

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

DWYER/OMEGA

DWYEROMEGA / OMEGA CT7100 1-Pen Circular Recorder

Omega CT7100 1-Pen Circular Temperature Recorder The CT7100 is an Omega / DwyerOmega 1-pen circular chart recorder. OEM CT7100 listings describe a single-pen circular recorder for temperature (and process) charting, used with thermocouple/RTD/process inputs depending on configuration, with a rotating circular chart and ink/pen trace. Chart size, rotation period, and accuracy are on the CT7100 recorder specification and are not invented here. Sibling CT7110 is the 2-pen circular recorder in the same Omega CT71xx line. The CT7100 is an Omega / DwyerOmega 1-pen circular chart recorder. OEM CT7100 listings describe a single-pen circular recorder for temperature (and process) charting, used with thermocouple/RTD/process inputs depending on configuration, with a rotating circular chart and ink/pen trace. Chart size, rotation period, and accuracy are on the CT7100 recorder specification and are not invented here. Sibling CT7110 is the 2-pen circular recorder in the same Omega CT71xx line. Single-pen circular chart recording of temperature/process in labs and plants.



MODEL

**Dwyer/Omega
CT7100**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

CT7100

LISTING

<https://aumictechlabs.com/products/ct7100-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Dwyer/Omega CT7100 is a microprocessor-based circular chart recorder that measures, displays, and records process variables in real time. This single-pen instrument accepts

thermocouple, RTD, mVDC, VDC, and mADC inputs with automatic linearization and cold junction compensation. A 10-inch (250 mm) circular chart and 4-digit LED display provide simultaneous recording and instantaneous value indication. Chart rotation speed is programmable from 0.1 to 168.0 hours per revolution, making it suitable for both rapid transient capture and extended trending applications. Technical Specifications Chart Size: 10 inches (250 mm) diameter Input Types: Thermocouple (J, K, T, E, N, R, S, B, C), RTD, mVDC, VDC, mADC Display: 4-digit LED per pen Recording Pen: Single-pen configuration; red disposable fiber-tip pen Chart Rotation Speed: 0.1 to 168.0 hours per revolution in 0.1-hour increments Pen Response Time: 20 seconds to full-scale deflection Accuracy: $\pm 0.25\%$ of span @ 25°C (77°F); $\pm 0.5\%$ of span deviation from 25°C; $\pm 1.0\%$ of chart span maximum overall Display Resolution: Thermocouple/RTD: 0.1 or 1°; mVdc/Vdc: 0.001, 0.01, 0.1, or 1 Process Filter: Programmable averaging from 1 to 20 scans Operating Temperature: 0°C to 55°C (32°F to 131°F) Key Features Signal conditioning includes automatic thermocouple linearization and cold junction compensation Dual alarm settings per pen; configurable as process high/low, deviation from setpoint, or deviation band with user-selectable hysteresis Sensor fault detection displays "Hi" or "Lo" for inputs deviating beyond 10% of span Optional on/off and PID control capabilities with SPST relay, SSR driver, or 4–20 mA DC output (user configurable to 0–20 mA DC) Optional isolated 24 VDC regulated transmitter power supply for up to two 4–20 mA sensor transducers Battery-backed memory protection against AC power loss Enable mode security system prevents unauthorized parameter changes Self-compensating calibration for ambient temperature variations Typical Applications Process monitoring and recording across pharmaceutical, chemical, HVAC, food processing, and industrial manufacturing environments where multirange input flexibility and extended chart operation are required. Compatibility & Integration The CT7100 interfaces with standard thermocouple and RTD sensors. Optional 4–20 mA DC retransmission output enables integration with SCADA systems and data acquisition platforms. Panel mounting accommodates standard enclosure cutouts per manufacturer specifications.

CT7100 Characteristics / Specifications

PARAMETER	VALUE
Model	CT7100
Instrument Type	1-pen circular recorder
Family	Omega CT71xx
Pen Count	1
Sibling	CT7110 2-pen circular recorder
Manufacturer	Omega / DwyerOmega
Literature	Omega CT7100 1-pen circular recorder listings
System Role	circular chart recording
Use Case	temperature/process charting
Form Factor	circular-chart recorder
Input Class	temperature/process (configuration dependent)
Documentation Type	CT7100 listing
Brand Lineage	Omega / DwyerOmega
Application Class	chart recording
Related	CT7110 2-pen
Connector Class	sensor/process input plus mains
Host Class	lab/plant recorder
Year Class	CT7100
Ate Class	process recording
Module Class	circular recorder
Control Class	1-pen trace
Chart Class	circular chart
Display Class	ink/pen circular trace
Sensor Class	TC/RTD/process class inputs

CT7100 Specifications

PARAMETER	VALUE
Key Features	1-pen circular chart recorder
Omega CT71xx recorder family	Sibling CT7110 2-pen
Technical Specifications	Model: CT7100

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	CT7100
Instrument Type	1-pen circular recorder
Family	Omega CT71xx
Pen Count	1
Sibling	CT7110 2-pen circular recorder
Manufacturer	Omega / DwyerOmega
Literature	Omega CT7100 1-pen circular recorder listings
System Role	circular chart recording
Use Case	temperature/process charting
Form Factor	circular-chart recorder
Input Class	temperature/process (configuration dependent)
Documentation Type	CT7100 listing
Brand Lineage	Omega / DwyerOmega
Application Class	chart recording
Related	CT7110 2-pen
Connector Class	sensor/process input plus mains
Host Class	lab/plant recorder
Year Class	CT7100
Ate Class	process recording
Module Class	circular recorder
Control Class	1-pen trace
Chart Class	circular chart
Display Class	ink/pen circular trace
Sensor Class	TC/RTD/process class inputs

Notes

From Omega CT7100 1-pen circular recorder listings. Chart diameter, rotation period, and accuracy are on the CT7100 specification; do not invent them.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.