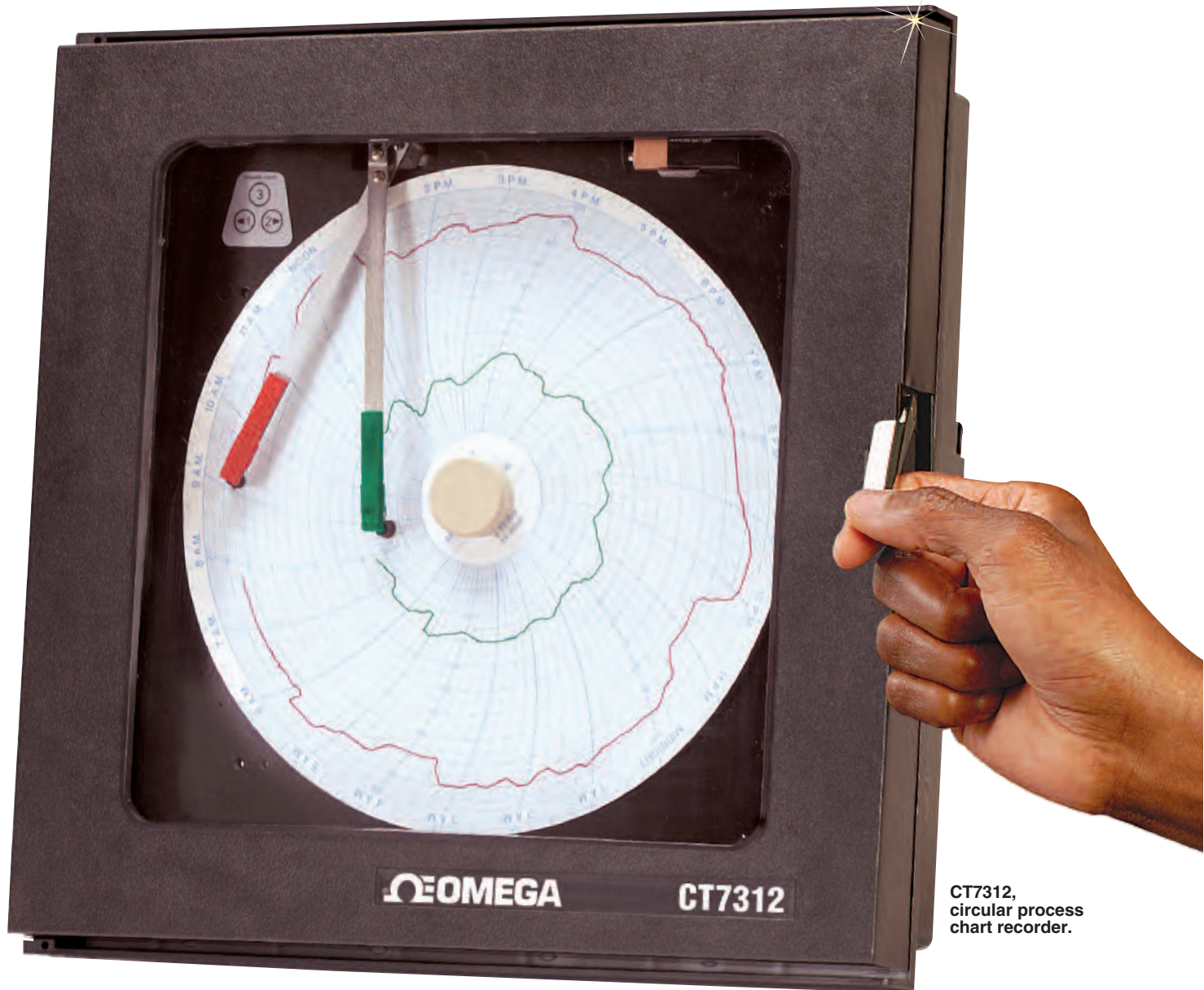


# Economical 2-Pen Circular Process Recorder



CT7312, circular process chart recorder.

CT7300  
Starts at



- ✓ Universal Input
- ✓ 2-Pen Circular Process Recorder with 254 mm (10") Chart
- ✓ Quick, Easy Setup
- ✓ 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  $\nabla$  RTD (385 curve)

Linear: 4 to 20 mA, 0 to 5 Vdc

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

**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*

**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:**

9V, 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)

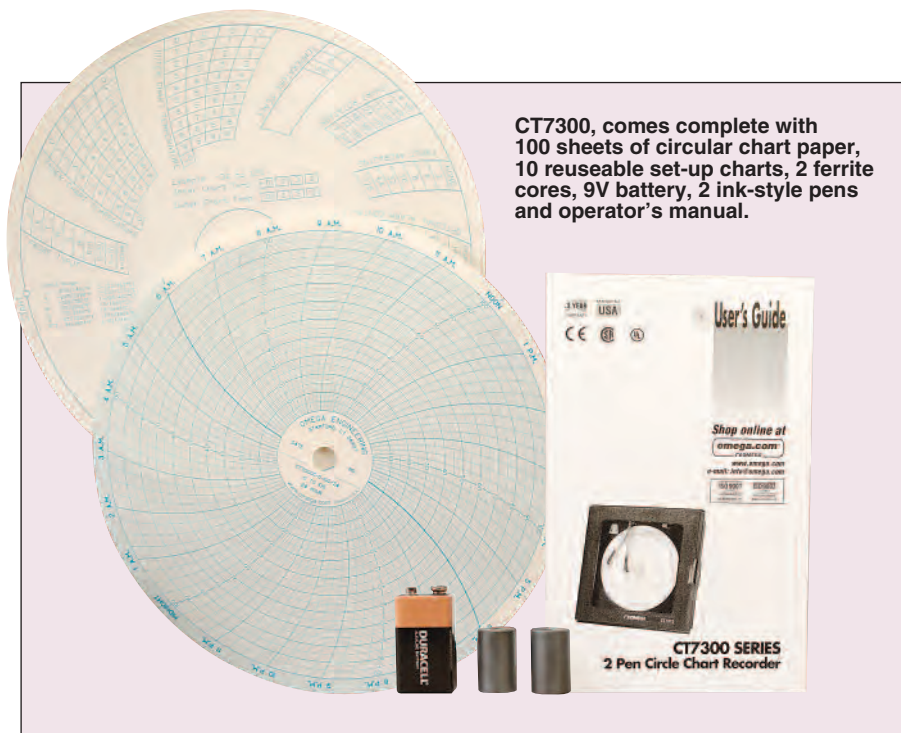
**Humidity:**

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]



CT7300, comes complete with 100 sheets of circular chart paper, 10 reuseable set-up charts, 2 ferrite cores, 9V battery, 2 ink-style pens and operator's manual.



**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)

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.

**MOST POPULAR MODELS HIGHLIGHTED!**

**To Order (Specify Model Number)**

Model No.	Description
CT7310	Recorder, circular process, 2-pens
CT7311	Recorder, circular process, 2-pens, 1 relay
CT7312	Recorder, circular process, 2-pens, 2 relays

*Comes complete with operator's manual, 10 reuseable set-up charts, 2 ferrite cores, 2 ink-style pens, 9V battery and 100 charts.*

**Accessories**

Model No.	Description
CT7300-GREEN	Pens, green, package of 6
CT7300-RED	Pens, red, package of 6
CT7000C-0-100/24	Paper, circular, 100 qty
CT7000C-(range/time*)	Paper, circular, 100 qty
CT7000C-CUSTOM	Paper, specify range, 10 x 100 qty
CT7300-SUP	Spare setup charts, 10 to a box

\* 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.

For NEMA 4 (IP65) rated case, add "-NEMA" to model number and add to price. For LED display indication, add "-D" to model number and add to price.

**Ordering Examples:** CT7310, 2-pen circular process recorder, CT7300-RED and CT7300-GREEN, spare pens, CT7000C-0-100/24, spare paper, CT7310-NEMA, chart recorder with NEMA 4 (IP65) rated case, OCW-2, OMEGACARE<sup>SM</sup> extends standard 3-year warranty to a total of 5 years





#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

[www.omega.de](http://www.omega.de)  
Deckenpfronn, Germany  
0800-8266342

#### UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)  
Manchester, England  
0800-488-488

#### FRANCE

[www.omega.fr](http://www.omega.fr)  
Guyancourt, France  
088-466-342

#### CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)  
Karviná, Czech Republic  
596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
Amstelveen, NL  
0800-099-33-44



## More than 100,000 Products Available!

### • Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, 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, Wire

### • 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

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 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, Strain Gages, 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