

# Economical 6- or 12- Zone ¼ DIN Temperature Monitors

**Ω OMEGA™**

## CN606 Series



- ✓ User Programmable
- ✓ Hi, Lo or Hi/Lo Alarms
- ✓ Password Protected
- ✓ Adjustable Scan Time
- ✓ Programmable °C or °F Display
- ✓ Zone Activation
- ✓ Thermocouple Types (J, K, E, T, S, R, B, C)
- ✓ RTD (2- or 3-wire)
- ✓ Front Panel Calibration
- ✓ Latching or Non-Latching Alarm
- ✓ RS232 Communications and Software
- ✓ Free Software (Fully Supported up to Windows™ XP)

The CN600 Series are microprocessor-based scanners which accept signals from up to 12 thermocouples or RTD's. Each zone is sequentially scanned and active zones are displayed. Individual zones can be locked for monitoring. Each instrument is programmable to meet the operator's needs for thermocouple types, degree scale, latching or non-latching, and high, low or high/low alarms. Memory and setpoints are retained when power is off.

The RS232 program can monitor up to 10 units. All CN600 Series scanners have RS232, 3-wire serial communications. Up to 10 scanners can be daisy-chained together. Line voltage is 120 or 240 Vac selectable by external jumper assembly. On the back of the instrument are easy-to-use screw terminal connections.

The CN600 Series implements a security password to protect settings. The password can be enabled or disabled on the front panel and changed via RS232.

Calibration is performed from the front panel and is separately password protected. Higher level passwords are available.

The instrument mounts in a ¼ DIN panel cutout and is secured by slide brackets. It does not have to be removed from its housing to be mounted. The instrument is housed in a ¼ DIN aluminum box.

Optional models available are 6-zone thermocouple with output cards, 12-zone thermocouple, 6-zone RTD or 12-zone RTD.

A single output relay is provided to indicate an alarm condition on any zone. The instrument shows an alarm condition by flashing the main temperature display while indicating the zone in alarm with a flashing zone number display. The alarm automatically shuts itself off when the condition changes in the non-latching setting and is manually reset in the latching setting.

There are 2 modes the monitor can be set for: "RUN" and "FUNCTION SELECT". "RUN" is the basic operating mode. "FUNCTION SELECT" is the password protected settings selection and control mode.



CN606TC2 shown smaller than actual size.

### 1 of 10 Functions Can be Selected:

- ✓ "RUN" MODE
- ✓ "FUNCTION SELECT"
- ✓ Select Active Zones
- ✓ Set "LO" Setpoint
- ✓ Set "HI" Setpoint
- ✓ Serial Number
- ✓ Set Scan Time
- ✓ Select Model
- ✓ Password Enable
- ✓ Calibration

### Specifications

**No. of Zones:** 6 standard/12 expanded

**Display Time Adjust:** 1 to 40 seconds

**Scan Time:** Approx. ¼ s for 6-zone, ½ s for 12-zone

**Input Ranges:** See chart below

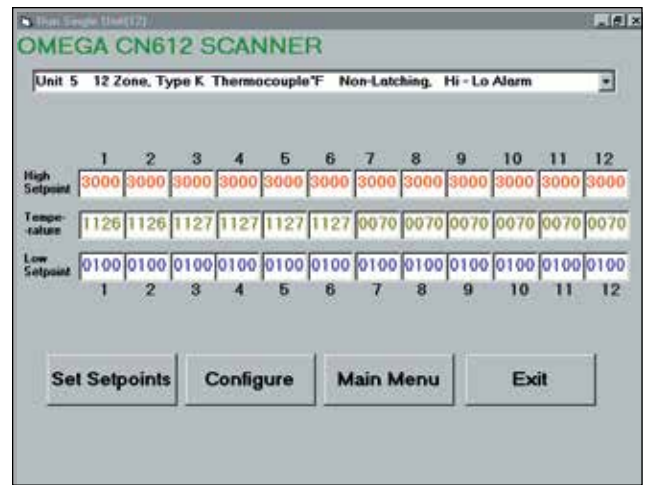
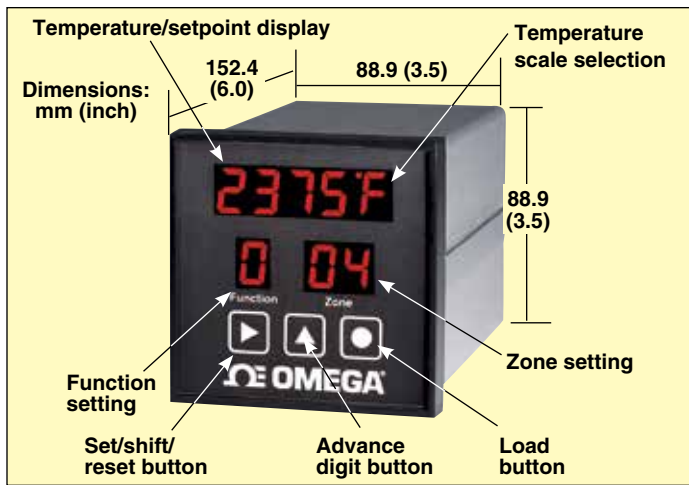
**Accuracy:** ±4°C range

**Resolution:** 1°C or °F

**Thermocouple Type:** J, K, E, T, S, R, B, C

**Cold-Junction Compensation:** Automatic

**Linearity:** ±1°C



RS232 sample screen

**Scale Selectable:** °C or °F

**Open Thermocouple Warning:**

Flashing display

**RTD (2- or 3-Wire):** 100 Ω Pt, 120 Ω Ni, 10 Ω Cu

**Line Power:** 120/240 Vac; 50/60 Hz

**Power Consumption:** 10 VA max

**Alarm Relay, 5 A:** 120 Vac, relay de-energizes on alarm

**Communication:** RS232 (3-wire)

**Alarms Selectable—High, Low and High/Low:** Latching or non-latching

**Alarm Range:** Full range

**RS232 Communications:** Single-drop

**Baud Rate:** 4800

**Data Bits:** 8

**Parity:** N

**Stop:** 1

**Protocols:**

**ASCII Line, Computer Interface**

**Communications Software:**

Windows compatible up to

Windows XP, included with unit

**Capability:** Up to 10 scanners can be daisy-chained; to avoid cross-talk between scanners, the transmission line is held in tristate except when the computer addresses a specific scanner for communication

**Terminals:** Headers for plug-in wiring

**Panel Cutout:** ¼ DIN 92 x 92 mm (3.62 x 3.62")

**Dimensions:** 95.3 x 95.3 mm (3.75 x 3.75") front face

**Weight:** 1.36 kg (3 lb)

**Enclosure:** ¼ DIN aluminum, 152.4 mm L (6")

**Storage Temperature:** 0 to 85°C (32 to 185°F)

**Operating Temperature:** 0 to 55°C (32 to 131°F)

**Reset:** Manual

**Max Voltage Between Inputs:**

6 Vdc or RMS

**Reaction to Power Loss:** Unit returns to "RUN MODE"

**Main Display:** 4-digit; 15 mm H (0.6")

### Input Ranges

Thermocouple Input Type	Standard Range (TC1)	Extended Range (TC2)
<b>J</b> Iron–Constantan	0 to 700°C (32 to 1300°F)	
<b>K</b> CHROME <sup>Ω</sup> GA™–ALOME <sup>Ω</sup> GA™	0 to 1000°C (32 to 1800°F)	0 to 1250°C (32 to 2282°F)
<b>T</b> Copper–Constantan	0 to 400°C (32 to 750°F)	
<b>E</b> CHROME <sup>Ω</sup> GA™–Constantan	0 to 550°C (32 to 1000°F)	0 to 900°C (32 to 1652°F)
<b>R</b> Pt/13% Rh-Pt	0 to 1750°C (32 to 3200°F)	
<b>S</b> Pt/10% Rh-Pt	0 to 1750°C (32 to 3200°F)	
<b>B</b> Pt/30% Rh-Pt/6% Rh	0 to 1800°C (32 to 3300°F)	
<b>C</b> W/5% Re-W/26% Re	0 to 2300°C (32 to 4200°F)	
RTD Input Type		Range
RTD	100 Ω Pt	0 to 850°C (32 to 1500°F)
	120 Ω Ni	0 to 300°C (32 to 580°F)
	10 Ω Cu (Special Order)	0 to 250°C (32 to 480°F)

### To Order

#### Scanner with 5 A Mechanical Relay Output

Model Number	Zones	Description
<b>CN606TC1</b>	6	Thermocouple input
<b>CN606TC2</b>	6	Thermocouple input with extended range
<b>CN606RTD2</b>	6	RTD (2-wire) input
<b>CN612RTD2</b>	12	RTD (2-wire) input
<b>CN606RTD3</b>	6	RTD (3-wire) input
<b>CN612TC1</b>	12	Thermocouple input
<b>CN612TC2</b>	12	Thermocouple input with extended range

Comes complete with software and operator's manual.

**Ordering Examples:** **CN606TC2**, six zone thermocouple input scanner with extended range. **CN612TC1**, twelve zone thermocouple input scanner.

### Accessory

Model No.	Description
<b>DPP-6</b>	¼ DIN panel punch