REOTEMP®
INSTRUMENTS

SANITARY DIGITAL THERMOMETER/TRANSMITTER

REOTEMP's Sanitary Digital Thermometer/Transmitter is a high accuracy thermometer with digital display. It features an IP67/NEMA 4X enclosure, clean-in-place connection, and a 5 year battery life. The Digital Thermometer is perfect for brewing, food, beverage and pharmaceutical applications where a high accuracy digital readout is required.

Accuracy   Custom Logo   Made in the USA

FEATURES / BENEFITS

- 3-A Conformance Certificate Included
- High Accuracy 1,000Ω RTD (Class A)
- Water Resistant IP67/NEMA 4X
- 5 Year Battery Life
- 4-20 mA Output Available
- Low or High Temperature Range Models

3 Certified

3.3 NOM.

TRI-CLAMP

Ø3.4

STEM LENGTH

M12, 4-20 mA (OPTIONAL)

M12 Wiring Diagram for 4-20 mA Output Option

All dimensions are in inches.

9 to 36 VDC

M12 MALE

M12, 4-20 mA (OPTIONAL)

Ø3.4

REOTEMP

4.6 NOM.

TRI-CLAMP

STEM LENGTH

All dimensions are in inches.

SPECIFICATIONS

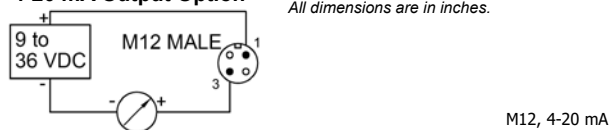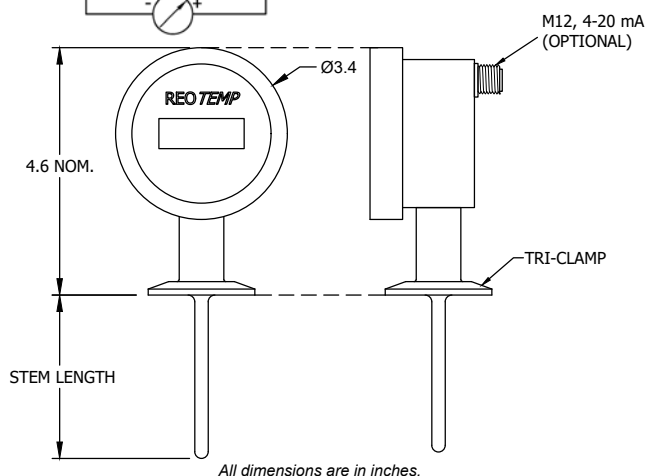|	
Accuracy	± (0.72 + 0.002 x | t-32 |) °F, ± (0.42 + 0.002 x | t |) °C, where t = temperature. Example: At 32°F accuracy is ± 0.72 °F.
Sensing Element	RTD, Type Pt1000Ω, Class A
Temperature Ranges	-58°F to 392°F (-50°C to 200°C) or -328°F to 1112°F (-200°C to 600°C)
Output (Optional)	4-20 mA, M12 Connector
Refresh Rate	3 Seconds
Display	4-digit LCD, 1/2" Height
Display Resolution	See Table 1
RFI Effect	1% or Less Typical
Temperature Effect	32°F to 122°F (0°C to 50°C)
Storage Temperature Range	-4°F to 158°F (-20°C to 70°C)
Housing Material	Stainless Steel 316
Wetted Finish	Ra 32 max., Ra 20 max. (optional)
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
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 temperature applications.

Table 1: Display Resolution		
Model	Range	Decimal Point
Low Temp, Displays Decimal	-58°F to 392°F (-50C to 200C)	Yes
High Temp, No Decimal	-328°F to 1112°F (-200°C to 600°C)	No

THERMOMETERS

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SANITARY DIGITAL THERMOMETER/TRANSMITTER

HOW TO ORDER: Choose options to build a part number. For example: DTXNC1A240A-R3

DT	X	N	C	1
MODEL	**STYLE**	**4-20 mA OUTPUT LOCATION**	**PROCESS CONNECTION**	**TEMPERATURE RANGE**

DT = Digital Sanitary Thermometer

STYLE
A = Back Connect
X = Bottom Connect

4-20 mA OUTPUT LOCATION
N = None
S = M12 Upper Back
T = M12 Right Side
U = M12 Left Side
V = M12 Top Side
W = M12 Bottom Side (Back Connect Style Only)

PROCESS CONNECTION
C = 1.5" Tri-Clamp®
L = 2" Tri-Clamp®
A = 2.5" Tri-Clamp®
P = 3" Tri-Clamp®
M = 3/4" Tri-Clamp®
K = 4" Tri-Clamp®

TEMPERATURE RANGE

Code	Temp. Range	Decimal Point
1	-58°F to 392°F	Yes
2	-50°C to 200°C	Yes
3*	-328°F to 1112°F ⚠	No
4*	-200°C to 600°C ⚠	No

⚠ *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.

A	240	A	-R3
STEM DIAMETER	**STEM LENGTH**	**RTD**	**OPTIONS**

STEM DIAMETER
Straight Stems
A = 1/4" Dia. (Standard)
F = 3/8" Dia.

Fast Response Stems
B = 3/8" Dia. Reduced to 3/16" Dia. Tip

STEM LENGTH
025 = 2.5"
040 = 4"
060 = 6"
090 = 9"
120 = 12"
150 = 15"
180 = 18"
240 = 24"
300 = 30"
360 = 36"
??? = Custom stem length in inches.

Millimeter Stem Lengths
M???? = Use a code beginning in M to specify a mm stem length ex: 100mm = M0100

RTD
A = Class A RTD, 1,000Ω

OPTIONS
-R1 = Cal Cert, 1 point (REOTEMP Picks Point)
-R3 = Cal Cert, 3 point (REOTEMP Picks Points)
-C1 = Cal Cert, 1 point (Customer Picks Point)
-C3 = Cal Cert, 3 points (Customer Picks Points)
-GL = Glass Lens
-TS = Tag, Stainless
-TP = Tag, Paper
-CL = Custom Logo Dial

For Additional Options See Page 139

For Thermowells See Pages 160-166

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.

THERMOMETERS

Customization

DIAL INDICATING THERMOMETER OPTIONS

Part #	Description	Industrial AA, RR, CC, CN, BB, SS, XR, XX, YY, YN, VR, VV, LL, MM, JJ	Small Dial OEM QQ, GG, HH	Digital DT, DTR, BT	Dual Mode Thermometer DMT
CASE FILL OPTIONS					
-SF	Silicone Filled Case	✓	N/A	N/A	✓
LENS OPTIONS					
-PC	Acrylic Window	✓	✓	N/A	✓
-PY	Polycarbonate Window	✓	✓	STD	✓
-TG	Tempered Safety Glass Lens	✓	N/A	N/A	✓
-SG	Laminated Safety Glass Lens	✓	N/A	N/A	✓
-GL	Plain Glass	STD	STD	✓	STD
STEM OPTIONS					
-PS	Pointed Tip	✓	✓	✓	N/A
-SS	316 Stainless Steel Stem	✓	✓	✓	✓
-F5	5/16" Diameter Stem (Not Available with 316SS Stem)	✓	✓	✓	N/A
-S3	3/8" Diameter Stem	✓	✓	✓	✓
-TF	Teflon Coating (Stem Only)	✓	✓	✓	✓
DIAL OPTIONS					
-CL	Custom Logo Dial	✓	✓	✓	✓
-HV	Hi-Vis Dial	✓	MQ	N/A	✓
-CB	Color Band	✓	MQ	N/A	✓
-CP	Color Pie	✓	MQ	N/A	✓
-WD	White Dial (Standard Ranges Only)	✓	✓	✓	✓
-MM	Min/Max Pointer	✓	N/A	N/A	✓
NL	No Logo	✓	✓	✓	✓
TAG OPTION					
-TS	Stainless Steel Tag (1-10 Characters)	✓	✓	✓	✓
-TP	Paper Tag	✓	✓	✓	✓
CERTIFICATION OPTIONS					
-R1	1pt. Calibration Certification (REOTEMP Chooses the Point)	✓	✓	✓	✓
-R3	3 pt. Calibration Certification (REOTEMP Chooses the Points)	✓	✓	✓	✓
-C1	1 pt. Calibration Certification (Customer Chooses the Point)	✓	✓	✓	✓
-C3	3 pt. Calibration Certification (Customer Chooses the Points)	✓	✓	✓	✓
-CS	NIST Calibration Sticker (No Logged Points)	✓	✓	✓	✓
-CC	Certificate of Conformance	✓	✓	✓	✓
OTHER					
-3H	316 Stainless Steel Head & Bezel	✓	N/A	STD	✓
-HT	Heat Transfer Compound	✓	✓	✓	✓
-CH	Spring Handle (T-27)	✓	✓	✓	N/A
-AS	Allows Bimet to Fit 1-1/4-18 Industrial Thermowell	✓	✓	✓	✓
-EH	Explosion Proof Head	N/A	N/A	✓	✓

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

THERMOMETERS

139 (800) 648-7737 sales@reotemp.com reotemp.com PTC-0817