convenient Keypad Programming from the Front Panel
- ✓ Chart Rescaling Through PC Interface
- ✓ High and Low Audible and Visual Alarms
- ✓ 2 Built-In Relay Contacts
- ✓ Chart Data are Stored in Non-Volatile Memory
- ✓ Data Storage
- ✓ RS232 PC Interface Allows the User to Download Recorded Data



CTXL-TRH, \$795, shown smaller than actual size

PATENTED Covered by U.S. and International Patents and pending applications

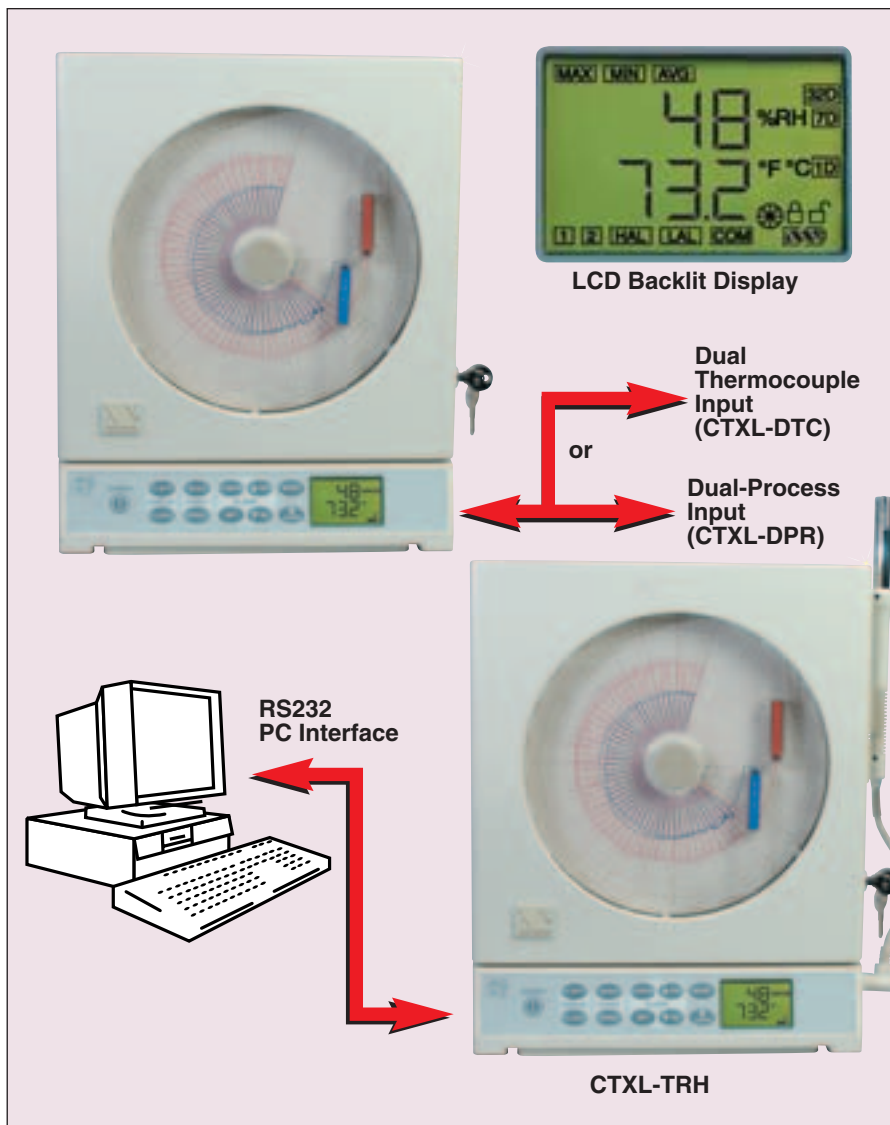
- ✓ CAL-2 Certificate of Calibration Included
- ✓ Available in Off-White or Charcoal Gray
- ✓ Ranges of -17 to 49°C (2 to 120°F) and 2 to 98% RH (CTXL-TRH)
- ✓ Powered by 4 "D" Cell Batteries or a Universal AC Adaptor
- ✓ 203 mm (8") Chart for 1-, 7-, or 32-Day Recording
- ✓ Large, Bright, Dual Backlit Display
- ✓ Monitors Min/Max/Avg Values

- ✓ Benchtop or Wall Mount with Built-In Chart Lights
- ✓ Versatile Remote Temperature/Humidity Sensor Probe Up to 12.2 m (40')
- ✓ Patented Double-Sided Chart Paper and Magnetic Hub
- ✓ 1-, 2-, 3-Year Extended Warranties Include Extra Pens, Paper, and Batteries

- MODELS COME WITH**
- Sensor Probe (-TRH) and Clip
 - 120 Assorted Double-Sided Charts
 - 2 Sets of Pens, Extra Chart Light
 - Universal AC Adaptor
 - 4 "D" Cell Alkaline Batteries
 - 1.8 m (6") Extension Cable
 - RS232 Cable and Adaptor
 - Wall Mounting Kit
 - 2-Year Warranty
 - Operator's Manual



SUPERRECORDER™ CTXL SERIES



Specifications (Temperature/Relative Humidity Model CTXL-TRH)

Temperature:

Range: -17 to 49°C (2 to 120°F)

Accuracy: $\pm 1^\circ\text{C}$ ($\pm 1.8^\circ\text{F}$)

Display Resolution: 0.1°

Relative Humidity:

Range: 2 to 98% RH

Accuracy: $\pm 3\%$ RH (@ 15 to 90% RH)

Display Resolution: 1% RH

Distance for Remote Probe:

12.2 m (40') maximum

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

Display Data Sampling Rate: Once per 2 seconds

Display Modes: Max, min, avg, T1 - T2

Display °C/°F Key: Switches between °C and °F

Display Clock: Displays the time and date for 3 seconds

Chart Speed: 1, 7, or 32 days

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

Configuration Modes:

High Alarm: Channel-1 (temperature)

Low Alarm: Channel-1 (temperature)

High Alarm: Channel-2 (humidity)

Low Alarm: Channel-2 (humidity)

Clock: Time (military time)

Clock: Date

Retaining the legendary CT-485 design, the CTXL Series comprises state-of-the-art circular chart recorders, available in 3 models—CTXL-TRH, CTXL-DTC, and CTXL-DPR.

The CTXL-TRH is a temperature/relative humidity chart recorder with a temperature range of -17 to 49°C (2 to 120°F) and a humidity range of 2 to 98%. The CTXL-DTC is a dual thermocouple input chart recorder that accepts J, K, or T type thermocouple probes. The CTXL-DPR is a dual-process input chart recorder that accepts 0 to 1 Vdc, 0 to 5 Vdc, 0 to 10 Vdc, 0 to 20 mA, and 4 to 20 mA inputs.

All models have dual-display backlit LCDs that show 2 inputs in real time. The charted data is stored in non-volatile memory and can be downloaded to a PC for printout. Functions include audiovisual alarms with built-in relay contacts; real-time clock; monitoring of the

minimum, maximum, and average values; 1-, 7-, or 32-day recording; and chart rescaling.

The high and low alarm setpoints for the 2 channels are configurable through the front-panel keypad. There are 2 built-in relays for high alarms, and 2 additional voltage outputs power external mechanical relays for low-alarm conditions.

Patented features include double-sided chart paper and the magnetic hub. And the linear pen and chart drives make it easy to understand the charts. All models come with a stabilizing arm for benchtop operation and a decorative foot cover for wall-mount applications.

For greater security, a hidden key (white box) enables/disables access to the front keypad. This will prevent unauthorized users from changing the recorder settings.

Note: Temperature/humidity sensor probe not recommended for use in corrosive environments.



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

Audible Alarm: Piezoelectric beeper

Alarm Outputs: 2 separate relay contacts and 2 voltage outputs

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

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

Alarm Deadband:

Temperature: 0.3°C (0.5°F)

Humidity: 2% RH

Operating Temperature:

0 to 49°C (32 to 120°F)

Operating Relative Humidity:

2 to 98% RH

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

Battery Life: 3 months under normal conditions

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

Low-Battery Indicator: Icon on LCD

Serial PC Communications:

RS232, 2-way, 9600 baud

Memory: 256K EEPROM (2.8 times worth of chart 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.

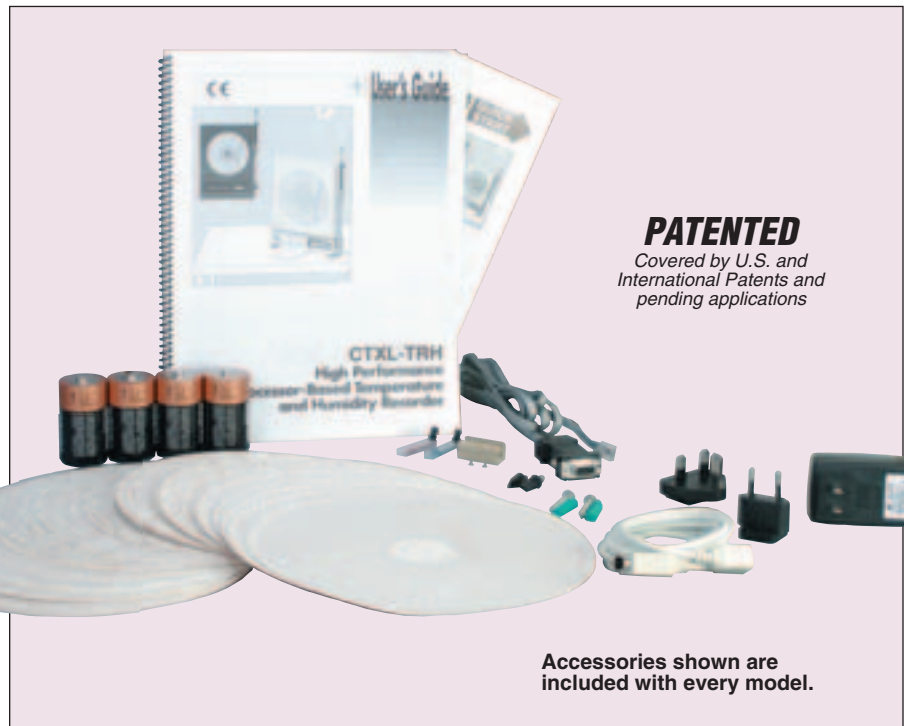
Mounting: Keyhole slots for wall mounting; foot cover for benchtop use

Case: Rugged ABS plastic

Dimensions:

33.5 H x 27.1 W x 6.7 cm D
(13³/₁₆ x 10¹¹/₁₆ x 2⁵/₁₆")

Weight: Approx 3.2 kg (7 lb) with batteries



PATENTED

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Accessories shown are included with every model.

**Specifications
(Dual-Process Input
CTXL-DPR)**

Voltage/Current Input: 0 to 1 V, 0 to 5 V, 0 to 10 V, 4 to 20 mA, 0 to 20 mA

Input Connection: Wire connection

Under- or Over-Range Input: Display will flash

Standard Chart Scale: 0 to 100%

**Specifications
(Dual Thermocouple Input
CTXL-DTC)**

Display Range:

Type K: -100 to 1000°C (-148 to 1832°F)

Type J: -100 to 700°C (-148 to 1292°F)

Type T: -100 to 300°C (-148 to 572°F)

Display Accuracy:

Type K: ±2°C (±3.6°F)

Type J: ±1.5°C (±2.7°F)

Type T: ±1.5°C (±2.7°F)

Standard Chart Scale:

Type K: -40 to 560°C (-40 to 1040°F)

Type J: -40 to 260°C (-40 to 500°F)

Type T: -40 to 160°C (-40 to 320°F)

Input Connection: Universal connector

T/C Break Indication: Display will show "Prb Err"

Out-of-Range Input: Display will flash

Display Modes: Max, min, avg, T1 – T2

MOST POPULAR MODELS HIGHLIGHTED!

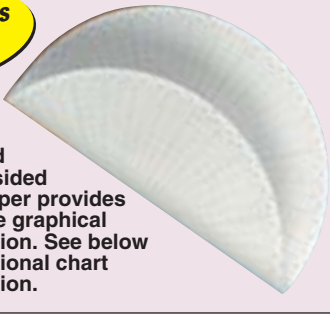
To Order (Specify Model Number)		
Model No.	Price	Description
CTXL-TRH-W	\$795	White temperature/relative humidity recorder with 2 built-in relays
CTXL-TRH-G	795	Gray temperature/relative humidity recorder with 2 built-in relays
CTXL-DTC-W	795	White dual thermocouple input recorder with 2 built-in relays
CTXL-DTC-G	795	Gray dual thermocouple input recorder with 2 built-in relays
CTXL-DPR-W*	795	White dual-process input recorder with 2 built-in relays
CTXL-DPR-G*	795	Gray dual-process input recorder with 2 built-in relays

* Add "-I" for current input; add "-V" for voltage input.

Comes with 120 assorted double-sided charts, 2 sets of pens, 1.8 m (6') remote sensor cable, wall mounting kit, 4 "D" cell batteries, RS232 cable and adaptor, and 9 V universal AC adaptor.

Ordering Example: **CTXL-TRH-W**, white temperature/relative humidity chart recorder, \$795, and **CT485-CWF**, package of 100, 7-day, °F temperature charts, \$19, \$795 + \$19 = \$814.

Custom Charts Available!



Patented 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).

Each unit includes 1 free sample pack of different charts

Model No.	Sample Pack Included
CTXL-TRH	CT485-CSP, 120 charts
CTXL-DTC	CTXL-CSP-T, 150 charts
CTXL-DPR	CTXL-CSP-P, 120 charts



Accessories

Model Number	Price	Description
CTXL-CABLE-6	\$15	1.8 m (6') extension cable
CTXL-CABLE-10	25	3.05 m (10') extension cable
CTXL-CABLE-25	40	7.6 m (25') extension cable
CTXL-CABLE-6-S	15	1.8 m (6') analog cable, stripped leads
CAL-3-CTXL	150	NIST-traceable calibration
CT485B-CAL-KIT	75	Calibration kit (33 and 75% RH salt solutions)
CT485-PS	10	Pen set, red and blue, package of 1-each
CT485-PS-6	52	Pen set, red and blue, package of 6-each
CT485B-CLIP-KIT	5	Sensor clip kit
CTXL-RP-W	80	Temperature/humidity sensor probe, white
CTXL-RP-G	80	Temperature/humidity sensor probe, gray

Specialty Paper (All double-sided, packages of 20 charts)

Model No.	Price	Description
CT485-MW(*)	\$20	Museums/art galleries, 7 days (in °C or °F) 18.3 to 22.2°C (65 to 72°F), 40 to 50% RH
CT485-MM(*)	20	Museums/art galleries, 32 days (in °C or °F) 18.3 to 22.2°C (65 to 72°F), 40 to 50% RH
CT485-HW(*)	20	Hospitals, 7 days (in °C or °F) 20 to 23.3°C (68 to 74°F), 40 to 50% RH
CT485-HM(*)	20	Hospitals, 32 days (in °C or °F) 20 to 23.3°C (68 to 74°F), 40 to 50% RH
CT485-LW(*)	20	Labs, clean rooms, 7 days (in °C or °F) 20 to 23.9°C (68 to 75°F), 40 to 55% RH
CT485-LM(*)	20	Labs, clean rooms, 32 days (in °C or °F) 20 to 23.9°C (68 to 75°F), 40 to 55% RH
CT485-PW(*)	20	Computer rooms/offices, 7 days (in °C or °F) 18.3 to 23.9°C (65 to 75°F), 45 to 60% RH
CT485-PM(*)	20	Computer rooms/offices, 32 days (in °C or °F) 18.3 to 23.9°C (65 to 75°F), 45 to 60% RH
CT485-WMC	20	Wine storage, 32 days, 10 to 15.6°C, 60 to 70% RH
CT485-WMF	20	Wine storage, 32 days, 50 to 60°F, 60 to 70% RH

* Insert C (for °C) or F (for °F).

Ordering Example: CT485-MWC, specialty paper for museums and art galleries, 7 days, with °C temperature measurements, \$20.

Charts

Model Number	Price	Description
CTXL-DTC-R1-CD	\$19.00	100 charts, 1-day -40/1040°F (-40/560°C)
CTXL-DTC-R1-CW	19.00	100 charts, 7-day -40/1040°F (-40/560°C)
CTXL-DTC-R1-CM	19.00	100 charts, 32-day -40/1040°F (-40/560°C)
CTXL-DTC-R2-CD	19.00	100 charts, 1-day -40/500°F (-40/260°C)
CTXL-DTC-R2-CW	19.00	100 charts, 7-day -40/500°F (-40/260°C)
CTXL-DTC-R2-CM	19.00	100 charts, 32-day -40/500°F (-40/260°C)
CTXL-DTC-R3-CD	19.00	100 charts, 1-day -40/320°F (-40/160°C)
CTXL-DTC-R3-CW	19.00	100 charts, 7-day -40/320°F (-40/160°C)
CTXL-DTC-R3-CM	19.00	100 charts, 32-day -40/320°F (-40/160°C)
CTXL-DPR-CD	19.00	100 charts, 1-day, 0 to 100%
CTXL-DPR-CW	19.00	100 charts, 7-day, 0 to 100%
CTXL-DPR-CM	19.00	100 charts, 32-day, 0 to 100%
CTXL-BLANK-CD	19.00	100 charts, 1-day, blank scale
CTXL-BLANK-CW	19.00	100 charts, 7-day, blank scale
CTXL-BLANK-CM	19.00	100 charts, 32-day, blank scale
CTXL-CSP-T	19.00	150 charts, sample pack temperature
CTXL-CSP-P	19.00	120 charts, sample pack process
CT485-CDF	19.00	100 charts, 1-day am/pm, °F
CT485-CDC	19.00	100 charts, 1-day am/pm, °C
CT485-C24F	10.00	20 charts, 24-hour clock, °F
CT485-C24C	10.00	20 charts, 24-hour clock, °C
CT485-CWF	19.00	100 charts, 7-day, °F
CT485-CWC	19.00	100 charts, 7-day, °C
CT485-CMF	19.00	100 charts, 32-day, °F
CT485-CMC	19.00	100 charts, 32-day, °C
CT485-CSP	19.00	120 charts, 20 of each style
CT485-CDF-6	87.50	600 charts, 1-day, °F
CT485-CDC-6	87.50	600 charts, 1-day, °C
CT485-CWF-6	87.50	600 charts, 7-day, °F
CT485-CWC-6	87.50	600 charts, 7-day, °C
CT485-CMF-6	87.50	600 charts, 32-day, °F
CT485-CMC-6	87.50	600 charts, 32-day, °C

Note: All charts are double sided.

Ordering Example: CT485-CWC-6, package of 600 double sided charts, 7 days, with °C temperature measurements, \$87.50.