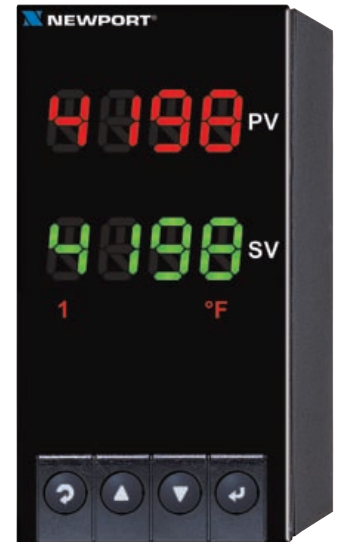


- ✓ High Quality
- ✓ 5-Year Warranty
- ✓ High Accuracy  $\pm 0.5^{\circ}\text{C}$  (0.9°F), 0.03% Reading
- ✓ 1/8 DIN Controller with Embedded Ethernet Connectivity (Optional)
- ✓ Dual Display with Bright Color Changing Feature
- ✓ Programmable Digital Filter
- ✓ 2 Control or Alarm Outputs. Choice of DC Pulse, Solid State Relays, Mechanical Relays, Analog Voltage and Current
- ✓ Full Autotune PID Control
- ✓ Built-In Excitation Standard
- ✓ Front Removable



The **NEWPORT®** i8DH and i8DV are high quality, highly accurate single loop Autotune PID Temperature and Process Controllers for 1/8 DIN (96mm x 48mm) 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 i8DH and i8DV are simple to configure and use, while providing tremendous versatility and a wealth of powerful features.

The i8DH and i8DV come standard with your choice of two control or alarm outputs in almost any combination: solid state relays (SSR) rated at 0.5A @ 120/240 Vac; Form "C" SPDT (Single Pole Double Throw) relays rated at 3 amps @ 120/240 Vac; pulsed 10 Vdc output for use with an external SSR; or Analog Output (0-10 Vdc or 0-20mA) selectable for control or retransmission of the process value.

The UNIVERSAL TEMPERATURE & PROCESS instrument (model "T") offers a selection of 10 thermocouple types as well as 2, 3 or 4 wire RTD's, process voltage and current. The i8DH and i8DV are ideal controllers for use with transmitters and amplified transducers. Built in excitation is standard (24Vdc @ 25mA). The devices handle 0-20mA Process Current and Process Voltage in three scales: 0-100mV, 0-1V, and 0-10V.

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 1/8 DIN) are the largest digits of any 1/8 DIN controller.

The STRAIN/PROCESS instrument (model "S") 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 0-20 mA. Excitation for transducers of 5 Volt and 10 Volt is standard.

The highly recommended Networking and Communications options include direct Ethernet LAN connectivity with an Embedded Web Server, and serial communications.

The C24 serial communications option includes both RS-232 and RS-485 which can be selected from the menu as well as both a straightforward ASCII protocol or MODBUS. The C4EI option includes both Ethernet and RS-485 ASCII/MODBUS on one device.

The iSeries, with the network option, are designed for easy integration with popular industrial automation, data acquisition and control programs as well as Microsoft Visual Basic and Excel. **NEWPORT®** provides free configuration software which makes it fast and easy to get up and running. Available on CD-ROM and for download off the Web.

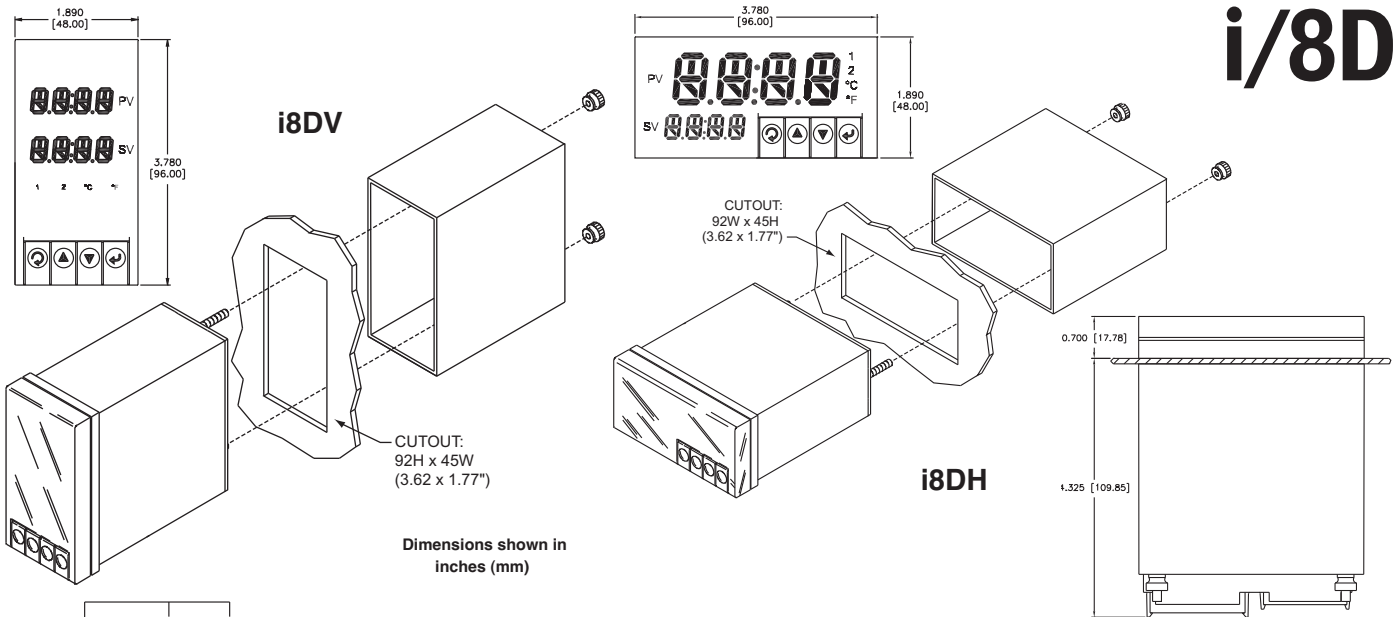
Input Type	Range	Accuracy
<b>Universal Temperature / Process</b>		
Process Voltage	0 to 100 mV, 0 to 1 V, 0 to 10 Vdc	0.03% rdg
Process Current	0 to 20 mA (4 to 20 mA)	0.03% rdg
Excitation	24 V @ 25 mA	-
<b>Universal Strain / Process</b>		
Process Voltage	0 to 100 mV, -100 to 1 V, 0 to 10 Vdc	0.03% rdg
Process Current	0 to 20 mA (4 to 20 mA)	0.03% rdg
Excitation	5 V @ 40 mA, 10 V @ 60 mV	-

**iSeries**  
**change color**

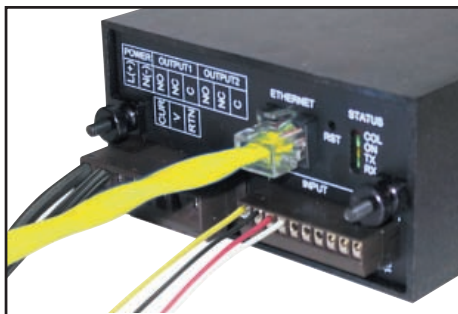
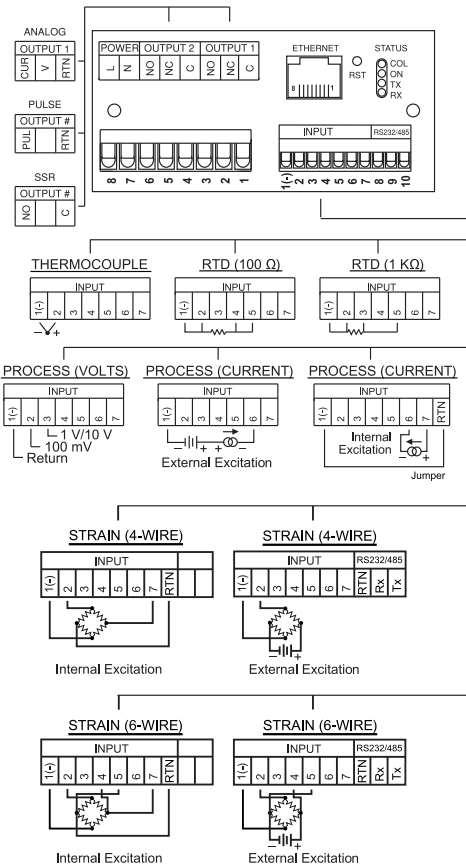
at any set point\*

Totally Programmable Color Displays

RED  
AMBER  
GREEN



Dimensions shown in inches (mm)



The i/8 Series controllers feature plug/removable connectors and a sturdy panel mounting sleeve with adjustable thumb nuts for easy secure installation.

## To Order (\*Specify Model No.)

Model Number	Description	
<b>CONTROL OUTPUTS #1 &amp; 2 Direct (Cool) or Reverse (Heat) Acting</b>		
i8DH	(*) (*)	Temperature/process 1/8 DIN dual display horizontal with 2 control outputs
i8DV	(*) (*)	Temperature/process 1/8 DIN dual display vertical with 2 control outputs
iS8DH	(*) (*)	Strain/process 1/8 DIN dual display horizontal with 2 control outputs
iS8DV	(*) (*)	Strain/process 1/8 DIN dual display vertical 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 Solid State
	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 (One Option Max.)

-EI	Ethernet with embedded internet
-C24	Isolated RS-232 and RS-485 300 to 19.2 K baud *1
-C4EI	Ethernet with embedded Web server + isolated RS-485/422 hub for up to 31 devices *1

## Power Supply (Select One)

*	Standard power input: 90-240 Vac/dc, 50-400 Hz (no entry required)
-DC	20-36 Vdc, 24 Vac*1

## Factory Setup Option

,FS	Factory setup and configuration
,FS(RTD-1N)	Customized "iS" model for MIL-T-7990B nickel RTD input (0 to 200°C)
,FS(RTD-2N)	Customized "iS" model for MIL-T-7990B nickel RTD input (-40 to 300°C)

\*1 -DC, -C24, or -C4EI not available with excitation.

\*2 Analog output (Option 5) is not available with -AL units.

\*3 Strain iS8DH or iS8DV is not available with -SM units.

**Ordering Example:** i8DH43 is a horizontal 1/8 DIN dual display with pulse and relay. iS8DH43-C24,FS(RTD-1N) factory scaled for MIL standard MIL-T-7990B nickel RTD input.

iS8DV33-C24,FS is a vertical 1/8 DIN dual display controller degree with 2 relays, factory scaled for temp. input: T/C type J, C.