

# 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

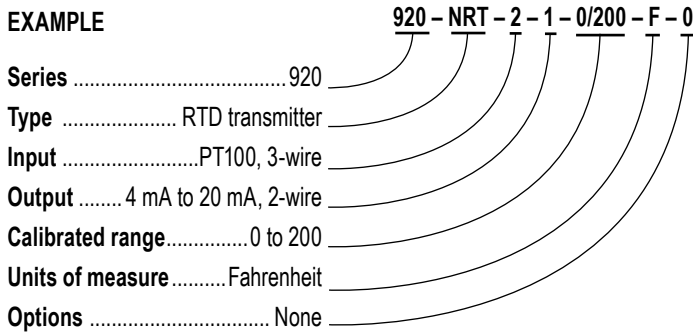
<b>SERIES</b>	920		
<b>TYPE</b>	NRT Head-mounted		
<b>INPUT</b>	2 PT-100, 3-wire		
<b>OUTPUTS</b>	1 4 mA to 20 mA, 2-wire	2 0 Vdc to 5 Vdc, 3-wire	5 0 Vdc to 10 Vdc, 3-wire
<b>CALIBRATED TEMPERATURE RANGE</b>	Please specify low/high		
<b>UNITS OF MEASURE</b>	C Celsius	F Fahrenheit	
<b>OPTIONS</b>	0 None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

<b>Housing material</b>	Die-cast zinc, enamel painted
<b>Housing dimensions</b>	1.82" dia. x 1.15" H
<b>Input</b>	PT100, 3-wire, $\alpha=0.00385$ , DIN EN 60751
<b>Output</b>	4 mA to 20 mA loop powered or voltage, linear to temperature
<b>Power requirement</b>	12-32 Vdc, polarity protected
<b>Supply effect</b>	0.02%/V, 0.001%/V with computer programmable version
<b>Zero drift</b>	$\pm 0.01\%$ FS/ °C
<b>Span drift</b>	$\pm 0.01\%$ FS/ °C
<b>Long term drift</b>	$\leq 0.5\%$ FS/year
<b>Excitation current RTD</b>	0.8 mA
<b>Sensor lead resistance RTD</b>	500 $\Omega$ max.
<b>Accuracy<sup>1</sup></b>	0.1% FS (includes effects of linearity, hysteresis and repeatability)
<b>Span/zero adjustment</b>	20 turn potentiometer, $\pm 10\%$ for zero and span
<b>Maximum loop resistance</b>	$R_{max} = [(V_{supply} - 9 Vdc) / 20 mA]$
<b>Open circuit detection</b>	Overscale limit (27.0 mA) or underscale limit (2.2 mA)
<b>Warm up</b>	30 seconds
<b>Temperature ranges</b>	Ambient -40 °F to 176 °F (-40 °C to 80 °C) Storage -40 °F to 176 °F (-40 °C to 80 °C)

<sup>1</sup> Max. error on complete span. Error at calibration point  $\leq 0.1$  °C.

