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[DPI16-DC](#)

[DPI16-DC.](#)

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the manufacturer

DE

Dieses Datenblatt wird vom
Hersteller bereitgestellt

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Cette fiche technique est
présentée par le fabricant

1/16 DIN Temperature, Process and Strain Meters and PID Controllers



- ✓ High Quality
- ✓ 5-Year Warranty
- ✓ High Accuracy $\pm 0.5^{\circ}\text{C}$ (0.9°F), 0.03% Reading
- ✓ First 1/16 DIN Controller with Totally Programmable Color Displays (Standard)
- ✓ User-Friendly, Simple to Configure
- ✓ Free Software
- ✓ Full Autotune PID Control
- ✓ Universal Inputs: Thermocouple, RTD, Process Voltage/Current, Strain
- ✓ Embedded Ethernet Connectivity

The OMEGA[®] DPi16/CNi16 is the popular 1/16 DIN size (48 mm square) meter or controller. The meter (model "DPi16") displays the process value and has no control outputs.

The controller is available with a single (model "CNi16") or dual display (model "CNi16D") that displays a set point along with the process value. The DPi16/CNi16 display can be programmed to change color at any set point or alarm point.

The CNi16 is the first 1/16 DIN controller with the option of both RS232 and RS485 in one instrument with both MODBUS[®] serial protocol and the straightforward OMEGA[®] ASCII protocol. And of course the CNi16 is the first 1/16 DIN Controller that can connect directly to an ethernet network and features an embedded web server. OMEGA[®] provides free configuration and data acquisition software for the iSeries on CD-ROM and for download off the Web.

The DPi16/CNi16 enclosure has a NEMA 4 (IP65) rated front bezel. The electronics are removable from the front panel.



- ✓ First 1/16 DIN Controller Offering Both RS232 and RS485 Serial Communications in One Instrument (Optional)
- ✓ First 1/16 DIN Controller with Built-in Excitation, 24 Vdc, Standard
- ✓ First 1/16 DIN Instrument with Analog Output Selectable as a Control Output or as a Calibrated Retransmission of Process Variable

- ✓ NEMA-4 (IP65) Front Bezel
- ✓ 2 Control or Alarm Outputs (Optional) dc Pulse, Solid State Relays (SSR's), Mechanical Relays, Analog Voltage & Current
- ✓ Temperature Stability $\pm 0.04^{\circ}\text{C}/^{\circ}\text{C}$ RTD and $\pm 0.05^{\circ}\text{C}/^{\circ}\text{C}$ TC @ 25°C (77°F)
- ✓ Front Removable and Plug Connectors

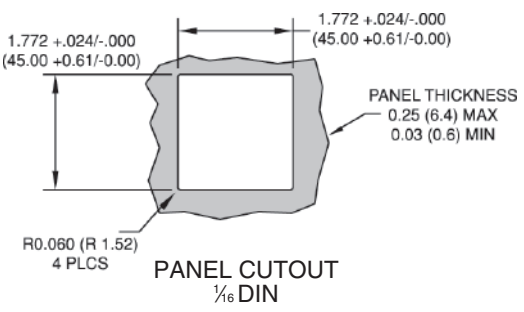
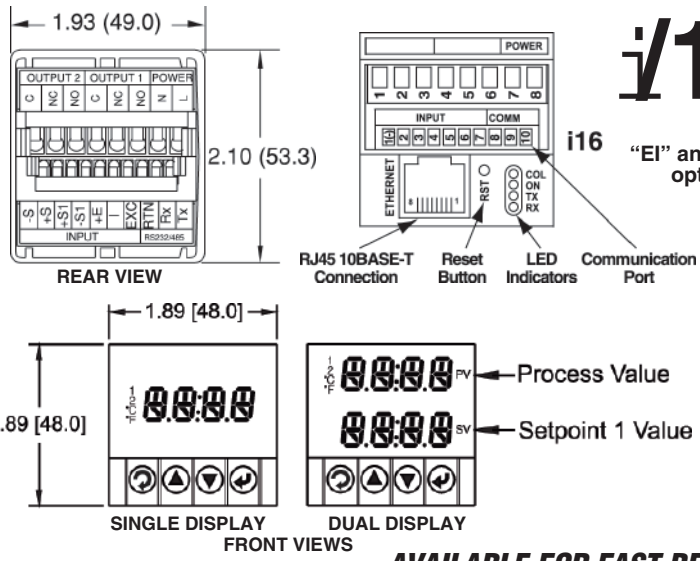
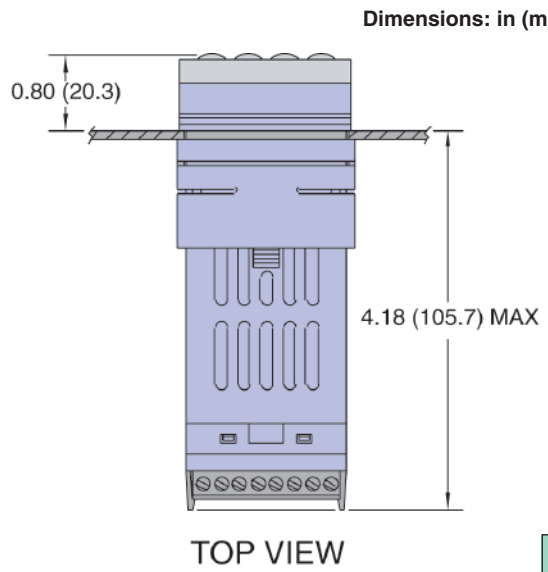
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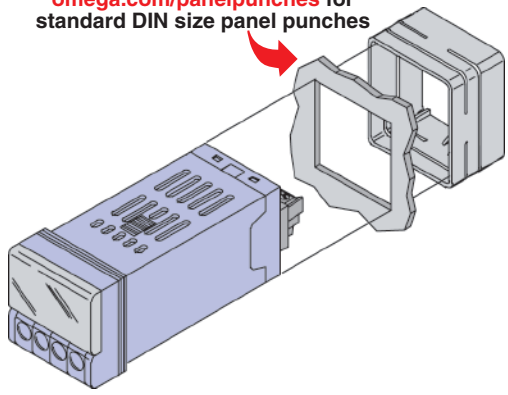
1/16 DIN Controller With Embedded Web Server, Dual Control Outputs, Dual Display

i16

“EI” and “C4EI” options



Please visit omega.com/panelpunches for standard DIN size panel punches



AVAILABLE FOR FAST DELIVERY!

To Order (*Specify Model Number)

Model No.	Description
DPi16	Temperature/Process (Monitor only) 1/16 DIN
DPiS16	Strain/Process (Monitor only) 1/16 DIN
CONTROL OUTPUTS #1 & 2 Direct (Cool) or Reverse (Heat) Acting	
CNi16	Temperature/Process with 2 Control Outputs
CNi16D	Temperature/Process Dual Display with 2 Control Outputs *1
CNiS16	Strain/Process with 2 Control Outputs
CNiS16D	Strain/Process Dual Display with 2 Control Outputs *1
2	2 Two solid state relays (SSR's): 0.5 A @ 120/240 Vac continuous
2	3 SSR and relay: Form "C" SPDT 3 A @ 120 Vac, 3 A @ 240 Vac
2	4 SSR and pulsed 10 Vdc @ 20 mA (for use with external SSR)
3	3 2 Relays: Form "C" SPDT 3 A @ 120 Vac, 3 A @ 240 Vac
4	2 Pulsed 10 Vdc @ 20 mA (for use with external SSR) and SSR
4	3 Pulsed 10 Vdc @ 20 mA (for use with external SSR) and relay: Form "C" SPDT 3 A @ 120 Vac, 3 A @ 240 Vac
4	4 Two pulsed 10 Vdc @ 20 mA (for use with external SSR)
5	2 Analog Output selectable as either control or retransmission of process value; 0 to 10 Vdc or 0-20 mA @ 500 ohm max and SSR
5	3 Analog Output 0 to 10 Vdc or 0-20 mA @ 500 ohm max and Relay
5	4 Analog Output 0 to 10 Vdc or 0-20 mA @ 500 ohm max and Pulse 10 Vdc
	-AL Limit Alarm Version (Alarm Menu, No PID Control)*3
	-SM Simplified Menu Version (ON/OFF Control, No PID)*4

NETWORK OPTIONS (One Option Max)

-EI	Ethernet with Embedded Internet*1
-C24	Isolated RS232 and RS485 300 to 19.2 k baud *2
-C4EI	Ethernet with Embedded Web Server + Isolated RS485/422 hub for up to 31 devices *1,*2

POWER SUPPLY (Select One)

*	Standard power input: 90 to 240 Vac/dc, 50-400 Hz (no entry required)
-DC	12 to 36 Vdc (for CN/DPi16), 20 to 36 Vdc (for CNi16D), 24 Vac *2

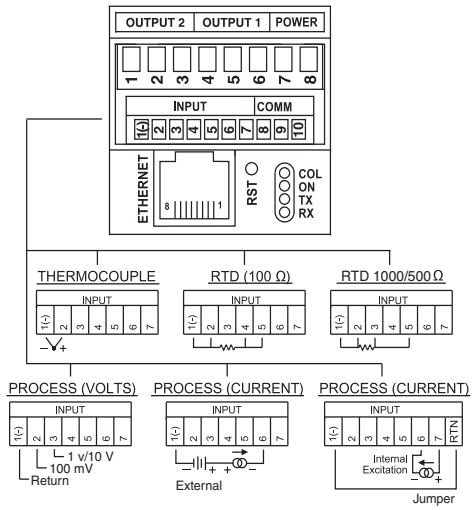
FACTORY SETUP (Requires Network Option)

-FS	Factory Setup and Configuration
-FS(RTD-1N)	Factory Scaled for MIL-T-7990B Nickel RTD input (0 to 200°C)
-FS(RTD-2N)	Factory Scaled for MIL-T-7990B Nickel RTD input (-40 to 300°C)

SOFTWARE (Requires Network Option)

OPC-SERVER LICENSE	OPC Server/Driver Software License
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*1 Ethernet options are available for the CNi16D and CNiS16D Controller only.
 *2 -DC, -C24 or -C4EI not available with excitation.
 *3 Analog Output (Option 5) is not available with -AL units.
 *4 Strain DP/CNiS16 or CNiS16D is not available with -SM units.
Ordering Examples: CNi16D44 1/16 DIN dual display PID Controller with two pulse control outputs
 CNiS16DH44-C24-FS(RTD-1N) factory scaled for MIL Standard MIL-T-7990B Nickel RTD input





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• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

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Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

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• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters

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