

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

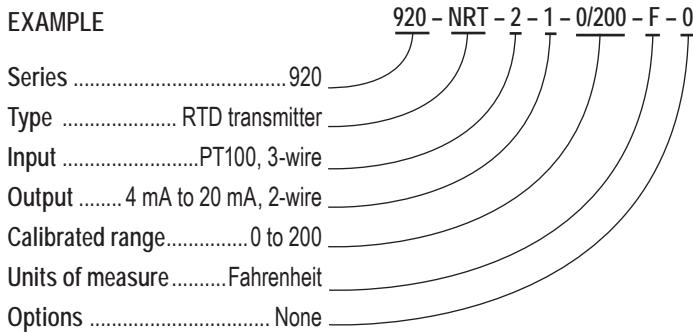
SERIES	920			
TYPE	NRT RTD transmitter			
INPUT	2 PT-100, 3-wire			
OUTPUTS	1 4 mA to 20 mA, 2-wire	2 0 Vdc to 5 Vdc, 3-wire	5 0 Vdc to 10 Vdc, 3-wire	36 4 mA to 20 mA, 3-wire
CALIBRATED TEMPERATURE RANGE	Please specify low/high			
UNITS OF MEASURE	C Celsius	F Fahrenheit		
OPTIONS	0 None	PC* Computer 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



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 supply	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.
Accuracy ¹	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	$R_{max} = [(V_{supply} - 9 Vdc) / 20 mA]$
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.

