

1/32 DIN Ramp/Soak Controllers

CN7500 Series

\$97

All Models



Panel Punches Available, Visit omega.com/panelpunches

- ✓ Dual 4-Digit LED Display
- ✓ 8 Ramp/Soak Programs, 8 Segments Each
- ✓ Universal Inputs
- ✓ Autotune
- ✓ Dual Control Outputs
- ✓ RS485 Communications Standard
- ✓ Alarm Functions
- ✓ Free Software

The CN7500 Series temperature/process controller's advanced control features can handle the most demanding temperature or process applications. Enclosed in a compact 1/32 DIN housing, the CN7500 has dual, 4-digit LED displays for local indication of process value and setpoint. Control methods include on/off, PID, autotune, and manual tune. PID control is supported with 64 temperature and time (ramp/soak) control actions. The dual-loop output control allows simultaneous heating and cooling. The second output can be configured as an alarm mode using one of the 13 built-in alarm functions.

RS485 communications is standard. Up to 247 communication addresses are available, with transmission speeds of 2400 to 38,400 bps. Other features include universal inputs, selectable temperature units (°C/°F), selectable resolution, quick sampling rate, and security protection.

Specifications

- Inputs:** Thermocouple, RTD, DC voltage or DC current
- Display:** Two 4-digit, 7 segment 6.35 mm H (25") LEDs; PV: red, SV: green
- Accuracy:** ±0.25% span, ±1 least significant digit
- Supply Voltage:** 100 to 240 Vac, 50/60 Hz
- Power Consumption:** 5 VA max
- Operating Temperature:** 0 to 50°C (32 to 122°F)
- Memory Backup:** Non-volatile memory
- Control Output Ratings:**
 - Relay:** SPST, 5A @ 250 Vac resistive
 - Voltage Pulse:** 14 V, 10 to -20% (max 40 mA)
 - Current:** 4 to 20 mA
- Communication:** RS485 MODBUS® A-5-11/RTU communication protocol
- Weight:** 114 g (4 oz)
- Panel Cut-Out:** 48 x 24 mm (1.890 x 0.938")
- Maximum Panel Thickness:** 3.40 mm (0.14")
- Panel Depth:** 99.80 mm (3.86")



CN7533, \$97.

Inputs

Input Types	Range
K Thermocouple	-200 to 1300°C (-328 to 2372°F)
J Thermocouple	-100 to 1200°C (-148 to 2192°F)
T Thermocouple	-200 to 400°C (-328 to 752°F)
E Thermocouple	0 to 600°C (32 to 1112°F)
N Thermocouple	-200 to 1300°C (-328 to 2372°F)
R Thermocouple	0 to 1700°C (32 to 3092°F)
S Thermocouple	0 to 1700°C (32 to 3092°F)
B Thermocouple	100 to 1800°C (212 to 3272°F)
L Thermocouple	-200 to 850°C (-328 to 1562°F)
U Thermocouple	-200 to 500°C (-328 to 932°F)
Pt100 RTD	-200 to 600°C (-328 to 1112°F)
0 to 50 mV	-999 to 9999
0 to 5 V	-999 to 9999
0 to 10 V	-999 to 9999
0 to 20 mA*	-999 to 9999
4 to 20 mA*	-999 to 9999

* Requires external 250 Ω precision shunt resistor, **OMX-R250** (sold separately).

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No.	Price	Description
CN7523	\$97	Dual output, DC pulse/relay, RS485*
CN7533	97	Dual output, relay/relay, RS485*
CN7553	97	Dual output, 4 to 20 mA/relay, RS485*

Accessories (Field Installable)

Model No.	Price	Description
CNQUENCHARC	\$8	Noise suppression RC snubber (2 leads), 110 to 230 Vac
OMX-R250	1	250 Ω precision resistor
CN7-485-USB-1	99	RS485 to USB mini-node converter

Comes complete with operator's manual.

* Free CN7-A software download available at omega.com/cn7500
Ordering Example: CN7523, dual-output controller, DC pulse and a mechanical relay output, RS485 communications, \$97.

Recommended Reference Book:
 Controller Tuning, PID
GE-2117, \$25.
 See Section Y For Additional Books



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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

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• 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