# 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.

Books

Available

**Online!** 

books1.com

### 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  $\Omega$  RTD (385 curve)

Linear: 4 to 20 mA, 0 to 5 Vdc

#### Input Range Table:

Туре	Range
J	-130°C to 760°C (-202°F to 1400°F)
K	-130°C to 1370°C (-202°F to 2498°F)
Т	-200°C to 400°C (-328°F to 752°F)
В	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)



### 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

//0000001100			
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.

# omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

# www.omega.co.uk



UNITED STATES www.omega.com 1-800-TC-OMEGA Stamford, CT.

CANADA www.omega.ca Laval(Quebec)

1-800-TC-OMEGA

### GERMANY

www.omega.de Deckenpfronn, Germany 0800-8266342 UNITED KINGDOM www.omega.co.uk Manchester, England 0800-488-488 +44-(0)161-777-6611

> FRANCE www.omega.fr 0800-466-342

BENELUX www.omega.nl 0800-099-33-44



# More than 100,000 Products Available!

# Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

# Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

# pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

# Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ehernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

# • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

# Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters