



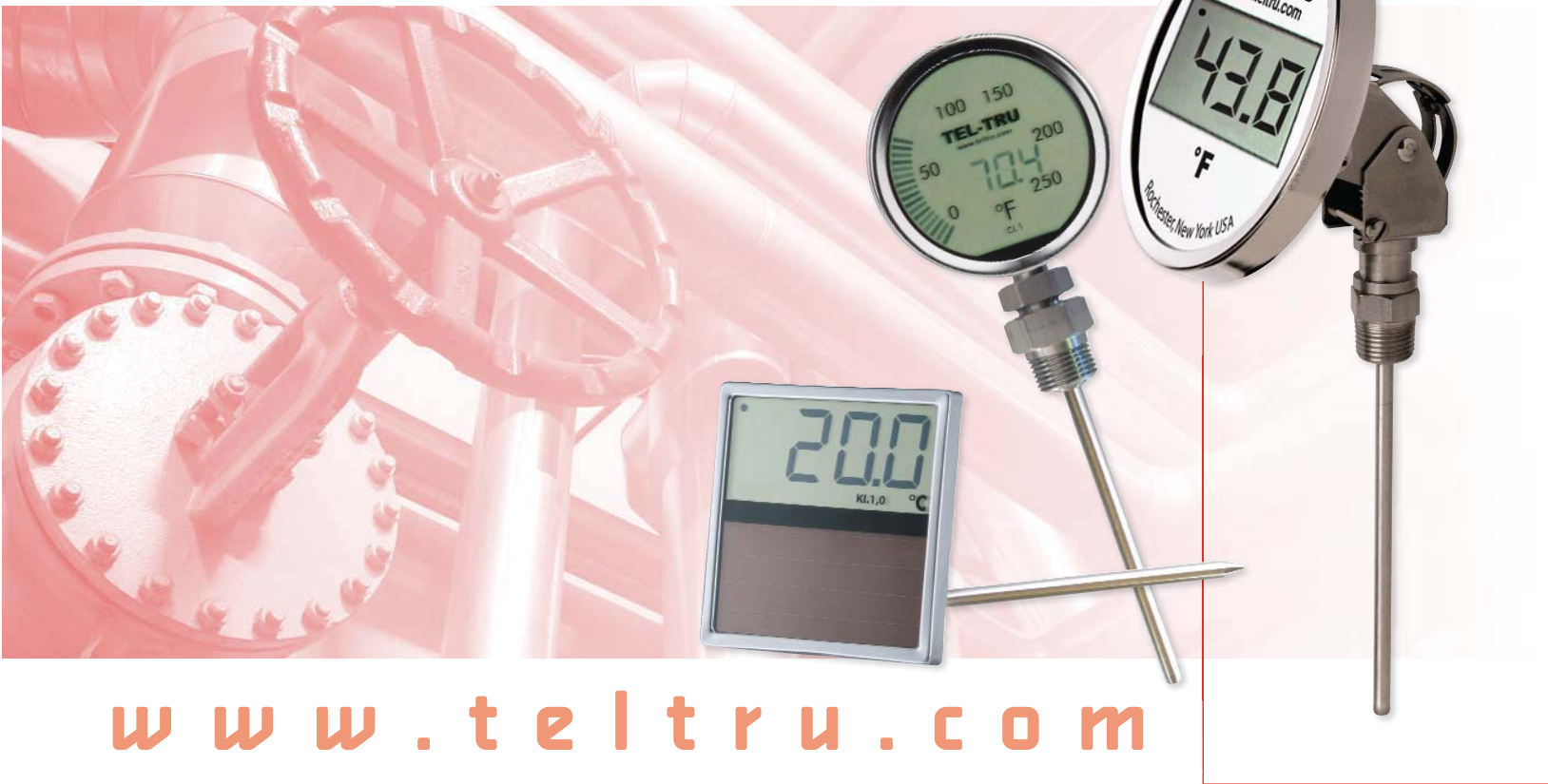
TEL-TRU MANUFACTURING COMPANY

DIGI-TEL THERMOMETERS

Solar-powered digital thermometers

Battery-powered interchangeable display/probe assemblies

DIGI-TEL Thermometers combine the easy, quick visual reference feature of a local indicator and the precision readout of a digital thermometer with a unique interchangeable probe concept.



www.teltru.com



World-Class Instruments Since 1916



Electronic DIGI-TEL Thermometers

Digi-Tel . . . The Industrial Thermometer of the Future

- ▶ Easily read display with either analog or digital indication
- ▶ Innovative sensor and microprocessor technology
- ▶ All stainless steel for heavy-duty industrial process applications
- ▶ Back, bottom, adjustable angle, or remote configurations
- ▶ Dust and moisture protection level is to IP 65 and EMI to EC standards
- ▶ Requiring very low power consumption, units are either battery powered (with a minimum 5-year life) or solar powered
- ▶ All DIGI-TEL models have a one-year warranty

The Probe Assembly—Sensor

- ▶ Pt 1000 thin film Platinum RTD, 2-wire type temperature sensor
- ▶ Maximum cable length recommended is 50 meters (163 feet) for remote models
- ▶ Probes fit standard bimetal thermowells

The Measuring Process

- ▶ A 3-second cycle for sensor readings provides real-time temperature indication, which is symbolized by a flashing sun on the display

Accuracy

- ▶ A microprocessor conditions the Pt 1000 signal with a resolution of 12 bits
- ▶ Meets accuracy requirements of EN 13190 class 1
- ▶ Factory certification of accuracy available

Sensor Monitoring and Service Considerations

- ▶ The microprocessor's integrated diagnostic routines continuously check the validity of the sensor output and the integrity of the sensor signal
- ▶ See www.teltru.com/digierror.aspx for error message details to confirm if:
 - ▷ There is a short circuit of the sensor connection
 - ▷ The measured value is out of range
 - ▷ The probe is not connected to the module
 - ▷ There is a sensor failure

Construction options

Interchangeable Display modules and probe assemblies

- ▶ Probe assembly and indicator display can be selected according to the application and easily connected on-site
- ▶ Standard watertight interchangeable connector assembly system
- ▶ Field changes and replacements are simple
- ▶ Maximum flexibility for use in industrial, test, and OEM applications
- ▶ SELECT, CONNECT, and INSTALL!

Integrated Display modules and probe assemblies with threaded connections are available for solar powered units.

Display readout options:

Analog/Digital display on 3" units

- ▶ The circular arrangement of LCD "graduations" gives the appearance of a traditional dial instrument allowing instant recognition of reading from a distance, while the exact temperature can be read from a 4-digit display
- ▶ Temperature ranges available are traditional bimetal thermometer equivalents

Digital only display on 5" and 4-1/2" units

- ▶ With large high-resolution digits

Power options

Battery powered

- ▶ A lithium battery, with a minimum working life of five years
- ▶ Factory battery replacement available

Solar Powered

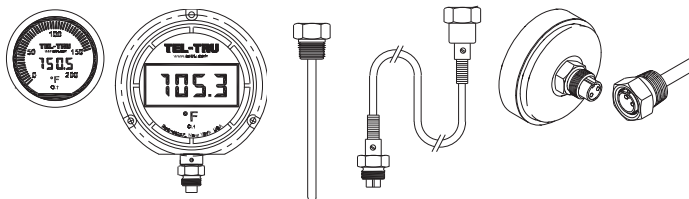
- ▶ The Solar powered DIGI-TEL has a solar cell integrated into the display module
- ▶ It can be used practically anywhere because the instrument functions reliably in artificial light at levels as low as 50 lux

BATTERY POWERED DIGI-TEL MODULAR THERMOMETERS

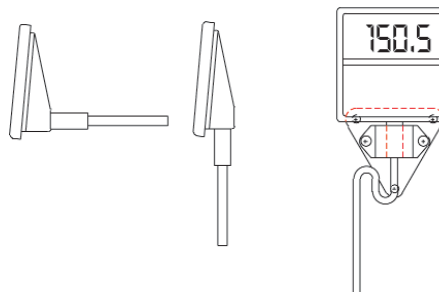
Select a Digital
Display Module

Select a Probe
and/or Cable

Connect and
Install



SOLAR POWERED DIGI-TEL INTEGRATED THERMOMETERS



▶ ACCURACY CHART

	3" Models	5", 4½" and 4" Models
Display Type	Analog/Digital Readout: <u>Analog</u> "graduations" similar to dial thermometers <u>Digital</u> readout for exact reading	Digital Only Readout
Size	.43" (11mm)	1.06" (27mm)
Factory Calibrated Temperature Ranges	Accuracy ≤1% FS	Accuracy ≤1% FS
	-80/120°F -40/80°C -40/160°F 0/120°C 0/250°F 0/200°C 0/400°F 0/300°C 25/125°F 50/550°F 150/750°F	-75/750°F -60/400°C



Solar Powered Digital Thermometers



D3B Direct
Mount
Back
Connect

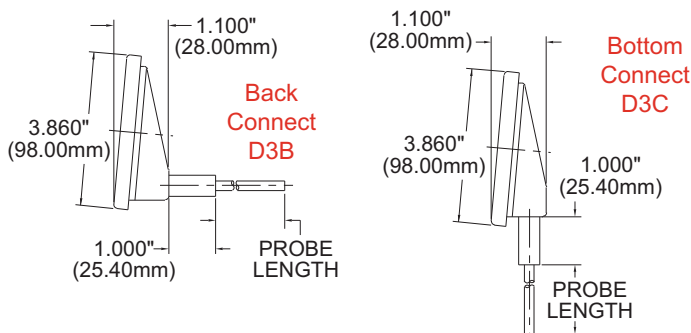
D3C
Direct
Mount
Back
Connect

D3R
Remote
Mount
Bottom
Connect

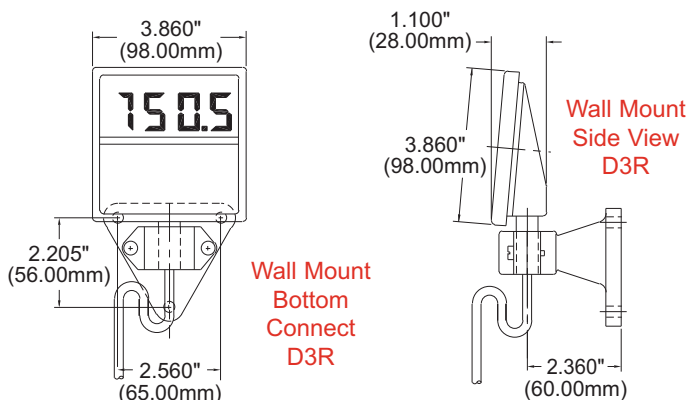
SPECIFICATIONS:

Case Material:	Stainless Steel case with chrome plated bezel
Connection:	None (compression fitting sold separately)
Probe:	6mm (.236") diameter 316SS
Power Supply:	Solar cell, 50 Lux min. light density
Reading Cycle:	3 second intervals
D3 Display:	Digital 4 digits with 7 segment display 1.06" (27mm) high
Protection Level:	IP 65
Ambient Temp.:	-4 to 140°F (-20 to 60°C)
Accuracy:	In accordance with DIN EN 13190 Class 1, see Accuracy Chart, first page

DIRECT DIMENSIONAL DRAWINGS



REMOTE DIMENSIONAL DRAWINGS



HOW TO ORDER

DIRECT MOUNT

A	B	C	D
			100
			14

REMOTE MOUNT

A	B	C	D	E	F
			100		
					14

Code	Description
A	Case Size/Display D3 4" Digital Display
B	Mounting Style B Direct Mounted, Back Connected C Direct Mounted, Bottom Connected R Remote Mounted (Bottom Connected)
C	Temperature Range
	Code Temp. Range Model
09	-75/750°F D3
58	-60/400°C (digital)
D	Probe Length 04 4" 06 6" 09 9" 12 12" 15 15"
▼ Remote Models Only ▼	
E	Cable C1 Teflon Coated
F	Cable Length 005 5' 010 10' 015 15' 020 20' 030 30' 040 40' 050 50'

Compression Fitting Order Separately

For use with Solar Powered Direct and Remote Mount Models

1/2" NPT Compression Fitting (Male), 6mm, 316SS

Order Code 96002105

