1/8 DIN 18 **Temperature**, **Process**, & Series **Strain Meters & PID Controllers**





NEWPORT

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 Colour **Displays**, Standard
- Built-In Excitation, Standard
- 2 Control or Alarm Outputs. Choice of DC Pulse, Mechanical Relays, Analogue Voltage and Current

The NEWPORT® i8 is a 1/8 DIN size (96 mm x 48 mm) digital panel meter featuring the big iSeries colour-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 colour between green, amber, and red at any setpoint or alarm point. The "i8" 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 analogue output, serial communications, MODBUS, and Ethernet. The user can easily program the i8 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 analogue (voltage and current) outputs.

Fully Isolated analogue output for retransmission of the process value is available in addition to the control and alarm relays (specify model i8A33).

The i8 covers a broad selection of transducer and transmitter inputs with two input models: The UNIVERSAL TEMPERATURE & PROCESS instrument (model "i") handles 10 common types of thermocouples, multiple RTDs, and several process (DC) voltage and





current ranges. This model also features built-in excitation, 24 Vdc @ 25 mA. With its wide choice of signal inputs, this model is an excellent choice for measuring or controlling temperature with a thermocouple, RTD, or 4 to 20mA 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 linearisation, which allows the user to linearise the signal input from extremely nonlinear transducers of all kinds. The NEWPORT[®] i8 ¹/₈ DIN enclosure has a IP65 (NEMA 4) rated front bezel and removable rear connectors for easy installation and wiring.

Input Type		Range	Accuracy
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	
J	Iron-Constantan	-210 to 760°C/-346 to 1400°F	0.4°C/0.7°F
K	CHROMEGA®-ALOMEGA®	-270 to -160°C/-160 to 1372°C -454 to -256°F/-256 to 2502°F	1.0°C/0.4°C 1.8°F/0.7°F
Т	Copper-Constantan	-270 to -190°C/-190 to 400°C -454 to -310°F/-310 to 752°F	1.0°C/0.4°C 1.8°F/0.7°F
Ε	CHROMEGA®-Constantan	-270 to -220°C/-220 to 1000°C -454 to -364°F/-364 to 1832°F	1.0°C/0.4°C 1.8°F/0.7°F
R	Pt/13%Rh-Pt	-50 to 40°C/40 to 1768°C -58 to 104°F/104 to 3214°F	1.0°C/0.5°C 1.8°F/0.9°F
S	Pt/10%Rh-Pt	-50 to 100°C/100 to 1768°C -58 to 212°F/212 to 3214°F	1.0°C/0.5°C 1.8°F/0.9°F
В	30%Rh-Pt/6%Rh-Pt	100 to 640°C/640 to 1820°C 212 to 1184°F/1184 to 3308°F	1.0°C/0.5°C 1.8°F/0.9°F
C	5%Re-W/26%Re-W	0 to 2320°C/32 to 4208°F	0.4°C/0.7°F
N	Nicrosil-Nisil	-250 to -100°C/-100 to 1300°C -418 to -148°F/-148 to 2372°F	1.0°C/0.4°C 1.8°F/0.7°F
L	J DIN	-200 to 900°C/-328 to 1652°F	0.4°C/0.7°F
RID	Pt, 0.00385, 100, 500, 1000	-200 to 900°C/-328 to 1652°F	0.4°C/0.7°F
RTD	Pt, 0.00392, 100, 500, 1000	-200 to 850°C/-328 to 1562°F	0.4°C/0.7°F

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