

# 1/32 DIN Temperature/Process Controllers

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CN8590 Series  
**\$220**  
 All Models



CN8592-R1-DC2, \$220, shown actual size.

- ✓ **User-Selectable Universal Inputs:** Thermocouple, RTD, Voltage, or Current
- ✓ **Autotune PID, Heat or Cool**
- ✓ **Smooth Auto/Manual Transfer**
- ✓ **Configurable Dual Heat or Cool Outputs**

The CN8590 is a 1/32 DIN microprocessor-based controller that provides accurate closed-loop control of temperature and other process variables. With on-demand autotuning, and complete on/off through full PID functionality, the CN8590 accepts inputs from J, K, and T Type thermocouples; RTDs; or linear signals.

## Specifications Performance

**Accuracy:** ±0.2% FS, ±1 digit  
**Display Resolution:** 0.1, 0.01 for process inputs; 1.0 for thermocouple inputs; 0.1, 1.0 for RTD inputs  
**Setpoint Resolution:** 1/0.1 count  
**Repeatability:** ±1.0 count  
**Temperature Stability:** 5 µV/°C max  
**Thermocouple Cold-End Tracking:** 0.05°C/°C ambient  
**Noise Rejection:** Common mode >100 dB, series mode >70 dB  
**Sampling Frequency:** 3.7 Hz (270 ms)  
**Operating Limits**  
**Line Voltage, Line Power:** 85 to 265V, 50/60 Hz  
**Power Consumption:** Less than 6 VA (instrument)

## Inputs

**Thermocouple:** J, K and T; max lead resistance, 100 Ω  
**RTD:** Platinum 100 Ω @ 0°C, DIN curve 0.00385  
**Process Inputs:** Linear current and voltage  
**Engineering Units:** -1999 to 9999



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.

## Output Options

**SPST Relay:** 5 A @ 120 Vac, 5 A @ 240 Vac  
**DC Pulse:** 5 Vdc pulsed  
**Solid State Relay:** 120/240 Vac; zero voltage switched; 1 A continuous, 10 A surge @ 25°C

## General

**Display:** 4-digit LED, 10 mm (0.39")  
**Display Indicators:** 7-segment alphanumeric LED

## Dimensions:

48 L x 23.97 W x 99.99 mm D (1.890 x 0.944 x 3.937")  
**Panel Cutout:** 45 L x 22.19 mm W (1.772 x 0.874")  
**Front-Panel Rating:** NEMA 4X (IP66)  
**Operating Temperature:** 0 to 55°C (32 to 131°F)  
**Humidity Tolerance:** 90% RH max, non-condensing  
**Weight:** 90.7 g (3.2 oz)

## Universal Input Types and Ranges

Input	Type	Range	Resolution
TC	J Iron-Constantan	-100 to 760°C -148 to 1400°F	1°C 1°F
	K CHROMEGA <sup>®</sup> -ALOMEGA <sup>®</sup>	-140 to 1350°C -220 to 2462°F	1°C 1°F
	T Copper-Constantan	-130 to 400°C -202 to 752°F	1°C 1°F
RTD	RTD 2-wire, 100 Ω Pt	-200 to 850°C -328 to 1562°F	1°C 1°F
	RTD 2-wire, 100 Ω Pt	-128.8 to 200.0°C -199.0 to 392.0°F	0.1°C 0.1°F
MV	10 to 50 mV 0 to 50 mV	Scalable (-1999 to 9999) Scalable (-1999 to 9999)	Selectable Selectable
*MA	4 to 20 mA 0 to 20 mA	Scalable (-1999 to 9999) Scalable (-1999 to 9999)	Selectable Selectable

\* Note: For mA input, connect external 2.5 Ω resistor across signal input terminals.

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## To Order (Specify Model Number)

Model Number	Price	Description
CN8592-R1-DC2	\$220	Dual-output relay/DC pulse
CN8592-R1-T2	220	Dual-output relay/AC SSR
CN8592-DC1-DC2	220	Dual-output DC pulse/DC pulse
CN8592-DC1-T2	220	Dual-output DC pulse/AC SSR
CN8592-T1-DC2	220	Dual-output AC SSR/DC pulse
CN8592-T1-T2	220	Dual-output AC SSR/AC SSR

Comes complete with operator's manual.

**Ordering Examples:** CN8592-DC1-DC2, controller with dual DC pulse outputs, \$220.  
 OCW-2 OMEGACARE<sup>SM</sup> extends standard 3-year warranty to a total of 5 years (\$40), \$220 + 40 = \$260. CN8592-R1-DC2, controller with dual outputs, relay/DC pulse, \$220.



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Stamford, CT.

#### CANADA

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