



# TEMPERATURE

## 100 OHM PLATINUM RTD RANGEABLE TRANSMITTER MODEL T81U

### DESCRIPTION

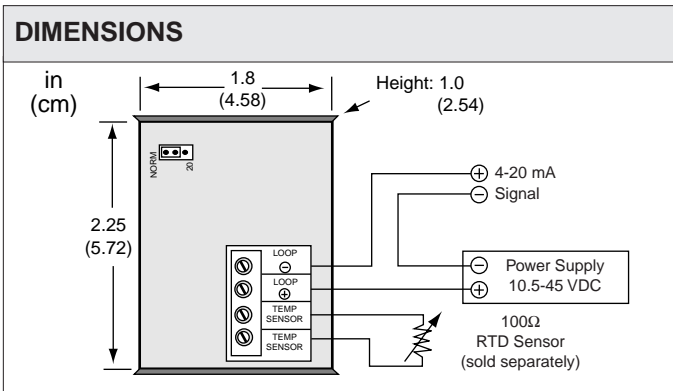
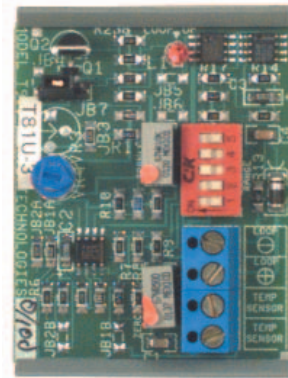
The **Model T81U Platinum RTD Rangeable Transmitter** is a two-wire, 4-20 mA transmitter designed for use with Type 81 100Ω platinum RTD sensors. The transmitter is available in three standard ranges, or it can be set for any range between -30° to 250°F (-34° to 121°C) with a minimum span of 40°F (22°C).

To adjust the **Model T81U**, set the DIP switches to match the desired range and use the zero and span pots to fine tune. A high accuracy digital ohmmeter and decade box are required.

The **Model T81U** has a special 20 mA loop calibration test signal to provide easy system verification. Simply move the bottle plug jumper from NORM to 20, and the transmitter will output a constant 20 mA. The Loop Up LED provides power indication for the 4-20 mA output.

### FEATURES

- *Dip switch rangeable*
- *Loop calibration test signal*
- *Snap-track mounting*
- *Loop-powered LED indication*
- *18-month warranty*



### SPECIFICATIONS

<b>Sensor input</b>	100Ω platinum TCR 0.00385 Ω/Ω°C	<b>Supply voltage</b>	10.5-45 VDC
<b>Output</b>	4-20 mA, loop-powered	<b>Max impedance</b>	675Ω @ 24 VDC
<b>Rangeability limits</b>	-30° to 250°F (-34° to 121°C)	<b>Ambient temp</b>	0° to 140°F (-18° to 60°C)
<b>Span min</b>	40°F (22°C)	<b>Humidity</b>	0% to 95% noncondensing
<b>Accuracy</b>	0.1°F or 0.2% of span	<b>Dimensions</b>	1.8"W x 2.25"L x 1"H (4.6 x 5.7 x 2.5 cm)
<b>Loop calibration output</b>	20 mA ±0.2%	<b>Approvals</b>	CE

### ORDERING INFORMATION

MODEL	DESCRIPTION
<b>T81U</b>	4-20 mA Rangeable RTD Transmitter
	<b>RANGE</b>
<b>2</b>	-20° to 140°F (-29° to 60°C)
<b>3</b>	0° to 100°F (-18° to 38°C)
<b>4</b>	30° to 240°F (-1° to 116°C)
<b>XR†</b>	Special Range
	<b>SENSOR TYPE</b>
—	Transmitter only
<b>D</b>	ST-D81-XW Duct sensor*
<b>O</b>	ST-O81 Outside air sensor*
<b>W</b>	ST-W81-XW Immersion sensor* with well
<b>AV</b>	ST-AV81H Averaging sensor*
<b>XWM</b>	Single gang weather resistant box (mounted without sensor)

**Example: T81U-2-D** Transmitter with range of -20° to 140°F (-29° to 60°C) mounted and wired in duct sensor enclosure

†Indicate at time of order  
\*Includes sensor mounted and wired

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