ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *OMEGA CN3000* at our website: *Click HERE*

Dual-Input Programmable Process Controllers

CN3000 Series

$2452

All Models



- Up to 4 Independent Outputs Available as Plug-In Modules
- Dual Loop Control
- Heat Autotuning
- Multiple PID Sets
- 4-Line Vacuum Fluorescent Dot Matrix Display Shows Data and Graphics
- Universal Inputs—User Programmable for Thermocouple, RTD, Voltage, and Current
- NEMA 4 (IP65) Enclosure Available Option
- Transducer Power

The CN3000 Series microprocessor-based ¼ DIN PID controllers provide accurate and reliable control of temperature, pressure, and other variables in both process and machine control applications. This menu-driven controller can be configured from either the front keypad or a remote PC. The front keypad offers direct digital data entry, direct access to desired displays, and soft-key macros.

The CN3000 features universal inputs, an extensive selection of control programs, 4 selectable control outputs, and unparalleled application configuration and programming. The blue dot matrix display can show 4 lines of alphanumeric data plus graphics and is mounted with the keypad in a NEMA 4 (IP65) bezel.

Specifications

Accuracy: ±0.2% of range
Temperature Stability: 3 µV/°C
Operating Ambient:
5 to 55°C (41 to 131°F)
Storage Ambient: -40 to 75°C (-40 to 167°F)
Common-Mode Rejection: 140 dB typical; 120 dB minimum @ 60 Hz
Normal-Mode Rejection:
65 dB typical; 60 dB minimum @ 60 Hz
Resolution: 1° for thermocouple, 1° or 0.1° for RTD
Power: 117/240 Vac, 50/60 ±2 Hz; 4 W typical, 13.5 W max consumption
Inputs: 2 standard, user configurable; additional input available for remote setpoint or other function
Input Impedance:
10 MΩ minimum (T/C input)
Input Update: 12 updates per second
Input Filtering:
Selectable 1 to 256 samples
RTD Input:
100 Ω, α = 0.00385 or 0.00392 curve; platinum with 3-wire connection
Current Input: 0 to 20 or 4 to 20 mA; fully scalable to ±19,999 counts
Voltage Input: 0 to 10 mV up to 100 mVdc; fully scalable to ±19,999 counts
User Programmable: 128-segment linearizer for custom analog input
Sensor Break Protection: Display indicates "-----" if thermocouple or RTD input opens, outputs go off or to a preselected percent output, and alarm triggers go on
Display: Vacuum fluorescent dot matrix, 4 lines of alphanumeric data with 10 characters per line plus dot access for graphic displays
Keypad: 15 pushbutton keys on sealed NEMA 4 (IP65) front panel

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Outputs: Up to 4, independent
Current Output:
4 to 20 mA into 750 Ω max
Voltage Output:
0 to 5 Vdc into 1 KΩ min
Solid State Relay:
Optically isolated form "A" contacts, 50 mA @ 240 Vac resistive
Electromechanical Relay: Form "C" contacts, rated 2.0 @ 240 Vac resistive
DC Trigger: 18 Vdc, 15 mA max
Open Collector: Requires external power up to 50 mA @ 32 Vdc
Alarm/Timer/Event Outputs: Any of the 4 outputs can be programmed as an alarm, timer or event output using SSR, EMR, DC trigger or OC board(s)
On/Off Output Deadband: 0 to 5% span, settable in 0.01% increments
Cycle Time: 1 to 511 seconds with 1 second resolution
Proportional Band: 5 to 4000 display units with 1 unit increments
Reset (Integral): 0.01 to 20 repeats per minute, settable in 0.01 increments; reset can be turned off by setting reset to 0
Anti-Reset Windup: Inhibits automatic reset when the process input is outside of the proportional band
Rate (Derivative): 0.01 to 5 minutes, settable in 0.01 minute increments; rate can be turned off by setting rate to 0
Drive Unit Deadband (Valve Positioner):
Settable 0.00 to 25.50% of span
Auto/Manual: Bumpless transfer
Autotune: User-initiated program optimizes PID parameters during "cold" start or on demand; PID values can be read and manually changed
Profile Control: Stores up to 99 profiles of up to 99 segments each with assured soak, multiple programmed events and link and loop programming position display
Control Limiters: Set rate of setpoint, change limit or rate of ramp on startup limit in units per selected time; set maximum or minimum output power in 1% increments
Enclosure: Assembly with plug-in output boards; NEMA 4 (IP65) front bezel when properly secured with tension bolt; polycarbonate flame-retardant bezel and rear terminal block
Weight:
1.6 kg (3.5 lb)



The CN3000 has a history graph that can display temperature over time.

Input Type and Range Table for Both Inputs

Input Types		Range: °C (°F)
J	Iron–Constantan	-212 to 1148 (-350 to 2100)
K	CHROMEGA®–ALOMEGA®	-212 to 1371 (-350 to 2500)
R	Pt-13%Rh/Pt	-45 to 1760 (-50 to 3200)
S	Pt-10%Rh/Pt	-45 to 1760 (-50 to 3200)
T	Copper-Constantan	-240 to 398 (-400 to 750)
N	OMEGA-P®–OMEGA-N®	-128 to 1260 (-200 to 2300)
E	CHROMEGA®–Constantan	-212 to 982 (-350 to 1800)
B	Pt-30%Rh/Pt–6%Rh	21 to 1815 (70 to 3300)
PLII	Platinel II	-73 to 1371 (-100 to 2500)
	Ni/Ni 18% Mo	-15 to 1310 (0 to 2390)
C	W5-Re/W26–Re	0 to 2315 (32 to 4200)
D	W3-Re/W25–Re	0 to 2371 (32 to 4300)
G	W/W26-Re	0 to 2315 (32 to 4200)
RTD	100 Ω Pt (0.00385)	-142 to 848 (-225 to 1560)
RTD	100 Ω Pt (0.00392)	-142 to 628 (-225 to 1160)

AVAILABLE FOR FAST DELIVERY!

To Order *(Specify Model Number)*

Model No.	Price	Description
CN3001	$2452	Single output, mechanical relay
CN3002	2452	Single output, AC SSR
CN3003	2452	Single output, 4 to 20 mA/0 to 5 Vdc
CN3004	2452	Single output, DC pulse/open collector

Comes with complete operator's manual.
Each unit supplied with mounting bracket and complete operator's manual.
Ordering Example: CN3001-R3-D3-D3,** 4-output controller with 2 A mechanical relay and 2 DC pulse outputs, $2452 + 56 + 56 + 56 = **$2620.
OCW-1,** OMEGACARE℠ extends standard 1-year warranty to a total of 2 years **($150),** $2620 + 150 = **$2770.

Plug-In Output Modules (Maximum 3 Output Slots Available)

Ordering Suffix	Price	Description
-R3*	$56	2 A mechanical relay
-T3*	56	50 mA AC SSR
-F3*	107	4 to 20 mA/0 to 5 Vdc
-D3*	56	DC pulse/open collector

*** Note:** Each CN3000 controller can have up to 4 outputs (3 optional modules plus the original standard output).*

Transducer Power Supply (Uses 1 Plug-In Output Slot)

Ordering Suffix	Price	Description
-X3*	$110	Transducer power, 12/24 V, 25 mA DC

**Field installable. Can be ordered separately.*
Ordering Example: CN3000-X3,** field-installable transducer power supply module, **$110.



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP