

Platinum Resistance Temperature Transmitter



APPLICATIONS

- Water systems
- Storage tanks
- Industrial machinery and machine tools
- HVAC systems
- Refrigeration systems



Also available with our 1800 Series attachable loop indicator. See www.noshok.com for details.

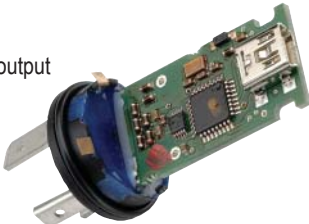
800 SERIES

- Proven 100 Ω platinum resistance sensor provides reliability, stability and unbeatable performance
- Economical price
- Standard temperature ranges from -40 °F to 1,000 °F
- Wide variety of temperature ranges and connections
- Quick response time
- Optional USB programmable output available
- 316 stainless steel housing
- Burnout protection from 3.3 mA to 23 mA
- Also available with our 1800 Series attachable loop indicator
- CE compliant to suppress RFI, EMI, and ESD
- Final calibration tests prior to shipment ensures 100% "out of the box" reliability

SPECIFICATIONS	
Output signals	4 mA to 20 mA 2-wire, 0 Vdc to 5 Vdc 3-wire 0 Vdc to 10 Vdc 3-wire, 1 Vdc to 5 Vdc 3-wire
Temperature ranges	Standard ranges from -40 °F to 1,000 °F
Accuracy	
Measuring element	Class B per EN 60751 (IEC 751)
Output	$\pm[0.30 + 0.005 \cdot t]$ °C $\pm 0.5\%$ full scale
Sensor protection	Burnout protected from 3.3 mA to 23 mA
Power supply*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire) 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
Load limitations	$\leq (V_{Power} - 10)/0.020$ Amp for 4 mA to 20 mA output $\leq 5,000 \Omega$ for 1 Vdc to 5 Vdc output $\leq 10,000 \Omega$ for 0 Vdc to 10 Vdc output $\leq 4,500 \Omega$ for 0.5 Vdc to 4.5 Vdc output
Wetted materials	316 stainless steel
Housing material	316 stainless steel
Ambient temperature	-40 °F to 185 °F (-40 °C to 85 °C)
Storage temperature	-40 °F to 185 °F (-40 °C to 85 °C)
Environmental rating	IP65 according to EN 60529/IEC 529
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Weight	Approximately 4 oz.

* Unregulated power supplies

Optional USB programmable output



Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 34-35.

ORDERING INFORMATION						
SERIES	800					
TEMPERATURE RANGES	-40/120	-40 °F to 120 °F	0/200	0 °F to 200 °F	0/300	0 °F to 300 °F
	25/125	25 °F to 125 °F	20/240	20 °F to 240 °F	50/300	50 °F to 300 °F
	0/140	0 °F to 140 °F	0/250	0 °F to 250 °F	50/500	50 °F to 500 °F
Custom ranges available on request (30K minimum span)						
ACCURACY	1 Class B + ($\pm 0.5\%$ BFSL)					
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire	3	1 Vdc to 5 Vdc, 3-wire	34	4 mA to 20 mA, 2-wire, USB programmable
	2	0 Vdc to 5 Vdc, 3-wire	5	0 Vdc to 10 Vdc, 3-wire		
PROCESS CONNECTIONS	2	1/4" NPT Male			48	1/2" NPT Male w/adjustable compression fitting
	8	1/2" NPT Male				
ELECTRICAL CONNECTIONS	1	36" cable (connected to option 8)			14	Hirschmann connection w/ISO 4400 1/2" NPT conduit
	8	Hirschmann (DIN EN 175301-803 Form A)				
STEM LENGTHS	025	2.5"			060	6"
	040	4"			090	9"
STEM DIAMETERS	3	Tapered from 6 mm - 3 mm tip			6	6 mm
					8	8 mm

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE

Series 800
 Temperature range 50 °F to 300 °F
 Accuracy $\pm 0.5\%$ BFSL
 Output signal 4 mA to 20 mA
 Process connection 1/2" NPT Male
 Electrical connection Hirschmann
 Stem length 4"
 Stem diameter 6 mm

800 - 50/300 - 1 - 1 - 8 - 8 - 040 - 6

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