



Instruction Manual

"DTG" Digital Temperature Gauge

LED Display

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TECHNICAL SPECIFICATIONS

Sensing Element :	RTD, Type Pt100 Class A
Temperature Ranges :	Customer re-scalable between -200°C to 600°C or -50°C to 200°C depending model. No re-calibration required.
Switching Ranges :	Customer programmable between -200°C to 600°C or -50°C to 200°C depending model.
Hysteresis :	Customer programmable, 1% of range by factory setting.
Accuracy :	±(0.25°C + 0.40% of reading) max. with default calibration. ±(0.10°C + 0.20% of reading) max. with one-point factory or customer calibration.
Open circuit detection :	Upscale (22mA) or Downscale (2.5mA) current output. Error message on LED display.
Warm-up :	30 seconds.
Response Time :	0.5 sec to 30 sec (software selectable)
Display :	4-DIGITS LED, decimal point selectable by software.
Display resolution :	±0.02% F.S. ±1 DIGIT
RFI effect :	1% or less typical
Temp. Effect :	<0.01% FS/°C
Ambient Temp. Range :	-40°C to 80°C (-40°F to 176°F)
Storage Temp. Range :	-50°C to 85°C (-58°F to 185°F)
Max. Pressure :	500 PSIG (on probe)
Housing Material :	Stainless steel 316
Probe Material :	Stainless steel 316 standard
Cable Materials :	PVC, Teflon®, Silicone, SS armored Teflon®
Environmental Protection :	NEMA 4/IP 65
ELECTRICAL	
Power Supply :	9-36 VDC, polarity protected
Supply effect :	0.005%/V
Power consumption :	15 mA @ 24 VDC + output current – 950mW max. 20 mA @ 24 VDC for PNP output – 500mW max. 20 mA @ 24 VDC + sourcing current for NPN output 50 mA @ 24 VDC for Relay Output – 1200mW max.
Current Output:	4-20mA (3 wires configuration) linear to temperature.
Max load on current output :	(Vsupply-9V)/20mA, Ohms
Switching Output :	Transistor NPN (max 100mA source) or Transistor PNP (max 100mA sink) or Relay SPDT 0.5A @ 240 VAC
Switching Logic :	N.C. or N.O. Software selectable.
Isolation :	500 VDC Input/Output (between probe and output signal)
Electrical Connection :	Micro-DC male plug or cable only

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Installation Considerations

Installation requirements of the DTG are similar to those of the temperature sensor assemblies with head mounted hockey puck transmitter and display. If the temperature of the electronics in the housing exceeds 80°C, permanent damage to the DTG will occur. In all applications, especially when they exceed 200°C, careful attention must be placed on correct installation. For these applications, a remote probe wall mount unit or remote probe panel mount unit, may be a better choice. It is the installer's, customer's and/or end user's responsibility to make sure that this over exposure to temperature does not occur due to improper installation.