

# 1/8 DIN Digital Proportional, On/Off Temperature Controller

Panel Punches Available

## CN1000 Series



- ✓ Thermocouple and RTD Input Models
- ✓ Dual Programmable Setpoints
- ✓ Analog Output Standard
- ✓ Latching/Non-Latching Relays
- ✓ Red or Green Display
- ✓ Optional Isolated Analog Output

The CN1000 Series combines the features of a controller, monitor and temperature limit alarm into one easy-to-use digital meter for applications that require maximum versatility. The CN1001TC is selectable for J, K, T or J DIN thermocouple input with 1° resolution. The CN1001RTD is selectable for 100 Ω Platinum RTD inputs (alpha = 0.00385) with 0.1° resolution. Dual independent setpoints are available and are programmable for proportional or on/off operation. The standard analog output is a retransmission of the temperature input and can be sent to a remote chart recorder, data logger or data acquisition system.

## Specifications

**Input:** Thermocouples Type J, K, T, and J DIN

**RTD Input:** 100 Ω Pt (0.00385 curve)

2-, 3- and 4-wire selectable

**Signal Input:** 240 Vrms overvoltage protection

**Outputs:** 2 Form C (SPDT) relays, rated 5 A, 250 Vac; programmable through software for proportional/non-proportional (on-off) control, or active high/low alarms with latching/nonlatching relays

**Relay Hysteresis:** Programmable for 0 to 9999

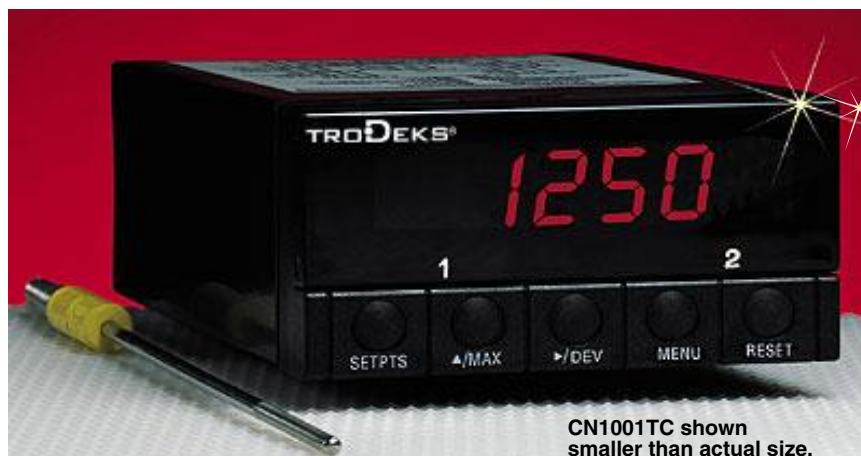
**Accuracy:** ±0.5% @ 25°C (77°F) after 30 minute warm-up

**Temperature Coefficient:** ±50 PPM/°C

**Read Rate:** 3/s

**Step Response:** 2 seconds

**Power:** 115 or 230 Vac ±10%, 0 to 60 Hz; 8 W maximum



CN1001TC shown smaller than actual size.

**Isolation:** Dielectric strength to 2500V transient per 3 mm (0.12") spacing based on EN61010 for 260 Vrms or DC

**NMR:** 60 dB

**CMR:** 120 dB

**Input Resistance:** 100 MΩ

**Operating Temperature:**

0 to 50°C (32 to 122°F)

**Storage Temperature:**

-40 to 85°C (-40 to 185°F)

**Analog Output:** (optional isolated version): scalable 0 to 10 Vdc or 4 to 20 mA

**Dimensions:**

48 H x 96 W x 152 mm D  
(1.89 x 3.78 x 6.0")

**Panel Cutout:** 45 H x 92 mm W  
(1.772 x 3.622")

**Weight:** 574 g (1.27 lb)

## To Order

Model No.	Description	Input Type	Range
CN1001TC	Programmable thermocouple controller	J	-210 to 760°C (-346 to 1400°F)
		J DIN	-200 to 900°C (-328 to 1652°F)
		T	-270 to 400°C (-454 to 752°F)
		K	-270 to 1372°C (-454 to 2500°F)
CN1001RTD	Programmable RTD controller	100 Ω Pt 2-, 3-, 4-wire	-200 to 850°C (-328 to 1562°F)

Comes complete with operator's manual.

**Ordering Example:** CN1001RTD-GN-AI-DC26/56, programmable thermocouple controller, with green display and 26 to 56 Vdc power, and isolated analog output.

## Display, Output and Power Options

Suffix	Description
-GN	Green LED display
-AI	Isolated analog output
-230V	230 Vac power
-DC10/32	10 to 32 Vdc power
-DC26/56	26 to 56 Vdc power

## Accessories

Model No.	Description
SPC4	NEMA 4 heavy-duty splashproof lens with screw clamp
SPC18	NEMA 4 splashproof lens with spring clip
CNQUENCHARC	Noise suppression RC snubber (2 leads), 110 to 230 Vac