

1/32 DIN Temperature, Process and Strain PID Controllers



CNi32 Series



CNi3233, smaller than actual size.

- ✓ **High Accuracy: $\pm 0.03\%$ Reading, 0.5°C ($\pm 0.9^{\circ}\text{F}$)**
- ✓ **Totally Programmable Color Displays**
- ✓ **User-Friendly, Simple to Configure**
- ✓ **Free Software**
- ✓ **Full Autotune PID Control**
- ✓ **Universal Inputs: Thermocouple RTD, Process Voltage/Current, Strain**
- ✓ **RS232 and RS485 Serial Communications (Optional)**
- ✓ **Built-in Excitation**
- ✓ **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)**
- ✓ **NEMA 4 (IP65) Front Bezel**
- ✓ **2 Control or Alarm Outputs Optional: DC Pulse, Solid State Relays, Mechanical Relays, Analog Voltage and Current**
- ✓ **Front Removable and Plug Connectors**

The OMEGA® CNI32 is the iSeries controller in the extremely compact and increasingly popular 1/32 DIN size (22.5 x 45 mm cutout). The CNI32 is the most sophisticated and accurate instrument available in the small 1/32 DIN package, yet is still easy to configure.

The CNI32 handles more thermocouple, RTD, process voltage and current inputs than any other 1/32 DIN controller.

The CNI32 is the first 1/32 DIN controller with built-in excitation for transmitters or other devices, 24 Vdc @ 25 mA.

The 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 CNI32 introduces a number of unique features not yet found on any other 1/32 DIN instrument. The CNI32 is the first 1/32 DIN controller with a totally programmable display that can change color between **GREEN**, **AMBER**, and **RED** at any setpoint or alarm point. The unique 9-segment LED characters greatly improves alphanumeric representations.

The CNI32 is the first 1/32 DIN controller offering 2 SPDT Form C relays, instead of the single throw relays on typical 1/32 DIN controllers.

The CNI32 is the first to offer both RS232 and RS422/485 serial communications in 1 instrument (C24 option). The ASCII protocol is 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.



9-segment LED



7-segment display



9-segment display