

1/8 DIN Vertical Temperature Controllers

CN710 Series



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

The CN710 Series temperature controllers offer easy-to-use programming menus designed for quick installation. These units are designed for direct or reverse acting (cooling or heating) control. The CN710 Series can be programmed for simple ON/OFF or more complex PID control functions. PID control is supported with manual or auto-tuning. Select relay, DC pulse, or current output control methods. The controller also includes two additional alarm outputs. The alarm outputs can be configured from 12 different preprogrammed settings. The temperature controller accepts a variety of thermocouple and RTD inputs. The process value and setpoint 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.

Specifications

Inputs: Thermocouple and RTD (see chart)

Display: Two 4-digit, 7-segment 9.53 mm H (0.38") 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 maximum

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% (maximum 40 mA)

Current: 4 to 20 mA

Communication: RS485 MODBUS® communication protocol

Weight: 425 g (15 oz)

Panel Cut-Out: 92 x 46 mm (3.6 x 1.8")

Maximum Panel Thickness:

9.50 mm (0.375")

Panel Depth: 79.2 mm (3.125")

Front Panel Rating: IP66



CN713 shown smaller than actual size.

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)

To Order

Model No.	Description
CN713	Relay output with RS485 communications*
CN712	DC pulse output with RS485 communications*
CN715	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

* Free **CN7-A** software download available online

Comes complete with operator's manual.

Ordering Example: **CN713**, single output controller, mechanical relay, RS485 communications.