

1/4 DIN Ramp/Soak Temperature/Process Controllers

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CN7200 Series



CN7223 shown smaller than actual size.

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

The CN7200 series 1/4 DIN temperature/process controllers are designed to accept thermocouple, RTD, current or voltage input and provide dual outputs for control. Available outputs include relay/relay, DC pulse/relay, current/relay, or linear voltage/relay. The units can be programmed for ON/OFF, PID, auto-tuning, or manual tuning control methods. The PID control is supported by 64 ramp/soak actions. The CN7200 series also includes two additional alarm outputs. The second relay output can be reconfigured as a third alarm output. The alarm type can be selected from 13 different preprogrammed alarm functions. The controller features dual LED displays for local indication of process and setpoint values.

Specifications

Inputs: Thermocouple, RTD, DC voltages or DC current

Display: Two 4-digit, 7-segment

PV: Red, 19 mm (0.75") H

SV: Green, 12.7 mm (0.5") H

Accuracy: $\pm 0.25\%$ span,

± 1 least significant digit

Supply Voltage:

100 to 240 Vac, 50/60 Hz

Power Consumption:

5 VA maximum

Operating Temperature:

0 to 50°C (32 to 122°F)

Memory Backup:

Nonvolatile memory

Control Output Ratings:

Relay: SPDT, 5 A @

250 Vac resistive

Voltage Pulse: 14V, 10 to -20%

(maximum 40 mA)

Current: 4 to 20 mA

Linear Voltage: 0 to 5V, 0 to 10V

Communication: RS485 MODBUS®

A-5-11/RTU communication protocol



Panel Cutout: 1/4 DIN, 92 mm² (3.622 in²)

Dimensions: 96 x 96 x 15.8 mm bezel (3.78 x 3.78 x 0.625")

Panel Depth: 79.2 mm (3.125")

Weight: 425 g (15 oz)

Front Panel Rating: IP66

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

Accessories (Field Installable)

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

To Order Visit omega.com/cn7200_series for Pricing and Details

Model No.	Description
CN7223	Dual output, DC pulse/relay with RS485**
CN7233	Dual output, relay/relay with RS485**
CN7253	Dual output, 4 to 20 mA/relay with RS485**
CN7263	Dual output, 0 to 5, 0 to 10 Vdc/relay with RS485**

Comes complete with operator's manual.

** Free CN7-A software download available on omega.com/cn7200

Ordering Examples: CN7223, dual output controller, DC pulse, mechanical relay output, RS485 communications.

CN7263, dual output, 0 to 5, 0 to 10 Vdc relay with RS485.