

DIGITAL THERMOMETER/TRANSMITTER

The Reotemp Digital Thermometer/Transmitter is a durable high accuracy thermometer with digital display. It features an IP67/NEMA 4X enclosure, 5 year battery life and optional transmitter output (Note: 4-20mA models are loop powered 9-36VDC).

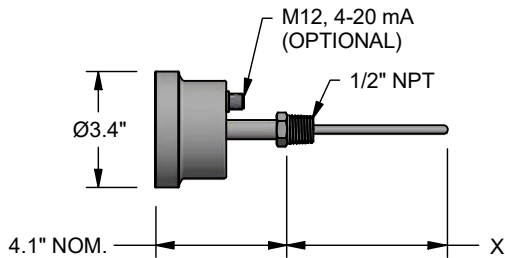
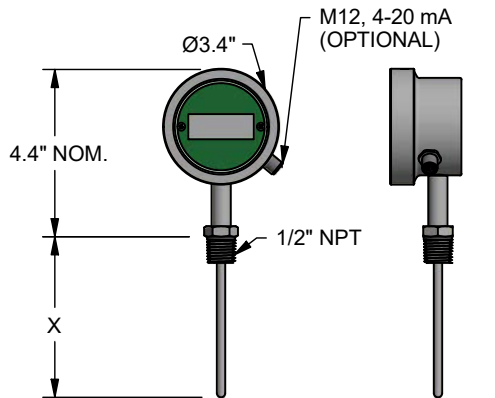


Table 1: Display Resolution

Model	Range	Decimal Point
Standard Temp, Displays Decimal	-58°F to 392°F (-50°C to 200°C)	Yes
Extended Temp, No Decimal	-328°F to 1112°F (-200°C to 600°C)	No



Accuracy



Custom Logo



Made in USA

FEATURES / BENEFITS

- High Accuracy 1,000Ω RTD (Class A)
- Water Resistant IP67/NEMA 4X
- 5 Year Battery Life (4-20mA Models are Loop Powered)
- 4-20 mA Output Available (Loop Powered 9-36VDC)
- Low or High Temperature Range Models

SPECIFICATIONS

Accuracy	$\pm (0.72 + 0.002 \times t - 32) ^\circ\text{F}$, $\pm (0.40 + 0.002 \times t) ^\circ\text{C}$, where t = temperature. Example: At 32°F accuracy is $\pm 0.72 ^\circ\text{F}$.
Sensing Element	RTD, Type Pt1000Ω, Class A
RTD Temperature Ranges	-58°F to 392°F (-50°C to 200°C) or -328°F to 1112°F (-200°C to 600°C)
Output (Optional)	4-20 mA, M12 Connector, Loop Powered 9-35 VDC
Refresh Rate	3 Seconds
Display	4-digit LCD, 1/2" Height
Display Resolution	See Table 1
RFI Effect	1% or Less Typical
Temperature Effect	<0.01% FS/°C
Ambient Temp. Range	32°F to 122°F (0°C to 50°C)
Storage Temp. Range	-4°F to 158°F (-20°C to 70°C)
Housing Material	Stainless Steel 316
Lens	Plastic Polycarbonate (Standard) or Glass
Probe Material	304 Stainless Steel
Weight	12 oz., Varies by Configuration
Environmental Protection	NEMA 4X/IP67
Power	1 x 3.6V AA Battery (M12 is loop powered 9-36 VDC.)
Battery Life	5 Years Minimum in Continuous Mode, (Note: 4-20mA Models are Loop Powered 9-36 VDC, No Battery Option)
Electronic Display Temperature Limit	If the temperature of the electronics in the display housing exceeds 122°F (50°C), permanent damage to the display will occur. A remote mount is recommended for high or low temperature applications.

DIGITAL THERMOMETER/TRANSMITTER

BUILD YOUR DIGITAL THERMOMETER: Choose options to build a part number. For example: **DTXN11A240A-R3**

MODEL	STYLE	4-20 mA OUTPUT LOCATION	PROCESS CONNECTION	TEMPERATURE RANGE
DT Digital Thermometer	X Back Connect	N None (Battery Operated)	1 1/2" NPT (Fits Standard Thermowell)	1 -58°F to 392°F
	X Bottom Connect	S M12 Upper Back (A & X Style Only, Loop Powered 9-36VDC)	4 1/4" NPT (1/4" Diameter Stem Only)	2 -50°C to 200°C
	E Explosion Proof Enclosure (Bottom Connect Only, Battery Powered Only)	T M12 Right Side (A & X Style Only, Loop Powered 9-36VDC)	5 3/4" NPT Adaptor	3 -328°F to 1112°F
		U M12 Left Side (A & X Style Only, Loop Powered 9-36VDC)	U 1/2" NPT Union (Fits Std. Thermowell)	4 -200°C to 600°C
		V M12 Top Side (A & X Style Only, Loop Powered 9-36VDC)	X Plain Unthreaded Bushing	
		W M12 Bottom Side (A Style Only, Loop Powered 9-36VDC)		

Code	Temp. Range	Resolution
1	-58°F to 392°F	0.1°
2	-50°C to 200°C	0.1°
3	-328°F to 1112°F	1°
4	-200°C to 600°C	1°

M12 Wiring Diagram for 4-20 mA Output Option

STEM DIAMETER	STEM LENGTH "X"	RTD	OPTIONS
A 1/4" Diameter (Standard)	240 24"	A Class A RTD, 1,000Ω	-R3 Three Point Calibration Certification (Reotemp Chooses Points)
F 3/8" Diameter	025 2.5"		-TS Stainless Tag
C 1/8" Diameter	040 4"		-R1 One Point Calibration Certification (Reotemp Chooses Points)
B 3/8" Diameter Reduced to 3/16" Diameter Tip	060 6"		-CL Custom Logo Dial
	090 9"		
	120 12"		
	150 15"		
	180 18"		
	240 24"		
	300 30"		
	360 36"		
	??? Custom stem length in inches.		
	M???? Use a code beginning in M to specify a mm stem length ex: 100mm = M0100		

Note: Thermowells should be used whenever the stem or bulb would be exposed to pressure, corrosion, velocity, abrasion or shear forces. Thermowells also make it possible to remove the thermometer without losing pressure or the contents of the process.



Explosion Proof Head Approvals (Explosion Proof Option Only)

CL. I. GR. A,B,C,D; CL. II. GR. E,F,G; CL. III.; Type 4X. For CSA Class I, Group A, conduit seal is required within 18 inches. CL. I, ZONE 1, ATEX: d IIC, IP66. ATEX: II 2GD Ex d tD A21 IIC, FTZU 04 ATEX 0265U. IECEx FMG 06.0003U, Ex d II C, IP68.

Explosion Proof Head

THERMOCOUPLE & RTD OPTIONS

		Thermocouple	RTD	Digital Thermometers	Handheld Digital
CERTIFICATION OPTIONS					
-R1	1 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓
-R3	3 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓
-C1	1 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓
-C3	3 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓
-CC	Certificate of Conformance	✓	✓	✓	✓
-CS	NIST Calibration Sticker (No Logged Points)	✓	✓	✓	✓
OTHER OPTIONS					
-VB	Hi-Vibration	N/A	✓	✓	✓
-AC	Hi-Accuracy	N/A	✓	N/A	N/A
-PS	Pointed Stem	✓	✓	✓	✓
-TF	Teflon Coating	✓	✓	✓	✓
-SS	316 SS stem	N/A	STD	✓	✓
-NL	No Logo	✓	✓	✓	✓
-HT	Heat Transfer Compound (2 oz)	✓	✓	✓	N/A
-GL	Plain Glass Lens	N/A	N/A	✓	✓
-CL	Custom Logo Dial	N/A	N/A	✓	✓
-BP	Replacement Battery Pack	N/A	N/A	✓	✓
-WD	White Dial	N/A	N/A	✓	✓
-AS	Allows to Fit 1-1/4-18 Industrial Thermowell	✓	✓	✓	N/A
TAG OPTION					
-TS	Stainless Steel Tag (1-10 Characters)			✓	
-TM	Stainless Steel Tag (11-80 Characters)			✓	
-TP	Paper Tag			✓	

✓	Indicates that the option is available with this model.
N/A	Indicates the option is not available with this model.
STD	Indicates standard options with no additional cost.