

TEMPERATURE

1000 OHM RTD RANGEABLE TRANSMITTER T85U SERIES



DESCRIPTION

The **Kele T85U 1000Ω RTD rangeable transmitter** is a range selectable, two-wire 4-20 mA RTD transmitter used with Type 85 1000Ω platinum RTD sensors. The transmitter is available in six standard ranges, or it can be set for any range between -30° to 280°F (-34° to 138°C) with a minimum span of 40°F (22°C).

To adjust the **T85U**, 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 **T85U** 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.



T85U



T85U-13-WE-XTD

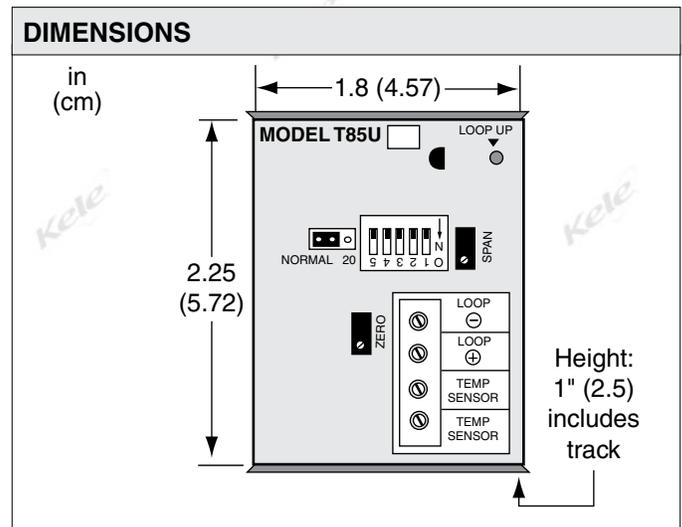


FEATURES

- **Class A Sensors**
- **Dip switch rangeable**
- **Loop calibration test signal**
- **Low cost**
- **Snap-track mounting**
- **Loop-powered LED indication**
- **Fits into card slot of ST-U85 housing**
- **CE approved (commercial and industrial)**
- **Available as a complete assembly**
- **Conformal coated**

APPLICATIONS

- **Duct**
- **OSA**
- **Immersion**
- **Averaging**



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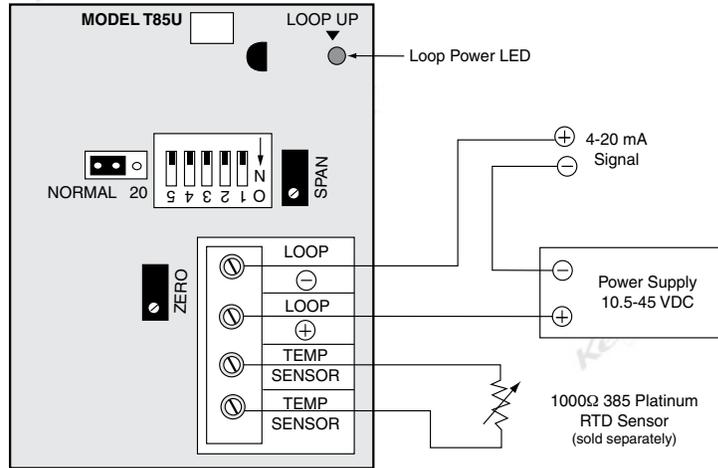
SPECIFICATIONS	
Supply Voltage	10.5-45 VDC
Transmitter Accuracy	±0.2°F or 0.2% of the span TCR 0.00385 Ω/Ω/°C
Signal Output	4-20 mA @ 675Ω, two wire loop-powered, except display @ 375Ω
Rangeability	-30° to 250°F (-34° to 121°C) Minimum span of 40°F (22°C)
Rangeability	
Zero	-30° to 210°F (-34.4° to 98.9°C)
Minimum Span	40°F (22°C)
Usable Range	-30° to 250°F (-34.4° to 121.1°C)
Loop Calibration Output	20 mA ± 0.2%
Sensor Element	1000Ω platinum TCR 0.00385 Ω/Ω/°C
Operating Temperature	0° to 140°F (-18° to 60°C)
Operating Humidity	0% to 95% non-condensing
Wiring Terminations	Terminals
Weight	0.16 lb (0.07 Kg) w/o options
Approvals	CE (EN50081-1, EN50082-1) Optional CE (EN50081-2, EN50082-2) Industrial RF/EM Hardened
Warranty	1 year



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WIRING



ORDERING INFORMATION

MODEL	DESCRIPTION
T85U	4-20 mA RTD transmitter standard rangeability
CE CERTIFICATION	
-	Commercial CE (EN50081-1 and EN50082-1)
EMC	Industrial CE, RF/EM hardened (EN50081-2 & EN50082-2) (Add -S to end of model number)
RANGE	
2	-20° to 140°F (-29° to 60°C)
3	0° to 100°F (-18° to 38°C)
4	30° to 240°F (-1° to 116°C)
12	-22° to 113°F (-30° to 45°C)
13	32° to 212°F (0° to 100°C)
14	32° to 122°F (0° to 50°C)
XR†	Special Range (See previous page for rangeability limits)
SENSOR TYPE	
-	Transmitter only
D	ST-D85-XW duct sensor*
O	ST-O85 outside air sensor*
W	ST-W85-XW immersion sensor* with brass well
WE	ST-W85-E-XW immersion sensor* without well
WS	ST-W85-S-XW immersion sensor* with stainless steel well
AV	ST-AV85H averaging sensor*
XTD	Digital display option for (D) duct or (W) immersion sensors
XWM	Single gang weather resistant box (Mounted without sensor)

T85U - [] - 2 - D

Example: T85U-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. Check temperature limits in the catalog for each probe.

RELATED PRODUCTS

DCPA-1.2
DCP-1.5-W

Power supply, 120 VAC IN to 24 VAC/24 VDC OUT
Power supply, 24 VAC IN to 24 VDC OUT