## **Product Features**

- Large 4-digit red LED display
- Field re-programmable with optional PC interface module & software
- Security password and tracking protection for re-programming and re-calibration
- Optional 4-20 mA programmable linearized signal output
- Optional fully programmable switch output; relay or transistor
- Utilizes self-calibration feature for accurate and stable performance
- Utilizes Pt-100 Ohm RTD Class A element for temperature sensing
- Micro M12 male plug or cable gland for electrical connection
- IP 65/NEMA 4 rated environmental protection
- All stainless steel 316 construction
- Easy installation with various mounting configurations

## Description

The Model DTG11, Digital Temperature Gauge, is a complete solution for most industrial temperature monitoring and temperature indicating applications. This gage features a bright and large 4-digit red LED display, optional analog 4-20 mA output, optional switch output, and an optional RTD output. Utilizing Intempco's patented MIST technology and the self-calibration feature, DTG is designed for optimum accuracy and performance. The DTG is designed as a direct replacement for bi-metal, liquid bulb and glass thermometers.

DTG can be factory calibrated to customer specified temperature range, in units of Celsius or Fahrenheit. But the unique feature of the DTG is that it is field programmable. Process temperature or alarm change? No problem! Simply use DTG-PKIT interface module and re-range your DTG without the need to recalibrate and without the loss of accuracy. DTG is much more accurate than an RTD and a separate indicator/transmitter. When the DTG is re-scaled to a different temperature range, the calibrated default values are not lost. This gauge can be customer re-calibrated by performing one-point or two-point calibration using known temperature standards. This is where the DTG leaves the competition behind. Indicating temperature range, current output, switch set point, switching hysterises, switch logic, damping and other features all programmable.

The DTG wetted parts, as well as the housing, are fabricated from 316 stainless construction. The probe is either of 1/4" or 3/8" diameter as standard. As an option, other diameters and materials are available. For electrical connection, a Micro-DC male plug or cable are available. The sensing element used is Pt-100 Ohm RTD accuracy to DIN EN 60751 Class A and the DTG can be made available with an additional 3-wire RTD output. This feature allows a single process connection to be used for indication of temperature and for remote indication, recording, or controlling. Each DTG has the part number, range and serial number marked on the transmitter housing.

If you require an accurate, stable and dependable digital thermometer, look no further. Model DTG11 is your solution.



# **Applications**

- Replacement for Bi-Metal, Liquid Bulb and Glass Thermometers
- Pharmaceutical
- Food Preparation
- Utilities and Municipal
- Refineries
- Chemical and Petrochemical Plants
- Paper Mills
- Hydraulics



### **Custom Builder**

MODEL	1	2	3	4	5	6	7	8	9	10	11	12
DTG11		·	-				- 0 -	· ·	•	•		-

BOX1 Code	Model Range			
L	Low Temp. -50 to 200°C (-58/392°F)			
Н	High Temp. -200 to 600℃ (-328/1112℃)			

\* Code *L* & *H* represent max. temperature limits of sensor construction..

BOX2 CODE	Output Type
0	None, indicator only
C1	4-20mA, source 3-wire
C2	4-20 mA + Relay SPDT
C3	4-20 mA + NPN Transistor
C4	4-20 mA + PNP Transistor
C5	4-20mA + RTD 3-wire
D1	Relay SPDT
D2	NPN Transistor
D3	PNP Transistor
A3	Pt 100 Ohm @ 0°C (±0.15°C) α = 0.00385 DIN EN 60751 Class A (±0.06 %), 3-wire

#### Notes:

- 1. DTGs are factory calibrated to an accuracy of ±0.25% of span or better.
- For 4-20 mA output temperature ranges, indicate desired values in °C or °F (display units) after the completed p/n. See web site www.intempco.com.
- For control/alarm setpoint output, indicate desired value in °C or °F (display units) after the completed p/n. See web site www.intempco.com.
- Order DTG PKIT to set-up, re-program and re-calibrate in the field.
  - Ex. DTG11-C2-D-S-065-N20-S12S-PV-060-SF-A Range 4-20mA = 0/100°C Set point = 75°C

BOX3 CODE	Probe Diameter "D"			
D	1/-	4"		
F	3/8"			
H	1/2"			
CODE	Sheath O.D.	Tip O.D.		
DB	1/4"	1/8"		
FC	3/8"	3/16"		
HC	1/2"	3/16"		
HD	1/2"	1/4"		
JD	5/8"	1/4 "		

Other diameters available. Consult factory.

BOX4 CODE	Probe Material		
S	Stainless steel 316/316L		
Other materials available. Consult factory.			

 
 BOX5 CODE
 Immersion Length "U"

 --- In 0.1" increments Ex.: 065=6.5 "long

BOX6	Extension		
CODE	Length "C "		
N	In 0.1 " increments (2.0 " Std.) Ex.: <b>N20</b> =2.0 " long		

BOX8 CODE	Fitting Type			
0	None			
A**S	Adjustable fitting *			
Ferrule A = * N Fitting S = S Ex.: T14E A12S	Ferrule material : A = Stainless steel* B = Brass* T = Teflon® * Not readjustable with metal ferrule Fitting material : S = Stainless steel (SS316) B = Brass Ex.: T14B = Teflon® ferrule, 1/4" NPT Brass fitting A12S = Stainless ferrule, 1/2" NPT Stainless fitting			
F**S	Fixed fitting (SS316)			
Process NPT size : ** 18 = 1/8 " NPT 14 = 1/4 " NPT 38 = 3/8 " NPT 12 = 1/2 " NPT 34 = 3/4 " NPT				

BOX9 CODE	Extension Connector/Cable Type
MC	M12 Micro-Male Connector
PV	PVC insulation, 90°C (195°F) max.
SL	Silicone insulation, 180°C (356°F) max.
TF	Teflon <sup>®</sup> insulation, 200 ℃ (392 °F) max.
ТА	Teflon <sup>®</sup> with SS armor, 200 <i>°</i> C (392 <i>°</i> F) max.
ТР	Teflon <sup>®</sup> with SS armor and polyolefin shrink, 90°C (195°F) max.
TT	Teflon <sup>®</sup> with SS armor and Teflon <sup>®</sup> shrink, 200°C (392°F) max.

BOX10 CODE	Extension Cable Length "H" (MC option)
N	None
A2	Straight, 2 meters
A5	Straight, 5 meters
B2	Right angle, 2 meters
B5	Right angle, 5 meters
BOX10 CODE	Extension Cable Length "F" (Cable option)
	In inches Ex.: <b>060</b> =60 " long

BOX11 Code	Surface Finish
SF	Standard, 32 Ra max.

BOX12 CODE	Mounting Options
Α	Top Mounting
В	Bottom Mounting
C	Back Mounting
D	Side Mounting, right
E	Side Mounting, left
G	Side Mounting, Display Front
Н	Side Mounting, Display Back

# **Dimensions & Mounting Options**

