Economical 6- or 12-Zone ¼ DIN Temperature Monitors

CN606 Series

2 YEAR WARRANTY c ⒰⒧ US*

*****Not offered with DC power option.**

- ✔ **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**

CN606TC2 shown smaller than actual size.

OMEGACARESM
Extended Warranty Program

OMEGACARESM extended warranty program is available for models shown on this page. OMEGACARESM covers parts, labor, and equivalent loaners.

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.

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
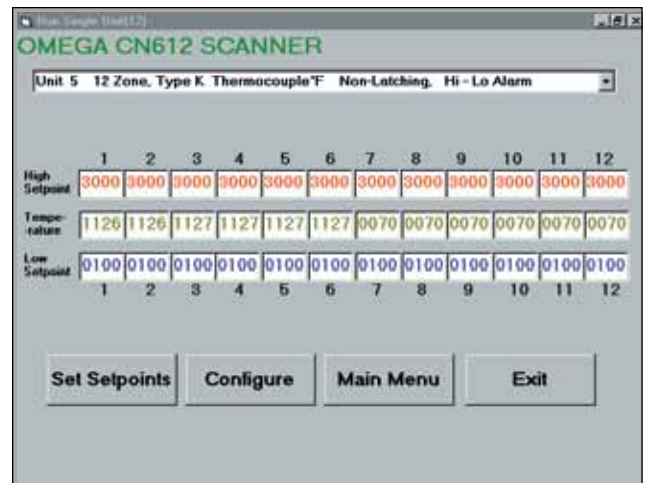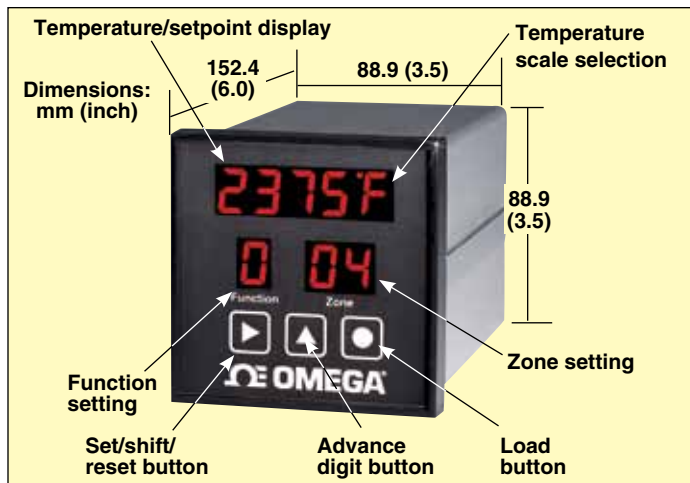**Input Ranges:** See chart below
Accuracy: ±0.1% range
Resolution: 1°C or °F
Thermocouple Type: J, K, E, T, S, R, B, C
Cold-Junction Compensation: Automatic
Linearity: ±1°C

Temperature/setpoint display

Dimensions: mm (inch)

152.4 (6.0)

88.9 (3.5)

Temperature scale selection

88.9 (3.5)

Function setting

Set/shift/ reset button

Advance digit button

Load button

Zone setting

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, 9 to 36 Vdc optional

Note: CE and UL ratings are not available on the dc power option

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, 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)
J	Iron–Constantan	0 to 700°C (32 to 1300°F)	
K	CHROMEGA®– ALOMEGA®	0 to 1000°C (32 to 1800°F)	0 to 1250°C (32 to 2282°F)
T	Copper–Constantan	0 to 400°C (32 to 750°F)	
E	CHROMEGA®– Constantan	0 to 550°C (32 to 1000°F)	0 to 900°C (32 to 1652°F)
R	Pt/13% Rh-Pt	0 to 1750°C (32 to 3200°F)	
S	Pt/10% Rh-Pt	0 to 1750°C (32 to 3200°F)	
B	Pt/30% Rh-Pt/6% Rh	0 to 1800°C (32 to 3300°F)	
C	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 *Visit omega.com/cn606_612 for Pricing and Details*

Scanner with 5 A Mechanical Relay Output

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

Scanner with Open Collector Option

Model Number	Zones	Description
CN606TC1-OC	6	Thermocouple input
CN606TC2-OC	6	Thermocouple input with extended range
CN606RTD2-OC	6	RTD (2-wire) input

Comes complete with software and operator's manual.
For 9 to 36 Vdc input power, add suffix "-DC" to model number, no additional cost.
Note: *CE and UL ratings are not available with dc power option.*
Ordering Examples: CN606TC2, *six zone thermocouple input scanner with extended range.*
OCW-3, *OMEGACARE[SM] extends standard 2-year warranty to a total of 5 years.*
CN612RTC1, *twelve zone thermocouple input scanner.*

Accessory

Model No.	Description
DPP-6	¼ DIN panel punch

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