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# 1/4 DIN Ramp/Soak Temperature/Process Controllers

CN7200 Series  
**\$169**  
 All Models



- ✓ 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.

**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

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

CN7223, \$169, shown smaller than actual size.



**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:** ±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:** Nonvolatile memory  
**Control Output Ratings:**  
 Relay: SPDT, 5 A @ 250 Vac resistive  
 Voltage Pulse: 14V, 10 to -20% (max 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 <b>K</b>	-200 to 1300°C (-328 to 2372°F)
Thermocouple Type <b>J</b>	-100 to 1200°C (-148 to 2192°F)
Thermocouple Type <b>T</b>	-200 to 400°C (-328 to 752°F)
Thermocouple Type <b>E</b>	0 to 600°C (32 to 1112°F)
Thermocouple Type <b>N</b>	-200 to 1300°C (-328 to 2372°F)
Thermocouple Type <b>R</b>	0 to 1700°C (32 to 3092°F)
Thermocouple Type <b>S</b>	0 to 1700°C (32 to 3092°F)
Thermocouple Type <b>B</b>	100 to 1800°C (212 to 3272°F)
Thermocouple Type <b>L</b>	-200 to 850°C (-328 to 1562°F)
Thermocouple Type <b>U</b>	-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).

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**To Order (Specify Model Number)**

Model No.	Price	Description
<b>CN7223</b>	<b>\$169</b>	Dual output, DC pulse/relay with RS485**
<b>CN7233</b>	<b>169</b>	Dual output, relay/relay with RS485**
<b>CN7253</b>	<b>169</b>	Dual output, 4 to 20 mA/relay with RS485**
<b>CN7263</b>	<b>169</b>	Dual output, 0 to 5, 0 to 10 Vdc/relay with RS485**

\*\* Free CN7-A software download available on [omega.com/cn7200](http://omega.com/cn7200)  
 Comes complete with operator's manual.  
**Ordering Examples:** CN7223, dual output controller, DC pulse, mechanical relay output, RS485 communications, \$169.  
 CN7263, dual output, 0 to 5, 0 to 10 Vdc relay with RS485, \$169.



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