

# Economical 2-Pen Circular Process Recorder



CT7310  
Starts at  
**\$725**



- ✓ Universal Input
- ✓ 2-Pen Circular Process Recorder with 254 mm (10") Chart
- ✓ Quick, Easy Setup

CT7312, \$845, circular process chart recorder shown smaller than actual size.

- ✓ Easy-to-Replace Paper Chart with Magnetic Hub
- ✓ LED Display Indication (Optional)
- ✓ No "DIP Switches" to Set During Configuration
- ✓ Up to 48 Hours of Battery Backup Recording Time
- ✓ Latching or Non-Latching Programmable Relays
- ✓ Built-In Chart Lights



The CT7300 Series consists of economical 2-pen circular process chart recorders that measure and record up to 2 process variables from a variety of inputs. Settings are easily configured for multiple applications. To protect the user's process, the battery backup will continuously record up to 48 hours if a power loss occurs.

## Specifications

### Power

**Line Voltage:** 110/220 Vac, 50/60 Hz

**Power Consumption:** 15 VA maximum

### Input

**Thermocouple Types:** J, K, T, R, B, S

**RTD (3-Wire):** Pt100 Ω RTD  
(385 curve)

**Linear:** 4 to 20 mA, 0 to 5 Vdc

### Input Range Table:

Type	Range
J	-130°C to 760°C (-202°F to 1400°F)
K	-130°C to 1370°C (-202°F to 2498°F)
T	-200°C to 400°C (-328°F to 752°F)
B	100°C to 1824°C (212°F to 3315°F)
R	0°C to 1650°C (32°F to 3002°F)
S	0°C to 1649°C (32°F to 3000°F)
Pt100 (DIN)	-210°C to 440°C (-346°F to 824°F)
mA	4 to 20 mA
V	0 to 5 Vdc

Note: Thermocouples and RTDs are scalable within range

### Common Mode Rejection:

>120 dB at 60 Hz

**Inputs:** 2 ink-style pens, not isolated from each other (share common ground)

### Cold Junction Accuracy:

±0.2°C/°F @ 25°C (77°F) ambient

**Ambient Error:** ±0.01% span/°C from 25°C ambient

**Isolation:** PV inputs isolated from all alarm outputs

### Recording

**Chart Size:** 254 mm (10")

### Recording Accuracy:

±0.5% of span (100-division span)

### Sensor Break:

Full scale pen <10 seconds

**Chart Speed:** Configurable—4, 8, 12, 24, 48 and 168 hours of rotation

### Input Filtering:

Programmable up to 120 seconds

### Battery Backup:

9 V, up to 48 hours of recording time

### Options

**Relay:** DPDT, 1.0 A @ 120 Vac resistive

### Relay Program:

Process, band, non-latching, latching

### Error Protection:

De-energized during sensor break

### Hysteresis:

Set at 2 units; activation is safe-sided

### Environmental and Physical

#### Operating Temperature:

0 to 60°C (32 to 140°F)

#### Storage Temperature:

-40 to 65°C (-40 to 149°F)



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### Humidity:

0 to 90% RH (non-condensing)

**Vibration:** 0.3 to 100 Hz @ 0.2 g

**Mounting:** ±20 degrees of vertical, ±10 degrees of horizontal

**Panel Rating:** NEMA 12X standard [NEMA 4 (IP65) optional]

### Dimensions:

356 H x 356 W x 97 mm D  
(14 x 14 x 4")

**Panel Cutout:** Industry standard  
323 x 323 mm (13 x 13")

**Weight:** 3 kg (7 lb)

**MOST POPULAR MODELS HIGHLIGHTED!**

## To Order (Specify Model Number)

Model No.	Price	Description
CT7310	\$725	Recorder, circular process, 2-pens
CT7311	785	Recorder, circular process, 2-pens, 1 relay
CT7312	845	Recorder, circular process, 2-pens, 2 relays

Comes with complete operator's manual, pens, battery and 100 charts.

For NEMA 4 (IP65) rated case, add "-NEMA" to model number and add \$50 to price.

For LED display indication, add "-D" to model number and add \$95 to price.

**Ordering Example:** CT7310, 2-pen circular process recorder, CT7300-RED and CT7300-GREEN, spare pens, CT7000C-0-100/24, spare paper, \$725 + 25 + 25 + 18 = \$793. CT7310-NEMA, chart recorder with NEMA 4 (IP65) rated case, \$725 + 50 = \$775.

OCW-2, OMEGACARE<sup>SM</sup> extends standard 3-year warranty to a total of 5 years (\$130), \$725 + 130 = \$855. OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

### Accessories

Model No.	Price	Description
CT7300-GREEN	\$25	Pens, green, package of 6
CT7300-RED	25	Pens, red, package of 6
CT7000C-0-100/24	18	Paper, circular, 100 qty
CT7000C-(range/time*)	18	Paper, circular, 100 qty
CT7000C-CUSTOM	630	Paper, specify range, 10 x 100 qty
CT7300-SUP	19	Spare setup charts, 10 to a box
FSW-343	125	Reference Book: Maintenance of Instruments and Systems

\* Other standard ranges: 0 to 600/24, 0 to 400/24, 0 to 200/24, 30 to 230F/24, 0 to 100/7, 0 to 1000/24, 0 to 300/24, 0 to 300/7, 0 to 800/24, 0 to 2000/24, -50 to 50/7, 0 to 200/7, 0 to 2500/24, 0 to 1200/24, 60 to 180F/24, 0 to 14PH/24, -50 to 50/24.



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