1/4 DIN Ramp and Soak

Controller

CN1501 Series





- ✓ 5 Ramp/Soak Profiles, Each up to 10 Segments
- Offers PID As Well As **On/Off Control**
- Rate of Change and Min/Max Display
- Flexible Scaling for Millivolts, Volts and Current
- ✓ Programmable **Heat/Cool Cycles**
- Tracks Min/Max Readings
- ✓ Optional Alarms: 2 Process, 1 Rate. 1 Deviation Plus a **Built-in Alarm Buzzer**
- 2 Timers with **Solid State Outputs**
- Tracks Run Time and **Setpoint Deviation**

Specifications

A/D Conversion: 20,000 count,

dual-slope integrating **Temperature Resolution:** Thermocouple or RTD: 1°C/F Thermistor: 0.1°C/0.2°F

Display: Red 7-segment LED display,

10 mm H (0.39")

Power: 120 Vac (60 Hz) standard; 220 Vac (50 Hz) and 15 Vdc @ 900 mA (optional)

Rate: 0 to 500 seconds Prop. Band: 0 to 100% of span Reset: 0 to 50 repeats/min On/Off Deadband: 0 FS

Control Output: 5 Vdc drive @ 50 mA

max (internal 5 Vdc source) Scale/Offset (For Voltage, Current and Millivolt):

Scale: 1 to 30000

Offset: 0 to 20 (current), 0 to 10.000 (voltage), 0 to 100.0 (millivolt)

Decimal Point: None, 10th, 100th, 1000th Output (Optional): Open collector:

4 open collector outputs, max sink capacity of 50 mA per output

Relays: Single pole single throw, 1 A @ 28 Vdc or 0.5 A @ 120 Vac resistive Rate: Variable-displayed as rate of

change/time base

Case (Bezel Dimensions and Depth): 65 x 117 x 178 mm (2.70 x 5.07 x 6.90"), all metal enclosure

Panel Cutout (% DIN): 45 x 92 mm

(1.77 x 3.66")

Weight: 1.24 kg (2.75 lb)



CN1501 controller offers the ease of an on/off controller as well as the precision of a full-blown PID controller. PID parameters as well as on/off hysteresis is programmable. The unit has the capability of accepting 5 different ramp and soak programs, each one with up to 10 segments. Separate pass-codes are required for selecting or entering a program. Manual hold feature allows for an indefinite hold. Also offered is a manual setpoint entry mode for a quick "ramp to setpoint" function. Maximum and minimum process readings are constantly tracked and

can be helpful in fine tuning PID parameters, quality control or monitoring unattended processes (e.g. overnight). Four process alarms (optional) are also featured. Also provided are 2 timers (optional) that work independently or in conjunction with process limits, e.g. turning on a fan 10 minutes after limit 1 temperature is reached. CN1501 also functions as a rate monitor with a programmable time base. Two process limit relays can be programmed to work as rate and deviation alarms.

Program

Panel punches available, visit

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To Order (Specify Model Number)						
Model No.	Price	Input	Range		Accuracy	
CN1501-TC	\$245	J	-200 to 1190°C	-328 to 2174°F	±1°C/2°F ±1 cnt	
		K	-170 to 1365°C	-274 to 2489°F	±1°C/2°F ±1 cnt	
		T	-155 to 400°C	-247 to 752°F	±1°C/2°F ±1 cnt	
		E	-185 to 915°C	-300 to 1675°F	±1°C/2°F ±1 cnt	
CN1501-R	245	R	0 to 1600°C	32 to 2900°F	±3°C/6°F ±1 cnt	
CN1501-S	245	S	0 to 1600°C	32 to 2900°F	±3°C/6°F ±1 cnt	
CN1501-B	245	В	470 to 1800°C	900 to 3300°F	±3°C/6°F ±1 cnt	
CN1501-RTD (2-wire, 100 Ω Pt)	245	0.00385 0.00392	-200 to 800°C -100 to 450°C	328 to 1472°F -148 to 842°F	±1°C ±1 digit ±1°C ±1 digit	
CN1501-TH	245	thermistor 2252 Ω @ 25°C	-8 to 100°C	17.2 to 212.0°F	±1°C ±1 digit	
CN1501-C	245	current	4 to 20 mA			
CN1501-V	245	voltage	0 to 10 Vdc	1 to 30000	0.05% ± 1 digit	
CN1501-P	245	millivolt	0 to 100 mV			

Ordering Suffix	Add'l Price	Description
-1	N/C	240 Vac power
-2	\$28	9 to 15 Vdc power
-3	111	Four 1 A alarm relays, 2 DC Pulse drivers for timers
-4	111	4 DC pulse drivers for alarms, 2 DC pulse for timers

Power, Output and Communication Options

Comes complete with operator's manual. CN1501-TC is field programmable for J, K, T or E thermocouple inputs.

OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE covers parts, labor, and equivalent loaners.

Ordering Examples: CN1501-TC-3, controller with thermocouple input, 4 limit relays, and 2 DC drivers for controller/timers, \$245 + 111 = \$356.

OCW-3 OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$89), \$356 + 89 = **\$445.**

CN1501-TH-1, controller with thermistor input, 240 Vac power, **\$245.**

Accessories

	Model No.	Price	Description	
	CNQUENCHARC	\$8	Noise suppression kit, 110 to 230 Vac	
	DPP-5	525	1/8 DIN panel punch	

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