¹⁄₁₆ DIN Temperature Controllers

CN740 Series

1 YEAR WARRANTY CE UL

CN743

✔ **Dual Display**
✔ **Autotune**
✔ **RS485 Communications**
✔ **Free Software**
✔ **Alarm Functions**
✔ **Thermocouple/ RTD Inputs**
✔ **Output Status**

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.

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

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

To Order

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

Accessories (Field Installable)

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

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