



800 SERIES

- Proven 100 Ω platinum resistance sensor provides reliability, stability and unbeatable performance
- Economical price
- Standard temperature ranges from -40 °F to 120 °F through 0 °F to 1,000 °F
- Custom temperature ranges available from -300 °F to 1,100 °F (-200 °C to 600 °C)
- 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

APPLICATIONS

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



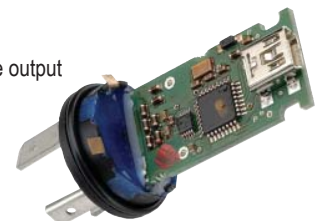
Also available with our 1800 Series attachable loop indicator. See www.noshok.com for details.

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	±[0.30 +0.005* t] °C ±0.5% full scale
Sensor protection	Burnout protected from 3.3 mA to 23 mA
Power requirement*	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	≤ (VPower -10)/0.020 Amp for 4 mA to 20 mA output ≤ 5,000 Ω for 1 Vdc to 5 Vdc output ≤ 10,000 Ω for 0 Vdc to 10 Vdc output ≤ 4,500 Ω 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

Optional USB programmable output



Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 36-37.

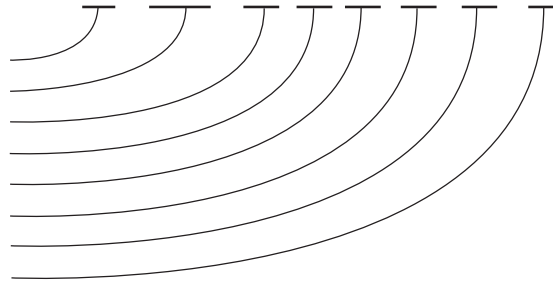
ORDERING INFORMATION								
SERIES	800							
TEMPERATURE RANGES	-40/120	-40 °F to 120 °F	0/200	0 °F to 200 °F	0/300	0 °F to 300 °F	0/750	0 °F to 750 °F
	25/125	25 °F to 125 °F	20/240	20 °F to 240 °F	50/300	50 °F to 300 °F	0/1000	0 °F to 1,000 °F
	0/140	0 °F to 140 °F	0/250	0 °F to 250 °F	50/500	50 °F to 500 °F	Custom ranges from -300 °F through 1,100 °F available on request (30K minimum span)	
ACCURACY	1 Class B + (±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)			25	M12 x 1 (4-pin)		
STEM LENGTHS	025	2.5"			060	6"	120	12"
	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

Series800
 Temperature range50 °F to 300 °F
 Accuracy±0.5% BFSL
 Output signal4 mA to 20 mA, 2-wire
 Process connection1/2" NPT Male
 Electrical connectionHirschmann
 Stem length4"
 Stem diameter6 mm

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



800 Series Platinum Resistance Temperature Transmitter

