

1/16 DIN Temperature Controllers

CN740 Series

\$88

All Models



Panel punches available, visit omega.com/panelpunches

CN743, \$88.



- ✓ Dual Display
- ✓ Autotune
- ✓ RS485 Communications
- ✓ Free Software
- ✓ Alarm Functions
- ✓ Thermocouple/RTD Inputs
- ✓ Output Status

Communication: RS485 MODBUS® communication protocol
Panel Cut-Out: 45 mm² (1.77 in²)
Front Bezel: 48 mm² (1.89 in²)
Maximum Panel Thickness: 9.50 mm (0.375")
Panel Depth: 80 mm (3.15")
Weight: 114 g (4 oz)
Front Panel Rating: IP66

The CN740 Series temperature controllers offer accurate temperature measurement and control in a 1/16 DIN package. Designed for direct or reverse acting (cooling or heating) control, the CN740 Series can be programmed for simple ON/OFF or more complex PID control functions. PID control is supported with manual or autotuning. Select relay, DC pulse or current output for control methods. The CN740 Series accepts a variety of thermocouple and RTD inputs. Process value and set-point value are displayed simultaneously on the large dual LED. Auto-tuning, engineering units (°F or °C), and alarm status is also indicated on the faceplate. Two alarm outputs are included on the unit with 12 preprogrammed alarm functions.

Specifications

Inputs: Thermocouple, RTD, see chart

Display: Two 4-digit, 7 segment

6.35 mm H (0.25") 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: Nonvolatile memory

Control Output Ratings:

Relay: SPST,

5A @ 250 Vac resistive

Voltage Pulse: 14 Vdc, 10 to -20% (max 40 mA)

Current: 4 to 20 mA

Input Types	Range
Pt100Ω RTD	0 to 100°C (32 to 212°F) -20 to 500°C (-4 to 932°F) -200 to 600°C (-328 to 1112°F)
Thermocouple Type B	100 to 1800°C (212 to 3272°F)
Thermocouple Type S	0 to 1700°C (32 to 3092°F)
Thermocouple Type R	0 to 1700°C (32 to 3092°F)
Thermocouple Type N	-200 to 1300°C (-328 to 2372°F)
Thermocouple Type E	0 to 600°C (32 to 1112°F)
Thermocouple Type T	-20 to 400°C (-4 to 752°F) -200 to 400°C (-328 to 752°F)
Thermocouple Type J	-20 to 400°C (-4 to 752°F) -100 to 850°C (-148 to 1562°F)
Thermocouple Type K	-200 to 1300°C (-328 to 2372°F) -200 to 500°C (-328 to 932°F)
Thermocouple Type L	-200 to 500°C (-328 to 932°F)
Thermocouple Type U	-200 to 800°C (-328 to 1472°F)

IN STOCK FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No.	Price	Description
CN743	\$88	Relay output, with RS485 communications*
CN742	88	DC pulse output, with RS485 communications*
CN745	88	4 to 20 mA output, with RS485 communications*

Accessories (Field Installable)


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

* Free CN7-A software download available at omega.com/cn740

Comes complete with operator's manual.

Ordering Example: CN743, single output controller, mechanical relay, RS485 communications, \$88.

Recommended Reference Book: Controller Tuning/PID, GE-2117, \$25.

See Section Y For Additional Books 



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