

NEWPORT® iSeries

1/32 DIN Temperature, Process & Strain PID Controllers

i/32



- ✓ High Quality
- ✓ 5-Year Warranty
- ✓ High Accuracy $\pm 0.5^{\circ}\text{C}$ (0.9°F), 0.03% Reading
- ✓ 1/32 DIN Instrument with Totally Programmable Color Displays (Standard)
- ✓ User-friendly, Simple to Configure
- ✓ Free Software, Active X Controls
- ✓ Full Autotune PID Control
- ✓ 1/32 DIN Instrument with Built-in Excitation, 24 Vdc, Standard

- ✓ Universal Inputs: Thermocouple, RTD, Process Voltage/Current, Strain
- ✓ 1/32 DIN Instrument Offering Both RS-232 and RS-485 Serial Communications in One Instrument (Optional)
- ✓ 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
- ✓ Front Removable and Plug Connectors

- ✓ 1/32 DIN Instrument with Analog Output Selectable as a Control Output or as Retransmission of Process Variable
- ✓ 2 Control or Alarm Outputs (Optional) dc Pulse, Solid State Relays (SSR's), Mechanical Relays, Analog Voltage & Current

The NEWPORT® i32 is the iSeries meter/controller in the extremely compact and increasingly popular 1/32 DIN size. The i32 is the most sophisticated and accurate instrument available in the small 1/32 DIN package, yet is still easy to configure.

The i32 handles more thermocouple, RTD, process voltage and current inputs than any other 1/32 DIN controller.

The i32 is the first 1/32 DIN controller with built-in excitation for transmitters or other devices, 24 Vdc @ 25mA.

The iS32 has built-in excitation for bridge transducers, 5Vdc @ 40mA or 10 Vdc @ 60mA. 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 i32 and iS32 introduce a number of unique features not yet found on any other 1/32 DIN instrument. The i32 and iS32 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 i32 and iS32 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 i32 and iS32 are the first to offer both RS-232 and RS-422/485 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.



9-segment LED



7-segment display

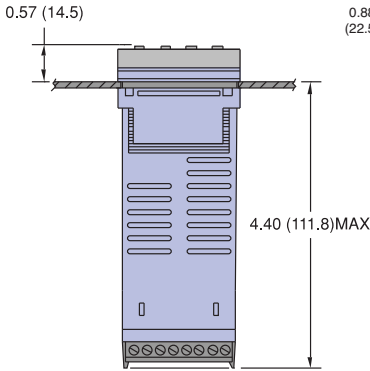


9-segment display

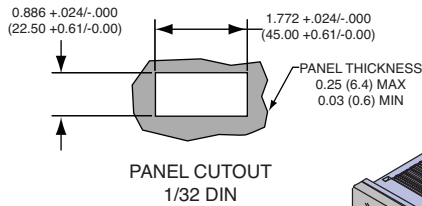
1/32 DIN

Temperature, Process & Strain PID Controllers

i/32

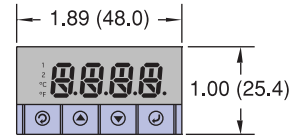
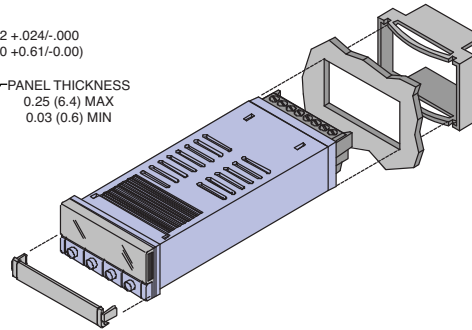


TOP VIEW

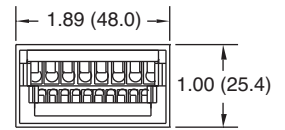


PANEL CUTOUT 1/32 DIN

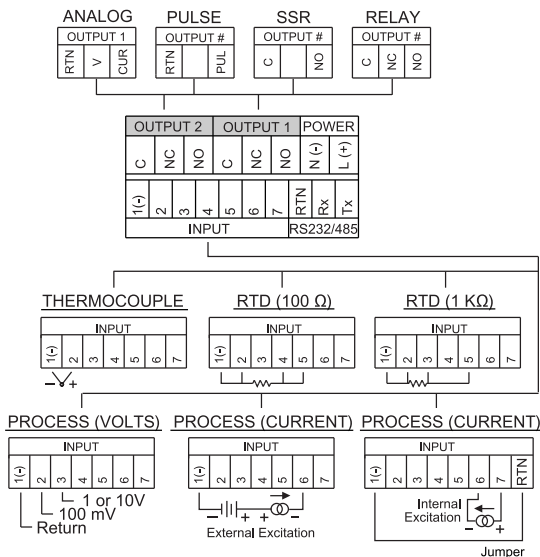
Dimensions shown in inches (mm)



FRONT VIEW



REAR VIEW



To Order (*Specify Model No.)

Model Number	Description	
i3200	Temperature/process (monitor only) 1/32 DIN	
iS3200	Strain/process (monitor only) 1/32 DIN	
Control Outputs #1 & 2 Direct (Cool) or Reverse (Heat) Acting		
i32	(*)	(*) Temperature/process with 2 control outputs
iS32	(*)	(*) Strain/process with 2 control outputs
	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, PID control) ²
		-SM Simplified menu version (ON/OFF control, no PID) ³

Network Options

-C24 Isolated RS-232 and R-485/422. 300 to 19.2 K baud *1

Power Supply

* Standard power input: 90-240 Vac/dc, 50-400 Hz (no entry required)

-DC 12-36 Vdc, 24 Vac *1

Factory Setup Option


,FS Factory setup and configuration

Model Number Description

EIT-D	iServer MicroServer, serves 32 devices
EIT-W	iServer MicroServer for serial to ethernet applications See iServer MicroServer Products for Complete Details

*1 -DC, -C24 not available with excitation.
*2 Analog Output (Option 5) is not available with -AL units.
*3 Strain iS32 is not available with -SM units.

Ordering Example: i3222-C24 is a 1/32 DIN PID controller with two solid state relays for PID control and serial communications, both RS-232 and RS-485.
iS3233,FS is a 1/32 DIN Controller w/ two relays and factory scaled for: 0-30mV = 0-1000, 10Vdc exc.



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.

