

RTD Transmitter



920 SERIES

RTD TRANSMITTERS

- High accuracy ($\pm 0.1\%$)
- 2-wire loop-powered 4 mA to 20 mA output
- Linearized output to temperature
- Input RTD PT100 with 3-wire compensation
- Analog design, potentiometer adjustable
- Factory calibrated for fixed range
- Metal housing
- Fits standard heads
- Optional model is fully field re-programmable with module and PC-based software

ORDERING INFORMATION

SERIES	920
TYPE	NRT Head-mounted
INPUT	2 PT-100, 3-wire
OUTPUTS	1 4 mA to 20 mA, 2-wire 2 0 Vdc to 5 Vdc, 3-wire 5 0 Vdc to 10 Vdc, 3-wire
CALIBRATED TEMPERATURE RANGE	Please specify low/high
UNITS OF MEASURE	C Celsius F Fahrenheit
OPTIONS	0 None PC* Computer Programmable

Special configurations available on request, please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

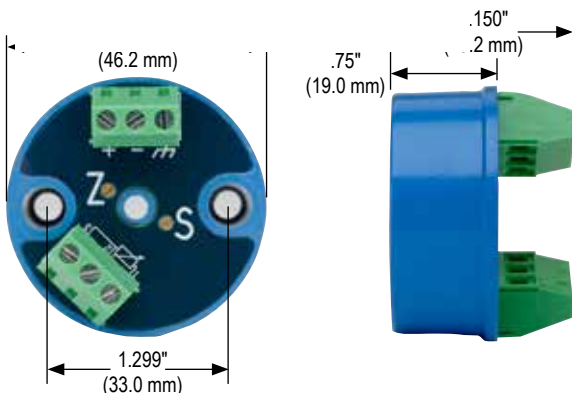
*Requires program module and software, 4 mA to 20 mA only

@Vnom = 24 Vdc, T.ambient = 25 °C, Span nom. = 100 °C

EXAMPLE

Series 920
 Type RTD transmitter
 Input PT100, 3-wire
 Output 4 mA to 20 mA, 2-wire
 Calibrated range 0 to 200
 Units of measure Fahrenheit
 Options None

920 - NRT - 2 - 1 - 0/200 - F - 0



SPECIFICATIONS

Housing material	Die-cast zinc, enamel painted
Housing dimensions	1.82" dia. x 1.15" H
Input	PT100, 3-wire, $\alpha=0.00385$, DIN EN 60751
Output	4 mA to 20 mA loop powered or voltage, linear to temperature
Power requirement	12-32 Vdc, polarity protected
Supply effect	0.02%/V, 0.001%/V with computer programmable version
Zero drift	$\pm 0.01\%$ FS/ °C
Span drift	$\pm 0.01\%$ FS/ °C
Long term drift	$\leq 0.5\%$ FS/year
Excitation current RTD	0.8 mA
Sensor lead resistance RTD	500 Ω max.
Accuracy¹	0.1% FS (includes effects of linearity, hysteresis and repeatability)
Span/zero adjustment	20 turn potentiometer, $\pm 10\%$ for zero and span
Maximum loop resistance	$R_{max} = [(V_{supply} - 9 Vdc) / 20 \text{ mA}]$
Open circuit detection	Overscale limit (27.0 mA) or underscale limit (2.2 mA)
Warm up	30 seconds
Temperature ranges	Ambient -40 °F to 176 °F (-40 °C to 80 °C) Storage -40 °F to 176 °F (-40 °C to 80 °C)

¹ Max. error on complete span. Error at calibration point ≤ 0.1 °C.



WARNING: This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov