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Data Sheet

August 15, 2026

DWYER/OMEGA

DWYEROMEGA / OMEGA CN77322-2.5 1/16 DIN MICROMEGA Autotune PID Temperature / Process Controllers

The DWYEROMEGA CN77322-2.5 is a 1/16 DIN MICROMEGA autotune PID temperature and process controller, offering precise temperature management for various industrial applications. Its compact design and advanced PID algorithm ensure accurate and stable control.



MODEL

**Dwyer/Omega
CN77322-2.5**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

CN77322-2.5

LISTING

<https://aumictechlabs.com/products/cn77322-2-5-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The DWYEROMEGA CN77322-2.5 is a 1/16 DIN MICROMEGA Autotune PID Temperature/Process Controller engineered for precise industrial thermal management and process control. It delivers dual LED displays for simultaneous Process Value (PV) and Setpoint Value (SV) monitoring, with color-differentiated readouts. The controller accepts universal power input from 90 to 250 Vac or Vdc at 7 Watts consumption and operates with multiple control algorithms: Preset Tune, Adaptive Tune, Autotune, PID, PI, and PD modes. Technical Specifications Input Configuration Thermocouple types: J, K, T, E, R, S, B, N, J-DIN°C (100 Ω lead resistance maximum) RTD: 100Ω or 1kΩ with 0.00385 or 0.00392 Pt curves; 2-, 3-, or 4-wire configurations Analog Voltage: 0-100

mV, 0–1 V, 0–10 Vdc (fully scalable with selectable decimal point) Analog Current: 0–20 mA, 4–20 mA (fully scalable with selectable decimal point) Output Architecture Dual control outputs: configurable for heat, heat/cool, heat/alarm, cool, or cool/alarm modes Output types: Relay (SPDT/SPST), Solid State Relay (SSR), Pulse, Voltage, Current, and Analog Output Alarm 1 output: SPST Relay rated 3 A @ 120 Vac and 3 A @ 240 Vac Analog outputs fully scalable and configurable Ramp/Soak & Control Maximum Ramp Time: 99.59 hours (HH.MM format) Soak Time range: 00.00 to 99.59 hours Damping adjustment: 1 to 8 in unit increments Electrical Isolation Power to Input/Output isolation: 2300 Vac per 1 minute test Power to Relay/SSR outputs: 2300 Vac per 1 minute test Key Features Compact 1/16 DIN footprint with NEMA 12 (IP54) or NEMA 4 (IP65) bezel ratings Universal AC/DC power supply eliminates dual-supply configurations Selectable input impedance and RTD excitation for mixed-sensor installations Multi-protocol communications: RS-232C, RS-485, optional Ethernet, and standard USB Typical Applications Thermal process control, incubator management, laboratory furnace regulation, industrial oven monitoring, and multi-zone heating/cooling systems requiring adaptive setpoint management. Compatibility & Integration UL, cUL, CE, and UKCA certified. Standard USB connectivity with optional Ethernet support enables networked monitoring and remote configuration in distributed control environments.

CN7732225 Characteristics / Specifications

PARAMETER	VALUE
Model	CN77322-2.5
Instrument Type	1/16 DIN autotune PID temperature/process controller
Family	Omega MICROMEGA CN77000 / CN77300
Accuracy Temperature	plus or minus 0.5 C (0.9 F)
Accuracy Process	0.03 percent of reading
Ad Conversion	dual slope, 3 samples per second
Display	dual 4-digit 7-segment LED, red process variable
Panel Cutout	45 mm x 45 mm (1.772 in x 1.772 in) 1/16 DIN NEMA 12
Thermocouple Types	J, K, T, E, R, S, B, C, N and J DIN
Rtd Input	2-, 3- or 4-wire 100, 500 and 1000 ohm; 0.00385 or 0.00392 Pt
Voltage Input	0 to 100 mV, 0 to 1 V, 0 to 10 Vdc
Current Input	0 to 20 mA, 4 to 20 mA
Thermocouple Lead Resistance	100 ohm maximum
Step Response	0.7 s for 99.9 percent
Power	90 to 250 Vac/Vdc, 50 to 400 Hz
Operating Ambient	0 to 55 C
Control Output One	SSR (CN77322 dual-SSR configuration)
Control Output Two	SSR (CN77322 dual-SSR configuration)
Ssr Rating Family	0.5 A at 120/240 Vac continuous (CN77000 SSR table)
Alarm Relay	SPST 3 A at 120 Vac and 3 A at 240 Vac
Dc Pulse Family	non-isolated 10 Vdc at 20 mA
Analog Output Family	non-isolated 0 to 10 Vdc or 0 to 20 mA, 500 ohm max
Ramp Soak	00.00 to 99.59 HH.MM
Cycle Time	1 to 199 seconds; 0 for on/off
Gain Band	0.5 to 100 percent of span

PARAMETER	VALUE
Rate Time	0 to 999.9 s
Reset Time	0 to 99 minutes 59 seconds
Manufacturer	Omega Engineering (DwyerOmega)
Literature	Omega CN77000 / CN77333 MICROMEGA specification tables

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

From Omega CN77000 MICROMEGA datasheet/manual (accuracy, inputs, 90-250 V, 0-55 C, SSR/alarm ratings). CN77322-2.5 is the dual-SSR 1/16 DIN NEMA 12 SKU; confirm SSR current on the installed nameplate if it differs from the 0.5 A family SSR row.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.