



TEL-TRU MANUFACTURING COMPANY

SOLAR POWERED DIGITAL PROCESS PRESSURE GAUGES

Advanced Technology in Pressure Measurement

Tel-Tru Digital Pressure Gauges offer all the benefits of a high quality digital sensor, including a quick and easy-to-read output. Designed to operate even in low light conditions, the added solar power feature eliminates the task of changing batteries.



KEY BENEFITS

- IP65 Weatherproof Housing
- ASME B40.7 Conformance
- User Selector Functions
- 4-20 MA Output
- <10 Lux Rating
- Large Display

SPECIFICATIONS

Case: 4-1/2" Black Glass Reinforced Thermo Plastic (PBTP) solid front construction, blow out back safety design, weatherproof IP65

Window: Acrylic

Sensor: Lux Capacitor™ (patent pending)

Wetted Materials: 316SS

Connection: 1/4" or 1/2" NPT Lower or Lower Back Connected

Ranges: Vacuum to 1,000 psi (See Range Tables)

Accuracy: 0.5% Full Scale ASME B40.7 AA (.25% available consult factory)

Ambient Operating: -15/150°F (-25/65°C)



DISPLAY

Type: LCD

Lux Rating: <10 (only one foot-candle)

Resolution: 1/4% first half, 1/2% second half

Digits: (4) 5/8" High

Update: One second
Two seconds (under 20 Lux)

USER SELECTOR FUNCTIONS

Left Units - Select from 4 units of measure PSI, kPa, KG/CM2 or Bar with corresponding Vacuum

Center Zero - Adjustment ± 4 increments

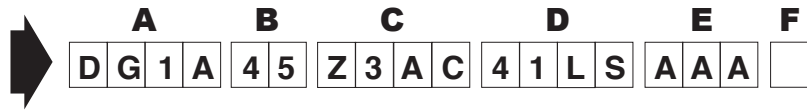
Right Avg. - Set reading in average of 1,2,4,8 seconds

NOTE: Over pressure rating = 2X FS Range



World-Class Instruments Since 1916

Ordering Example: Model DG1A solar process with safety case, 4-1/2" dial size, -30/0/60 psi range, 1/4" NPT lower connection, 316SS material.

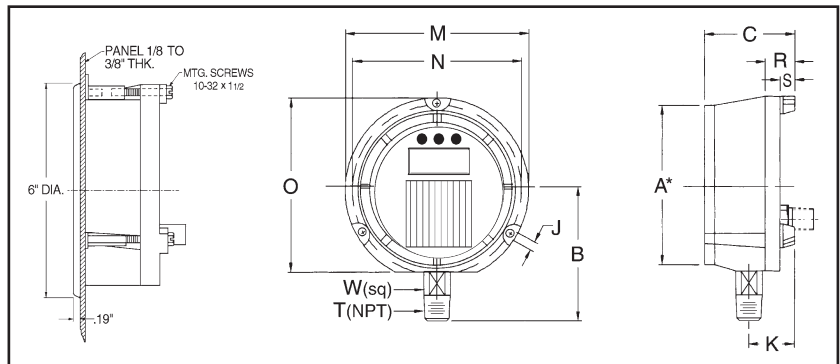


A	B	C	D	E	F
MODEL	DIAL SIZE	PRESSURE RANGE	CONNECTION	OUTPUT	OPTIONS
DG1A Solar Process, Safety Case	45 = 4-1/2"	Z1AC = 30-0-15psi Z3AC = 30-0-60psi Z4AC = 30-0-100psi E5AG = 0-200psi F2AG = 0-400psi F8AG = 0-1000psi	21BS = 1/2" NPT, lower back 316SS 41BS = 1/4" NPT, lower back 316SS 21LS = 1/2" NPT, lower 316SS 41LS = 1/4" NPT, lower 316SS	AAA = None ABA = 4-20mA	A = Safety Glass (no selector accessory) B = Selector Lockout C = Flush Mounting Ring

Digital Ranges - Units ship with psi units of measure

Vacuum	psi	kPa	KG/CM2	Bar
30" HG*	15	100	1	1
30" HG*	60	400	4	4
30" HG*	100	700	7	7
-	200	1400	14	14
-	400	2800	28	28
-	1000	7000	70	70
*Metric Reads		-100 kPa	76 CM/HG	-1 Bar

For pricing information, see our website at www.teltru.com/s-175-digital-pressure-gauges.aspx, or contact our factory.



	A*	B	C	J	K	M	N	O	R	S	TNPT	Wsq
mm	114	103	82	6.0	38	148	136.5	141	25	12.5	-	22
in	4.5	4.06 ¹	3.23	0.24	1.505	.83	5.37	5.55	0.98	0.49	1/2"	0.87

A* - Nominal Size. 1- Gauges with 1/4" NPT connection - dimension changes to 97mm (3.81").

Instructions

The Tel-Tru solar pressure gauge provides 1/2% full scale accuracy and operates continuously, even in low light conditions. There is no need to change a battery or push a button to read. Some special features, not available on any other digital gauge, are included to maximize the versatility and to customize for your application.

Three rotary DIP switches are located at the top of the gauge front panel and are accessed by removing the plugs on the lexan window or by removing the threaded ring and glass window. A small screwdriver is used to turn the switches to the desired position. The three switches are used to select the units of measure, zero set, and averaging. Unless otherwise requested the gauge is preset for PSI, zero shift, and no averaging. Replace the plug after the adjustment is made. This pressure gauge conforms with ASME 840.1 and 40.7 standards. A familiarity with these standards is recommended before selecting, installing and using pressure gauges.

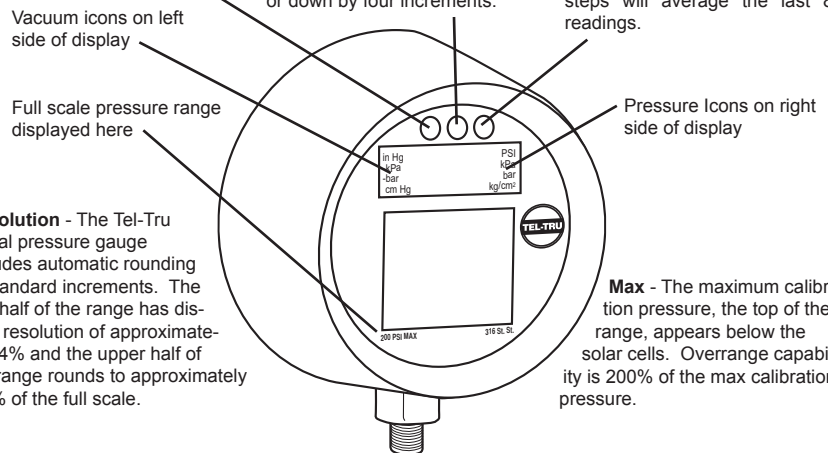
Scale - Rotating the switch on the left hand side changes the units of measure. Rotate until the desired units appear on the right side of the display. For compound gauges the corresponding vacuum scale will appear on the left.

Zero - The center switch can be used to offset the reading, similar to an adjustable pointer on an analog gauge. Turning clockwise increases the reading by one scale increment, approximately .25% of full scale. Turning counterclockwise reduces the reading by one scale increment, -.25%. You can adjust up or down by four increments.

Averaging - The switch on the right is used to average the pressure readings, similar to damping the pointer in a liquid filled gauge to remove fluctuations due to vibration or line pressure pulsation. One turn clockwise averages the last two readings, two clockwise clicks averages the last four readings and three steps will average the last 8 readings.

Resolution - The Tel-Tru digital pressure gauge includes automatic rounding to standard increments. The first half of the range has display resolution of approximately 1/4% and the upper half of the range rounds to approximately 1/2% of the full scale.

Max - The maximum calibration pressure, the top of the range, appears below the solar cells. Overrange capability is 200% of the max calibration pressure.



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