User Friendly, Simple to Configure
High Quality
Extended 5-Year Warranty
Powerful Features
Free Software, Active X Controls
Full Autotune PID Control
Totally Programmable Color Displays, Standard
High Accuracy ±0.5°C (0.9°F), 0.03% Reading
Temperature Stability ±0.04°C/°C RTD and ±0.05°C/°C TC @ 25°C (77°F)
Both RS232 and RS485 MODBUS® on One Instrument Selectable From Menu, Optional
Universal Inputs: Thermocouple, RTD, Process Voltage/Current, Strain
Built-in Excitation, Standard
2 Control or Alarm Outputs. Choice of dc Pulse, Solid State Relays, Mechanical Relays, Analog Voltage and Current
Embedded Ethernet Connectivity

The innovative OMEGA® iSeries devices feature state of the art technology, uncompromising accuracy, and quality backed by an extended 5-year warranty. The iSeries family includes extremely accurate digital panel meters and single loop PID controllers that are simple to configure and use, while providing tremendous versatility and a wealth of powerful features.

Embedded Internet and Serial Communications
Featuring optional “Embedded Internet” (specify -EI option) the iSeries are the first instruments of their kind that connect directly to an Ethernet network and transmit data in standard TCP/IP packets, or even serve Web pages over a LAN or the Internet. The iSeries are also available with serial communications. With the -C24 option, the user can select from the push-button menu between RS232, RS422, and RS485, with straightforward ASCII commands or MODBUS.

iSeries FAMILY
The OMEGA® iSeries is a family of microprocessor-based instruments offered in three true DIN sizes with NEMA-4 (IP65) rated front bezels. All of the instruments share a similar set-up and configuration menu and method of operation, which is a tremendous time saver for integration of a large system.

Programmable Color Display
The OMEGA® iSeries are the first complete series of 1/32, 1/16 and 1/8 DIN process control instruments with totally programmable color displays. The display can be programmed to change color at any set point or alarm point. For example, the instrument can be programmed to display the process value in GREEN during warm-up, switching to AMBER to signal the normal operating range, and in RED to signal an alarm condition. The changes in color are quickly seen from a distance, and machine operators can intuitively react to changing conditions. The colors can be programmed to change back when the value drops back below the alarm point or to “latch” on until being reset by the operator.

The instrument can also be programmed to display only one unchanging color: GREEN, AMBER, or RED. This is a useful way to let an operator identify, at a glance, process values in three separate locations, or to display three different measurements such as Temperature, Pressure, and Flow.

QUALITY and TECHNOLOGY
Designed and manufactured in the USA, the innovative OMEGA® iSeries of meters & controllers features an extended five (5) YEAR warranty at no extra charge. The iSeries packs a wealth of power and features into the smallest of packages, utilizing COB (chip-on-board) and SMT (surface mount technology) assembly techniques and automation. Every iSeries instrument is thoroughly calibrated and tested at several stages throughout production. The iSeries offers the highest accuracy for industrial instrumentation at 0.03% of reading. The analog-to-digital conversion utilizes a proprietary 20-bit ASIC (application specific integrated circuit) patented algorithms and smart filtering.

Universal Inputs
The innovative iSeries offers the broadest selection of signal inputs available on one industrial instrument. The choices are easily selected from the menu with four front panel pushbuttons, or by serial or Ethernet communications.

10 Thermocouple Types
The iSeries handles TEN (10) thermocouple types: K, J, T, E, R, S, B, C, N, and J DIN. The patented thermocouple linearization algorithms employed in the iSeries produce the highest standard of accuracy.

i® Series is a trademark of Newport Electronics, Inc.
AND STRAIN METERS AND PID CONTROLLERS

**Most Accurate RTD Measurements**
The iSeries works with the widest selection of RTD's and produces the most accurate RTD measurements. Handles both Pt 0.00385 and 0.00392 curves, and 100 (ohm), 500 (ohm) and 1000 (ohm). A choice of 2-, 3- and 4-wire RTD connections ensures the absolute highest degree of accuracy. The MIL Standard Nickel RTD with MIL-T-7999B curve is available as a Factory Setup.

**Process Voltage and Current**
The OMEGA® iSeries measures process voltage: 0 to 100 mVdc, 0 to 1 Vdc, 0 to 10 Vdc ranges, and process current: 0 to 20 mA.

**Strain Gauge**
The STRAIN/PROCESS meters and controllers measure inputs from Load Cells, Pressure Transducers, and most any strain gauge sensor. Input ranges include 0 to 100 mVdc, -100 mVdc to 1 Vdc and 0 to 10 Vdc in addition to 0 to 20 mA. Excitation for transducers of 5 Volt and 10 Volt is standard. Strain/Process meters and controllers are available in all iSeries Models.

**Analog Output**
The optional analog output can be programmed within a range of 0 to 10 Vdc or 0 to 20 mA. It is selectable as either a control output or as a calibrated retransmission of the process value—a unique feature among controllers.

**Control Functions**
The iSeries can control simple manual operation to ON-OFF and full Autotune PID control. (Selectable preset tune, adaptive tune, PID, PI, PD control modes). The dual control outputs can be configured for a variety of independent control and alarm applications such as heat/heat, heat/cool, heat/alar, cool/cool, cool/alar or alarm/alar. The ramp-to-setpoint feature allows the user to define the rate of rise to setpoint, minimizing thermal shock to the load during start-up. Maximum ramp time: 99.59 (HH.MM), Soak: 00.00 to 99.59 (HH.MM), Damping: 1 to 8 in unit steps.

For applications that do not require PID control, just simplified programming, there are 2 options available: -AL Limit Alarm and -SM Simplified Menu ON-OFF Control.

**Built-in Excitation Standard**
The temperature/process (model “i”) comes standard with built-in excitation (24 Vdc @ 25 mA). Any excitation voltage between 5 and 24 Vdc is available by special order. This means the same instrument can handle thermocouple, standard RTD’s, or 4 to 20 mA transmitters, with the meter’s built-in excitation. The strain/process (model “iS”) comes standard with built-in excitation (10 Vdc @ 60 mA), 5V excitation is user selectable. (Built-in excitation is not available with optional isolated RS232/RS485 serial communications or DC power option).

**Fully Programmable Color Displays**
The OMEGA® i/8, i/16, and i/32 are the first complete series of 1/8, 1/16 and 1/32 DIN process control instruments with totally programmable color displays. The display can be programmed to change color at any setpoint or alarm point.
<table>
<thead>
<tr>
<th>Description</th>
<th>CNi8/DPI8</th>
<th>CNi8DH</th>
<th>CNi8DV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process and Temperature (model “i”)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T/C: (J, K, T, E, R, S, B, N, C, J DIN)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTD: Pt 100, 500, 1000 Ohms (385,392)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 to 20 mA, 0 to 100 mV, 0 to 1V, 0 to 10V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strain and Process (model “iS”)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 to 20 mA, 0 to 100 mVdc, -100 mVdc to 1 Vdc, 0 to 10 Vdc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratiometric/Non-Ratiometric; 10 pt linearization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidity and Temperature (model “iTH”)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RH: 0 to 100% @ ±2% to ±3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temp: -40 to 124°C @ ±0.5°C to ±1°C ( -40 to 254°F @ ±1° to ±2°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Single Display</td>
<td>Dual Display</td>
<td>Dual Display</td>
</tr>
<tr>
<td>Nine Segment LED Digits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color Programmable: Red, Amber, Green</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height of Digits</td>
<td>21 mm (0.83&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Available Output Options</strong></td>
<td>Two Outputs Standard</td>
<td>Two Outputs Standard</td>
<td>Two Outputs Standard</td>
</tr>
<tr>
<td>(Any combination of Two)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSR's: Solid State Relays 0.5 A @120/240 Vac</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relays: Form “C” SPDT 3 A @120/240 Vac</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pulse: 10 V dc @ 20 mA (for use w/ external SSR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programmable Analog Voltage &amp; Current Output (non-isolated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Output Options</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated Programmable Analog Voltage &amp; Current Output</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limit Alarm (-AL) or Simplified Menu (-SM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power (standard) 90-240 Vac, 50-400 Hz 110-375 Vdc, Equivalent voltage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low Voltage Power Option 12-36 Vdc, 3 W</strong></td>
<td>12 to 36 Vdc</td>
<td>20 to 36 Vdc</td>
<td>20 to 36 Vdc</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td>48 x 96 x 127 mm (1.89 x 3.78 x 5&quot;)</td>
<td>48 x 96 x 127 mm (1.89 x 3.78 x 5&quot;)</td>
<td>96 x 48 x 127 mm (3.78 x 1.89 x 5&quot;)</td>
</tr>
<tr>
<td>(size: H x W x D )</td>
<td>295 g (0.65 lb)</td>
<td>295 g (0.65 lb)</td>
<td>295 g (0.65 lb)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Network Options</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. RS232, RS422, RS485, MODBUS® (-C24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Ethernet + RS485, MODBUS® (-C4EI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Ethernet (-EI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Base Unit Pricing</strong></td>
<td>DPi8 $240</td>
<td>CNi8DH33 $340</td>
<td>CNi8DV33 $340</td>
</tr>
<tr>
<td><strong>Most Popular Model</strong></td>
<td>CNi833-C24</td>
<td>CNi8DH33-C4EI</td>
<td>CNi8DV43</td>
</tr>
<tr>
<td></td>
<td>¼ DIN single display controller with two mechanical relay output + serial output</td>
<td>¼ DIN dual display horizontal controller with two mechanical relay output + serial and Ethernet output</td>
<td>¼ DIN dual display vertical controller with pulse and relay output</td>
</tr>
</tbody>
</table>
# TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Display Size</th>
<th>Dimensions</th>
<th>Weight</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Price</th>
<th>Additional Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNI/DPi8C</td>
<td>1⁄8 DIN Ultra Compact Monitor/Controller</td>
<td></td>
<td>21 mm (0.83&quot;)</td>
<td></td>
<td>12 to 36 Vdc</td>
<td>48 x 96 x 54.84 mm</td>
<td></td>
<td>255 g (0.55 lb)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1.89 x 3.78 x 2.16&quot;)</td>
<td></td>
<td></td>
<td>159 g (0.35 lb)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNI/DPi16</td>
<td>1⁄8 DIN Single Monitor/Controller</td>
<td></td>
<td>10.2 mm (0.40&quot;)</td>
<td></td>
<td>12 to 36 Vdc</td>
<td>48 x 48 x 127 mm</td>
<td></td>
<td>159 g (0.35 lb)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1.89 x 1.89 x 5&quot;)</td>
<td></td>
<td></td>
<td>159 g (0.35 lb)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNI16D</td>
<td>1⁄8 DIN Dual Display PID Controller</td>
<td></td>
<td>Two Outputs Standard</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CNI/DPi32</td>
<td>1⁄8 DIN Single Monitor/Controller</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **CNI/DPi8C:** 1⁄8 DIN Ultra Compact Monitor/Controller
- **CNI/DPi16:** 1⁄8 DIN Single Monitor/Controller
- **CNI16D:** 1⁄8 DIN Dual Display PID Controller
- **CNI/DPi32:** 1⁄8 DIN Single Monitor/Controller

- **Model:**
- **Display Size:**
- **Dimensions:**
- **Weight:**
- **Inputs:**
- **Outputs:**
- **Price:**
- **Additional Features:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Price:**
  - **CNI/DPi8C:** $285
  - **CNI/DPi16:** $180
  - **CNI16D:** $245
  - **CNI/DPi32:** $150

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Overview:**
- **Features:**
- **Applications:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Usage:**
- **Benefits:**
- **Compatibility:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Technical Specifications:**
- **Operational Requirements:**
- **Environmental Conditions:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Maintenance:**
- **Warranty:**
- **Support:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Customer Reviews:**
- **Case Studies:**
- **Downloads:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Contact Information:**
- **Ordering:**
- **Delivery:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Global Availability:**
- **Regional Differences:**
- **Language Support:**

## TEMPERATURE, PROCESS, AND STRAIN METERS AND PID CONTROLLERS

- **Video Tutorials:**
- **Webinars:**
- **FAQ:**
Embedded Internet
The OMEGA® iSeries devices can connect directly to an Ethernet network with a standard RJ45 connector and can send and receive data in standard TCP/IP packets. (Please specify -EI or -C4EI option).

The iSeries devices can serve Web pages over an Ethernet LAN or even over the Internet making it possible to monitor and control a process through a web browser (such as Microsoft Internet Explorer) from anywhere in the facility or anywhere in the world.

Remote Control
For example, using an iSeries ¼ DIN temperature controller to control a heater, an engineer can monitor the temperature, change set points or alarm points, turn the heater on and off, or make other modifications from anywhere on the local network or anywhere on the Internet. The web pages are easily customized and secure password protected access to the devices is easily controlled. And it requires absolutely no special software on the engineer’s computer to view the data and “supervise” the controller--nothing other than a Web Browser.

Email and Alarm
In fact, the iSeries controller can even send an email to the engineer (or anyone they choose) alerting them to an alarm condition or updating the status. Leveraging the technology of the Internet, the engineer could receive a message from the iSeries controller on an Internet enabled pager or cell phone. Most remarkable is that all this can be accomplished without a computer. The OMEGA® iSeries device (meter or controller) connects directly to the Ethernet Network—not to the serial port of a computer functioning as a “server” and “master” to “slave” instruments connected through serial communications. The iSeries devices are also available with RS232, RS422, RS485 and MODBUS® serial communications. (Specify the -C24 option). In fact, the iSeries are the first instruments of this type which include all these serial protocols on one device, selectable from a menu.

Internet Appliances
With the -EI option, these small ¼ DIN and ½ DIN instruments are stand-alone Web Servers. The Ethernet and Web Server capability is actually embedded in the device. (The smallest ¼ DIN size device must be connected to an external iServer).

The OMEGA® iSeries device is assigned an IP address on the network and can also be assigned an easily remembered name such as “Heater1”. In fact, the device could be assigned an authorized Internet IP address from an Internet Service Provider and function as a World Wide Web Server delivering whatever specific information is called for. (For an example, please see www.omega.com/iserver)

The iSeries devices work well with conventional industrial automation, data acquisition and control programs as well as Microsoft Visual Basic and Excel. OMEGA® provides free software and demos which makes it fast and easy to get up and running with many applications.

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The iSeries devices work well with conventional industrial automation, data acquisition and control programs as well as Microsoft Visual Basic and Excel. OMEGA® provides free software and demos which makes it fast and easy to get up and running with many applications.
The “iServer” is a DIN rail device which can be a hub connecting up to 32 instruments to the Ethernet and Internet. The “iServer” is both a Web Server and an Ethernet-Serial bridge. To connect to the iServer, iSeries devices must feature the “-C24” Serial Communications option. The OMEGA iServer is also compatible with the MICROMEGA® family of ultra high performance digital panel meters and the OMEGA iDRX family of Signal Conditioners. The iServer can also connect almost any RS232 or RS485 Serial Device to Ethernet.

**iServer**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIS-2B</td>
<td>iServer industrial MicroServer™, serves 32 devices</td>
<td>$195</td>
</tr>
</tbody>
</table>

**Option**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>iDRN-PS-1000</td>
<td>Power supply (switching), 95 to 240 Vac input, 24 Vdc output @ 1 A (powers 10 units)</td>
<td>$150</td>
</tr>
</tbody>
</table>

*Contact SALES for quantity and OEM pricing.*
DPI8 Meter Starts at $240

High Quality
5-Year Warranty
High Accuracy ±0.5°C (0.9°F), 0.03% Reading
User-Friendly, Simple to Configure
Free Software
Full Autotune PID Control
Universal Inputs: Thermocouple, RTD, Process Voltage/Current, Strain
Totally Programmable Color Displays, Standard
Built-In Excitation, Standard
2 Control or Alarm Outputs, Choice of dc Pulse, Mechanical Relays, Analog Voltage and Current
Front Removable

The OMEGA® DPI8/CNi8 is a 1/8 DIN size (96 x 48 mm) Digital Panel Meter featuring the big iSeries color-changing display. The digits are twice the size of typical 1/8 DIN panel meters. The iSeries meters feature the only LED displays that can be programmed to change color between GREEN, AMBER, and RED at any set point or alarm point. The “DPI8/CNi8” model is available as an extremely accurate programmable digital panel meter with no outputs or with dual outputs for controlling or alarming functions. Other options include isolated programmable analog output, serial communications, MODBUS® and Ethernet. The user can easily program the DPI8/CNi8 for any control or alarming requirement from simple on-off to full autotune PID with a choice of Form C SPDT relays, Solid State Relays, DC pulse, and Analog (voltage and current) outputs.

Fully Isolated Analog Output for retransmission of the process value is available in addition to the control and alarm relays (specify model CNi8A33). The DPI8/CNi8 covers a broad selection of transducer and transmitter inputs with two input models:

- The UNIVERSAL TEMPERATURE & PROCESS instrument (model “i”) handles ten common types of thermocouples, multiple RTD’s, and several Process (DC) Voltage and Current ranges. This model also features built-in excitation, 24 Vdc @ 25 mA. With it’s wide choice of signal inputs, this model is an excellent choice for measuring or controlling temperature with a thermocouple, RTD, or 4-20 mA transmitter.
- The STRAIN & PROCESS instrument (model “iS”) measures inputs from Load Cells, Pressure Transducers, and most any strain gauge sensor as well as Process Voltage and Current ranges. The “iS” has built-in 5 or 10 Vdc excitation for bridge transducers, 5 Vdc @ 40 mA or 10 Vdc @ 60 mA. (Any excitation voltage between 5 and 24 Vdc is available by special order). This “iS” model supports 4 and 6 wire bridge configurations, ratiometric and non-ratiometric measurements. The “iS” features fast and easy “in process” calibration/scaling of the signal inputs to any engineering units. This model also features 10 Point Linearization which allows the user to linearize the signal input from extremely nonlinear transducers of all kinds.

<table>
<thead>
<tr>
<th>Input Type</th>
<th>Range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Temperature / Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J Iron-Constantan</td>
<td>-210 to 760°C / -346 to 1400°F</td>
<td>0.4°C / 0.7°F</td>
</tr>
<tr>
<td>K CHROMEGA®-ALOMEGA®</td>
<td>-270 to -160°C / -160 to 1372°C</td>
<td>1.0°C / 0.4°F</td>
</tr>
<tr>
<td>T Copper-Constantan</td>
<td>-270 to -190°C / -190 to 400°C</td>
<td>1.0°C / 0.4°F</td>
</tr>
<tr>
<td>E CHROMEGA®-Constantan</td>
<td>-270 to -220°C / -220 to 1000°C</td>
<td>1.0°C / 0.4°F</td>
</tr>
<tr>
<td>R Pt/13%Rh-Pt</td>
<td>-50 to 40°C / 40 to 1768°C</td>
<td>1.0°C / 0.5°F</td>
</tr>
<tr>
<td>S Pt/10%Rh-Pt</td>
<td>-50 to 100°C / 100 to 1768°C</td>
<td>1.0°C / 0.5°F</td>
</tr>
<tr>
<td>B 30%Rh-Pt/6%Rh-Pt</td>
<td>100 to 640°C / 640 to 1820°C</td>
<td>1.0°C / 0.5°F</td>
</tr>
<tr>
<td>C 5%Re-W/26%Re-W</td>
<td>0 to 2320°C / 32 to 4208°F</td>
<td>0.4°C / 0.7°F</td>
</tr>
<tr>
<td>N Nicrosil-Nisil</td>
<td>-250 to -100°C / -100 to 1300°C</td>
<td>1.0°C / 0.4°F</td>
</tr>
<tr>
<td>L J DIN</td>
<td>-200 to 900°C / -328 to 1652°F</td>
<td>0.4°C / 0.7°F</td>
</tr>
<tr>
<td>RTD Pt, 0.00385, 100, 500, 1000 Ω</td>
<td>-200 to 900°C / -328 to 1652°F</td>
<td>0.4°C / 0.7°F</td>
</tr>
<tr>
<td>RTD Pt, 0.00392, 100, 500, 1000 Ω</td>
<td>-200 to 850°C / -328 to 1562°F</td>
<td>0.4°C / 0.7°F</td>
</tr>
</tbody>
</table>

Nickel RTD Input (FS required)
The OMEGA® i/8, i/16, and i/32 are the first complete series of 1⁄8, 1⁄16 and 1⁄32 DIN process control instruments with totally programmable color displays. The display can be programmed to change color at any setpoint or alarm point.

**Totally Programmable Color Displays**

The OMEGA® i/8, i/16, and i/32 are the first complete series of 1⁄8, 1⁄16 and 1⁄32 DIN process control instruments with totally programmable color displays. The display can be programmed to change color at any setpoint or alarm point.

**To Order (Specify Model Number)**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPI8</td>
<td>Temperature/Process (Monitor only) 1⁄8 DIN</td>
<td>$240</td>
</tr>
<tr>
<td>DPI8A</td>
<td>Temperature/Process Monitor with Isolated Analog Output 1⁄8 DIN</td>
<td>$295</td>
</tr>
<tr>
<td>DPI8S</td>
<td>Signal/Process (Monitor only) 1⁄8 DIN</td>
<td>$275</td>
</tr>
</tbody>
</table>

**CONTROL OUTPUTS #1 & 2 Direct (Cool) or Reverse (Heat) Acting**

| CN8       | Temperature/Process with 2 Control Outputs | $310  |
| CN8A      | Temperature/Process with Isolated Analog Output and 2 Outputs* * | $365  |
| CN8S      | Signal/Process with 2 Control Outputs | $370  |

**NETWORK OPTIONS (One Option Max.)**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>-EI</td>
<td>Ethernet with Embedded Internet</td>
</tr>
<tr>
<td>-C24</td>
<td>Isolated RS232 and RS485 300 to 19.2 k baud * *</td>
</tr>
<tr>
<td>-C4EI</td>
<td>Ethernet with Embedded Web Server + Isolated RS485/422 hub for up to 31 devices * *</td>
</tr>
</tbody>
</table>

**POWER SUPPLY (Select One)**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>-DC</td>
<td>12 to 36 Vdc (for CN/DPI8), 20 to 36 Vdc (for CN/DPI8A), 24 Vac * *</td>
</tr>
</tbody>
</table>

**FACTORY SETUP (Requires Network Option)**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>-FS</td>
<td>Factory Setup and Configuration</td>
</tr>
<tr>
<td>-FS(RTD-1N)</td>
<td>Factory Scaled for MIL-T-7990B Nickel RTD input (0 to 200°C)</td>
</tr>
<tr>
<td>-FS(RTD-2N)</td>
<td>Factory Scaled for MIL-T-7990B Nickel RTD input (-40 to 300°C)</td>
</tr>
</tbody>
</table>

**SOFTWARE (Requires Network Option)**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPC-SERVER LICENSE</td>
<td>OPC Server/Driver Software License</td>
</tr>
</tbody>
</table>

**ORDERING EXAMPLES:**

- DPI8A 1⁄8 DIN Meter with isolated scalable analog retransmission of the process value $295. CN8S33-AL-C24 1⁄8 DIN Indicator and Dual Alarm only with serial communication $370.
- CN8S33-C24-FS(RTD-1N) 1⁄8 DIN Controller with 2 relay outputs, serial communication and is factory scaled for MIL Standard MIL-T-7990B Nickel RTD input $430.

**Available for Fast Delivery!**
The OMEGA® CNi8D H and CNi8D V are high quality, highly accurate single loop Autotune PID Temperature and Process Controllers for ¼ DIN (96 x 48 mm) horizontal or vertical panel cutouts. Both devices feature the same state of the art technology, uncompromising accuracy, and quality backed by an extended 5-year warranty. The CNi8D H and CNi8D V are ideal controllers for use with transmitters and amplified transducers. Built in excitation is standard (24 Vdc @ 25 mA). The devices handle 0 to 20 mA Process Current and Process Voltage in three scales: 0 to 100 mV, 0 to 1 V, and 0 to 10 V.

As with all iSeries devices, the Process Value display can be programmed to change color between GREEN, AMBER, and RED at any set point or alarm point. The LED’s displaying the Process Value on the i8DH (horizontal ¼ DIN) are the largest digits of any ¼ DIN controller. The STRAIN/PROCESS instrument (model “i”) meters and controllers measure inputs from Load Cells, Pressure Transducers, and most any strain gauge sensor. Input ranges include 0 to 100 mVdc, -100 mVdc to 1 Vdc, 0 to 10 Vdc in addition to 0 to 20 mA. Excitation for transducers of 5 Volt and 10 Volt is standard.

<table>
<thead>
<tr>
<th>Input Type</th>
<th>Range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Temperature/Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Voltage</td>
<td>0 to 100 mV, 0 to 1 V, 0 to 10 Vdc</td>
<td>0.03% rdg</td>
</tr>
<tr>
<td>Process Current</td>
<td>0 to 20 mA (4 to 20 mA)</td>
<td>0.03% rdg</td>
</tr>
<tr>
<td>Excitation</td>
<td>24V @ 25 mA</td>
<td></td>
</tr>
<tr>
<td>Universal Strain/Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Voltage</td>
<td>0 to 100 mV, -100 mV to 1 V, 0 to 10 Vdc</td>
<td>0.03% rdg</td>
</tr>
<tr>
<td>Process Current</td>
<td>0 to 20 mA (4 to 20 mA)</td>
<td>0.03% rdg</td>
</tr>
<tr>
<td>Excitation</td>
<td>5V @ 40 mA, 10V @ 60 mA</td>
<td>-</td>
</tr>
</tbody>
</table>
The i/8 Series controllers feature plug/removable connectors and a sturdy panel mounting sleeve with adjustable thumb nuts for easy secure installation.

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High Quality
5-Year Warranty
High Accuracy ±0.5°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 1/6 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 1/6 DIN Controller with Built-in Excitation, 24 Vdc, Standard
First 1/6 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 ±0.04°C/°C RTD and ±0.05°C/°C TC @ 25°C (77°F)
Front Removable and Plug Connectors


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

- 1 V/10 V
- 100 mV
- Jumper RTD 1000/500

Please visit [omega.com/panelpunches](http://omega.com/panelpunches) for standard DIN size panel punches.

### Ordering Examples:
- CN16D44 1⁄16 DIN dual display PID Controller with two pulse control outputs $245.

---

**To Order (**Specify Model Number)**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPI16</td>
<td>Temperature/Process (Monitor only) 1⁄16 DIN</td>
<td>$180</td>
</tr>
<tr>
<td>DPI16S</td>
<td>Strain/Process (Monitor only) 1⁄8 DIN</td>
<td>$230</td>
</tr>
</tbody>
</table>

**CONTROL OUTPUTS #1 & 2 Direct (Cool) or Reverse (Heat) Acting**

| CN16(*) | Temperature/Process with 2 Control Outputs | $225 |
| CN16D(*) | Temperature/Process Dual Display with 2 Control Outputs * | $245 |
| CN16S(*) | Strain/Process with 2 Control Outputs | $275 |
| CN16D(*) | Strain/Process Dual Display with 2 Control Outputs * | $295 |

1. Two solid state relays (SSR’s): 0.5 A @ 120/240 Vac continuous
2. SSR and pulsed 10 Vdc @ 20 mA (for use with external SSR)
3. SSR and pulsed 10 Vdc @ 20 mA (for use with external SSR)
4. Two pulse 10 Vdc @ 20 mA (for use with external SSR)
5. Analog Output selectable as either control or retransmission of process value; 0 to 10 Vdc or 0-20 mA @ 500 ohm max and SSR
6. Analog Output 0 to 10 Vdc or 0-20 mA @ 500 ohm max and Relay

**NETWORK OPTIONS (One Option Max)**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>-EI</td>
<td>Ethernet with Embedded Internet*</td>
<td>$50</td>
</tr>
<tr>
<td>-C24</td>
<td>Isolated RS232 and RS485 300 to 19.2 k baud **</td>
<td>$60</td>
</tr>
<tr>
<td>-C4EI</td>
<td>Ethernet with Embedded Web Server + Isolated RS485/422 hub for up to 31 devices <em>,</em></td>
<td>$110</td>
</tr>
</tbody>
</table>

**POWER SUPPLY (Select One)**

- Standard power input: 90 to 240 Vac/dc, 50-400 Hz (no entry required) N/C
- 12 to 36 Vdc (for CN/DPI16), 20 to 36 Vdc (for CN16D), 24 Vac ** | $25 |

**FACTORY SETUP (Requires Network Option)**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>-FS</td>
<td>Factory Setup and Configuration</td>
<td>N/C</td>
</tr>
<tr>
<td>-FS(RTD-1N)</td>
<td>Factory Scaled for MIL-T-7990B Nickel RTD input (0 to 200°C)</td>
<td>N/C</td>
</tr>
<tr>
<td>-FS(RTD-2N)</td>
<td>Factory Scaled for MIL-T-7990B Nickel RTD input (-40 to 300°C)</td>
<td>N/C</td>
</tr>
</tbody>
</table>

**SOFTWARE (Requires Network Option)**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPC-SERVER LICENSE</td>
<td>OPC Server/Driver Software License</td>
<td>$295</td>
</tr>
</tbody>
</table>

**DIMENSIONS (in (mm))**

- SINGLE DISPLAY FRONT VIEWS
- DUAL DISPLAY FRONT VIEWS
- PANEL CUTOUT 1⁄4 DIN
- AVAILABLE FOR FAST DELIVERY!
The OMEGA® DPI32/CNi32 is the iSeries meter (DPI32) and controller (CNi32) in the extremely compact and increasingly popular 1⁄32 DIN size. The DPI32/CNi32 is the most sophisticated and accurate instrument available in the small 1⁄32 DIN package, yet is still easy to configure.

The DPI32/CNi32 handles more thermocouple, RTD, process voltage and current inputs than any other 1⁄32 DIN controller.

The DPI32/CNi32 is the first 1⁄32 DIN controller with built-in excitation for transmitters or other devices, 24 Vdc @ 25 mA.

The DPI32/CNi32 has built-in excitation for bridge transducers, 5 Vdc @ 40 mA or 10 Vdc @ 60 mA. When communications options are installed, external excitation may be used and ratiometric operation maintained by connecting the external excitation to the sense leads. Both 4 or 6-wire bridge configurations are supported for internal or external excitation. Non-ratiometric operation is supported for voltage and current transducers and is also valuable in measuring offset and millivolt output of bridge devices during manufacturing and calibration.

This model also features 10 Point Linearization which allows the user to linearize the signal input from extremely nonlinear transducers of all kinds.

The DPI32/CNi32 and DPiS32/CNiS32 introduce a number of unique features not yet found on any other 1⁄32 DIN instrument. The DPI32/CNi32 and DPiS32/CNiS32 are the first 1⁄32 DIN controllers with a totally programmable display that can change color at any set point or alarm point. The unique 9-segment LED characters greatly improves alphanumeric representations.

The DPI32/CNi32 and DPiS32/CNiS32 are the first 1⁄32 DIN controllers offering 2 SPDT (Single Pole Double Throw) Form C relays, instead of the single throw relays on typical 1⁄32 DIN controllers.

The DPI32/CNi32 and DPiS32/CNiS32 are the first to offer both RS232 and RS485 serial communications in one instrument (-C24 option). Both ASCII protocol and modbus protocol are selectable from the menu.

The iSeries displays feature unique 9-segment LED characters, which greatly improves alphanumeric representations. The 7-segment LED characters found on most instruments are adequate for presenting numbers, but not letters. Words are easier to read with the unique 9-segment LED characters on the iSeries, which makes operating and programming simpler and easier.
The “iServer” is a DIN rail mounted device which can be a hub connecting up to 32 instruments to the Ethernet and Internet. The “iServer” is both a Web Server and an Ethernet-Serial bridge. To connect to the iServer, iSeries devices must feature the “C24” Serial Communications option.

### Dimensions: inches (mm)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>1.80 (45.0)</td>
</tr>
<tr>
<td>Height</td>
<td>1.00 (25.4)</td>
</tr>
</tbody>
</table>

### PANEL CUTOUT 1/32 DIN

### FRONT VIEW

**To Order** (*Specify Model Number*)

<table>
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<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>DPI32</td>
<td>Temperature/Process (Monitor only) 1/2 DIN</td>
<td>$150</td>
</tr>
<tr>
<td>DPI32</td>
<td>Strain/Process (Monitor only) 1/2 DIN</td>
<td>$195</td>
</tr>
</tbody>
</table>

### CONTROL OUTPUTS #1 & #2 Direct (Cool) or Reverse (Heat) Acting

<table>
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<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNI32(*)</td>
<td>Temperature/Process with 2 Control Outputs</td>
<td>$195</td>
</tr>
<tr>
<td>CNI32(*)</td>
<td>Strain/Process with 2 Control Outputs</td>
<td>$240</td>
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</tbody>
</table>

### NETWORK OPTIONS

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>-C24</td>
<td>Isolated RS232 and RS485/422, 300 to 19.2k Baud</td>
<td>$60</td>
</tr>
</tbody>
</table>

### POWER SUPPLY (Select One)

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>-DC</td>
<td>12 to 36 Vdc, 24 Vac</td>
<td>$25</td>
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### FACTORY SETUP (Requires Network Option)

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<td>Factory Setup and Configuration</td>
<td>N/C</td>
</tr>
<tr>
<td>-FS(RTD-1N)</td>
<td>Factory Scaled for MIL-T-7990B Nickel RTD input (0 to 200°C)</td>
<td>N/C</td>
</tr>
<tr>
<td>-FS(RTD-2N)</td>
<td>Factory Scaled for MIL-T-7990B Nickel RTD input (-40 to 300°C)</td>
<td>N/C</td>
</tr>
</tbody>
</table>

### SOFTWARE (Requires Network Option)

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIS-2B</td>
<td>iServer MicroServer, serves 32 devices, page D-12</td>
<td>$195</td>
</tr>
<tr>
<td>EIS-W</td>
<td>iServer MicroServer for Serial to Ethernet applications</td>
<td>195</td>
</tr>
</tbody>
</table>

### OPC-SERVER LICENSE

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OPC Server/Driver Software License</td>
<td>$295</td>
</tr>
</tbody>
</table>

*1 -DC, -C24 not available with Excitation.
*2 Analog Output (Option 5) is not available with -AL units.
*3 Strain DP/CNI32 is not available with -SM units.

**Ordering Examples:**
- **CNI3222-C24** 1/2 DIN PID Controller with two solid state relays for PID control and serial communications, both RS232 and RS485 $195 + 60 = $255.
- **CNI3222-C24-FS(RTD-1N)** factory scaled for MIL Standard MIL-T-7990B Nickel RTD input $300.

---

**iServer (i/32)**

**D-20**
The Ultra Compact DPi8C/CNi8C and DPiS8C/CNiS8C Meters and Controllers are similar to the full size i8 in an Ultra Compact enclosure. Only 2 inches behind the panel.

**To Order (Specify Model Number)**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPi8C</td>
<td>Temperature/Process (Monitor only) 1/8 DIN Compact Case</td>
<td>$285</td>
</tr>
<tr>
<td>DPiS8C</td>
<td>Temperature/Process (Monitor only) 1/8 DIN Compact Case</td>
<td>$345</td>
</tr>
</tbody>
</table>

**CONTROL OUTPUTS**

- 2 Direct (Cool) or Reverse (Heat) Acting

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNi8C(*)</td>
<td>Temperature/Process with 2 Control Outputs Compact Case</td>
<td>$355</td>
</tr>
<tr>
<td>CNiS8C(*)</td>
<td>Temperature/Process with 2 Control Outputs Compact Case</td>
<td>$415</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2 solid state relays (SSRs): 0.5 A @ 120/240 Vac continuous</td>
<td>N/C</td>
</tr>
<tr>
<td>3</td>
<td>SSR and relay: Form &quot;C&quot; SPDT 3 A @ 120 Vac, 3 A @ 240 Vac</td>
<td>415</td>
</tr>
<tr>
<td>4</td>
<td>Pulsed 10 Vdc @ 20 mA (for use with external SSR) and SSR</td>
<td>N/C</td>
</tr>
<tr>
<td>5</td>
<td>Pulsed 10 Vdc @ 20 mA (for use with external SSR) and relay: Form &quot;C&quot; SPDT 3 A @ 120 Vac, 3 A @ 240 Vac</td>
<td>N/C</td>
</tr>
<tr>
<td>6</td>
<td>2 pulsed 10 Vdc @ 20 mA (for use with external SSR) and SSR</td>
<td>N/C</td>
</tr>
<tr>
<td>7</td>
<td>Analog Output selectable as either control or retransmission of process value: 0 to 10 Vdc or 0-20 mA @ 500 ohm max and SSR</td>
<td>N/C</td>
</tr>
<tr>
<td>8</td>
<td>Analog Output 0 to 10 Vdc @ 20 mA @ 500 ohm max and Pulsed 10 Vdc</td>
<td>N/C</td>
</tr>
<tr>
<td>-AL</td>
<td>Limit Alarm Version (Alarm Menu, No PID Control)</td>
<td>N/C</td>
</tr>
<tr>
<td>-SM</td>
<td>Simplified Menu Version (ON/OFF Control, No PID)</td>
<td>N/C</td>
</tr>
</tbody>
</table>

**NETWORK OPTIONS**

- C24 | Isolated RS232 and R485/422, 300 to 19.2k Baud | $60    |

**POWER SUPPLY**

- DC | 12 to 36 Vdc, 24 Vac | N/C   |

**FACTORY SETUP**

- FS | Factory Setup and Configuration (req. -C24 Serial Communication option) | N/C   |

**SOFTWARE (Requires Network Option)**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIS-2B</td>
<td>MicroServer, supports 32 devices, page D-12</td>
<td>$195</td>
</tr>
</tbody>
</table>

**OPTIONAL ACCESSORIES**

- EIS-W | MicroServer for Serial to Ethernet applications | $195   |

**AVAILABILITY**

- ULTRA COMPACT CASE TEMPERATURE, PROCESS AND STRAIN METERS AND PID CONTROLLERS

- AVAILABLE FOR FAST DELIVERY!
REMOTE DISPLAY/ PROGRAMMER

Compatible with all iSeries Meters and Controllers

RD4/RD6

✓ ¼ DIN Panel Cutout or Surface Mount
✓ Big LED’s—RD4 is 21 mm (0.83") and RD6 is 17.3 mm (0.68")
✓ Alarm Indicators, and Color change
✓ Serial Input ASCII RS232, RS485
✓ Menu Selectable
✓ NEMA-4 (IP65) ¼ DIN Bezel
✓ 20 mm (0.80") Behind Panel and Only 39 mm (1.6") Overall

REMOTE DISPLAY

The RD4/RD6 are 4 or 6 digit master/slave displays providing remote readout from instruments such as programmable controllers, digital panel meters and other instruments with serial output. Two communication interfaces are supported in remote Display: RS232 and RS485 and can be programmed through front panel buttons. The RD4/RD6 remote display can be mounted in a ¼ DIN panel cutout, or surface mounted with the included bale. The RD4 and RD6 features big bright 21 mm (0.83") and 17.3 mm (0.68") 9-segment LED’s that can be programmed to change color between GREEN, AMBER, and RED to indicate alarms. Serial Connections can be made to an RJ-11 jack or screw terminals.

In the Slave mode, the RD4 and RD6 can be used for displaying

Alphanumeric characters from a computer. Power is supplied from 10 to 36 Vdc power supply or optional universal (100 to 240 Vac) power adaptor.

(Compatible Host device must feature serial RS232 or RS485 output)

Specifications

Serial: ASCII Interface RS232/RS485
Baud Rate:
300, 600, 1200, 2400, 4800, 9600, 19200
Data Formats: 7 data/odd parity/1 stop, 7 data/even parity/1 stop, 8 data/no parity /1 stop.
Power Requirements: 10 to 36 Vdc, or universal power adaptor, nominal output: 9 Vdc @ 0.5 mA; input: 100-240 Vac, 50/60Hz
Power Consumption: 2 W
Operating Temperature: 0 to 50°C (32 to 122°F)
Relative Humidity: 0 to 85%
Storage Temperature: -20 to +85°C (-4 to +185°F)
RD4 Display:
4-Digit, 9-segment LED 21 mm (0.83")
RD6 Display:
6-Digit, 9-segment LED 17.3 mm (0.68")
Protection: NEMA-4 (IP65)
Mechanical Dimensions:
96 x 48 x 39 mm (3.78 x 1.89 x 1.6")
Panel Cutout: 92 x 45 mm (3.62 x 1.772")

To Order (*Specify Model Number)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD4</td>
<td>4-Digit Remote Display for iSeries Monitors and Controllers</td>
<td>$150</td>
</tr>
<tr>
<td>RD6</td>
<td>6-Digit Remote Display for iSeries Monitors and Controllers</td>
<td>$200</td>
</tr>
<tr>
<td>Options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNIV-AC-100/240</td>
<td>Universal Power Adaptor</td>
<td>$25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>iLD24-EI</td>
<td>2.25&quot; 4-digit display with Ethernet, RS485/422 Input*</td>
<td>$795</td>
</tr>
<tr>
<td>iLD44-EI</td>
<td>4&quot; 4-digit display with Ethernet, RS485/422 Input*</td>
<td>995</td>
</tr>
<tr>
<td>iLD26-EI</td>
<td>2.25&quot; 6-digit display with Ethernet, RS485/422 Input*</td>
<td>995</td>
</tr>
<tr>
<td>iLD46-EI</td>
<td>4&quot; 6-digit display with Ethernet, RS485/422 Input*</td>
<td>1195</td>
</tr>
</tbody>
</table>

*Please see iLD Series on page D-43.

Ordering Example: RD4, 4-digit remote display for iSeries monitors and controllers, $150.

Available for Fast Delivery!
Universal Temperature and Process Input (Model “1”)
Accuracy: ±0.5°C; 0.03% rdg
Resolution: 1°/0.1°; 10 µV process
Temperature Stability:
RTD: 0.04°C/C
Thermocouple @ 25°C (77°F): 0.05°C/C cold-junction compensation
Process: 50 ppm/C
NMR: 60 dB
CMRR: 120 dB
A/D Conversion: Dual slope
Reading Rate: 3 samples per second
Digital Filter: Programmable
Display: 4-digit, 9-segment LED
Voltage Input: 0 to 100 mV, 0 to 1V
Current Input: 0 to 20 mA
Input Impedance: 10 MΩ for 100 mV; 1 MΩ for 1 or 10 Vdc
Current Input: 0 to 20 mA (5 Ω load)
Configuration: Single-ended
Polarity: Unipolar
Step Response: 0.7 s for 99.9%
Decimal Selection: None, 0.1 for temperature; none, 0.1, 0.01 or 0.001 for process
Setpoint Adjustment: -1999 to 9999 counts
Span Adjustment: 0.001 to 9999 counts
Offset Adjustment: -1999 to ±9999
Excitation (Optional in Place of Communication): 5 Vdc @ 40 mA; 10 Vdc @ 60 mA
Control
Action: Reverse (heat) or direct (cool)
Modes: Time and amplitude proportional control modes; manual or auto PID, proportional, proportional with integral, proportional with derivative with anti-reset
windup and ON/OFF
Rate: 0 to 399.9 s
Reset: 0 to 3999 s
Cycle Time: 1 to 199 s; set to 0 for ON/OFF operation
Gain: 0.5 to 100% of span; setpoints 1 or 2
Damping: 0000 to 0008
Soak: 00.00 to 99.99 (HH:MM), or OFF
Ramp to Setpoint: 00.00 to 99.99 (HH:MM), or OFF
Autotune: Selectable from front panel
Control Output 1 and 2
Relay: 250 Vac or 30 Vdc @ 3 A (resistive load); configurable for ON/OFF, PID, ramp and soak
Output 1: SPDT type; can be configured as alarm 1 output
Output 2: SPDT type; can be configured as alarm 2 output
SSR: 20 to 265 Vac @ 0.05 to 0.5 A (resistive load); continuous
DC Pulse: Non-isolated; 10 Vdc @ 20 mA
Analog Output (Output 1 Only): Non-isolated, proportional 0 to 10 Vdc or 0 to 20 mA; 500 Ω max
Network and Communications
Ethernet: In compliance with IEEE 802.3
Supported Protocols:
TCP/IP, ARP, HTTP, GET
RS232/RS422/RS485: Selectable from menu; both ASCII and MODBUS® protocol selectable from menu; programmable
300 to 19.2k baud; complete programmable setup capability; program to transmit current display, alarm status, min/max, actual measured input value and status
RS485: Addressable from 0 to 199
Connection: Screw terminals
Alarm 1 and 2 (Programmable)
Type: Same as output 1 and 2
Operation: High/low, above/below, band, latch/unlatch, normally open/normally closed and process/deviation; front-panel configurations
Analog Output (Programmable):
Non-isolated, transmission 0 to 10 Vdc or 0 to 20 mA, 500 Ω max (output 1 only).
Accuracy is ±1% FS when following conditions are satisfied:
1) Input is not scaled below 1% of input FS
2) Analog output is not below 3% of output FS
Excitation (Not Included with Communication):
24 Vdc @ 25 mA (not available for low power option)
Insulation
Power to Input or Output: 2500 Vac per 1-minute test (RS232/485, input or output)
For Low-Voltage Power Option:
1500 Vac per 1-minute test
(WS232/485, input or output)
Power to Relay/SSR Option:
2500 Vac per 1-minute test
Relay/SSR to Relay/SSR Option:
2500 Vac per 1-minute test
RS232/485 to Input/Options:
500 Vac per 1-minute test
Approvals: UL, C-UL, CE en EN50081-1, EN50082-2, EN61010-1
General
Power: 90 to 240 Vac ±10%, 50 to 400 Hz*, 110 to 375 Vdc, equivalent voltage
Low Voltage Power Option: 24 Vac ±10%, 12 to 36 Vac, from qualified safety approved source
Environmental Conditions:
0 to 50°C (32 to 122°F), 90% RH non-condensing—i/8, i/16, i/32
Installation Category:
II per EN61010-1
Equipment Class: II per EN61010-1
Pollution Degree: II per EN61010-1
Protection: NEMA 4 (IP65) front bezel
Dimensions
i/8 Series: 48 H x 96 W x 127 mm D
1(1.89 x 3.78 x 5.00 ”)
i/16 Series: 48 H x 48 W x 127 mm D
1(1.89 x 1.89 x 5.00 ”)
i/32 Series: 25.4 H x 48 W x 127 mm D
1(1.0 x 1.89 x 5.00 ”)
Panel Cutout
i/8 Series: 45 H x 92 W mm W
1(1.772” x 3.622”)
¾ DIN
i/16 Series: 45 mm (1.772”) square, ¾ DIN
i/32 Series: 22.5 H x 45 mm W
1(0.886” x 1.772”), ¾ DIN
Weight
i/8 Series: 295 g (0.65 lb)
i/16 Series: 159 g (0.35 lb)
i/32 Series: 127 g (0.28 lb)
* No CE compliance above 60 Hz

** Change Color At Any Setpoint**

* Totally Programmable Color Displays

D-47
More than 100,000 Products Available!

- **Temperature**

- **Flow and Level**
  Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

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

- **Data Acquisition**

- **Pressure, Strain and Force**
  Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

- **Heaters**