

# Digital Display Air Pressure Gauge DPG

Congratulations on purchase of this World Class Digital Display Air Pressure Gauge!

For your safety, please read the following before using the gauge.

- Do not use corrosive or flammable gas or liquid with this product.
- Use within the rated pressure range. Do not apply pressure beyond recommended maximum withstand pressure, permanent damage to the pressure gauge may occur.
- Do not drop, hit or allow excessive shock. Even if pressure gauge body appears undamaged, internal components may be broken and can cause malfunction.
- Do not use in environment containing steam or oil vapor.
- This product is not explosion-proof rated. Do not use in atmosphere containing flammable or explosive gases.
- Using filter can extend pressure gauge's service life.



RoHS

## A. SPECIFICATIONS

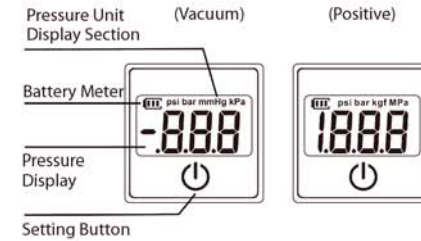
Rated Pressure Range	0 - 145 psi	
Display Pressure Range	0 to 145 psi *	
Max. Pressure	217.5 psi	
Applicable Fluid	Filtered air, incombustible and non-corrosive gases	
Pressure Resolution	MPa	0.001
	kgf/cm <sup>2</sup>	0.01
	bar	0.01
	psi	0.1
Battery	CR 2032 lithium	
Back Light	Yes	
Battery Life	1 Year (5 times / day)	
Low-Power Indicator	Yes	
Battery Replaceable	Yes	
Turn-On-Interval	Display turn off after 60 sec.	
Sampling Rate	2 Hz (2 times / sec.)	

Pressure Unit	psi, bar, kgf/cm <sup>2</sup> , MPa. User selectable	
Repeatability	≤ ±0.2% F.S. ±1 Digit	
LCD Display	3½ digit, 7 segment	
Indicator Accuracy	≤ ±2% F.S. ±1 Digit (ambient temperature: 22 - 28 °C / 72 - 82 °F)	
Environment	Enclosure	IP65 **
	Ambient Temp. Range	Operation: 0 - 50 °C (32-122 °F), Storage: -10 to 60 °C (14 - 140 °F) (No condensation or freezing)
	Ambient Humidity Range	Operation / Storage: 35 ~ 85% RH (No condensation)
	Vibration	Total amplitude 1.5mm or 10G, 10Hz - 55Hz -10Hz scan for 1 minute, two hours each direction of X, Y and Z
	Shock	100m/s <sup>2</sup> (10G), 3 times each in direction of X, Y and Z
Temperature Characteristic	≤ ±2% F.S. of detected pressure 25°C (77 °F) at temp. range of 0 - 50 °C (32 - 122 °F)	
Port Size	1/8" BSPT, 1/8" NPT	
	1/4" BSPT, 1/4" NPT	
Weight	Approx. 40g / 1.4 oz.	

\* When the pressure is -15.0 psi, LCD Displays

\*\* Air tube must be installed to maintain IP65. (See Section J)

## B. PANEL DESCRIPTION

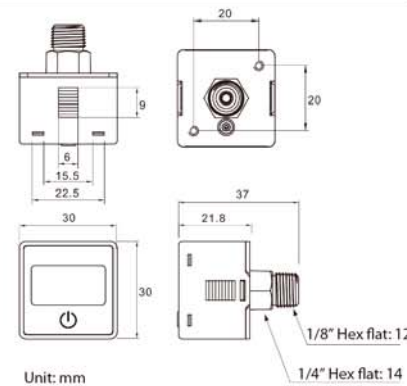


## D. BATTERY STATUS / INSTALLATION

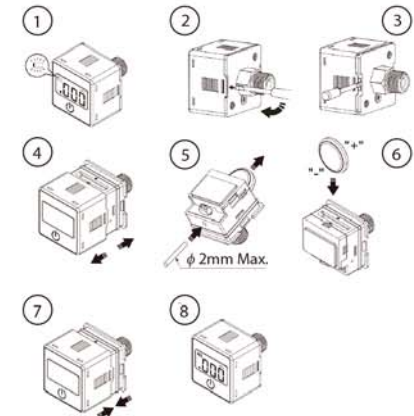
FOLLOW THE STEPS BELOW:

- Using a flat screwdriver size 1.4 ~ 3.0 mm insert into the back of the pressure gauge as pictured. (See figure 2)
- Turn the screwdriver horizontally 90° to separate the case and the base. Repeat the process again for the other side. (See figure 3)
- Carefully remove the outer cover (See figure 4), and follow the diagrams below to replace battery and reassembly. Polarity must be observed, incorrect battery installation will cause malfunction

## C. DIMENSIONS

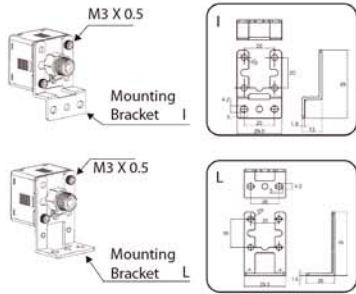


Unit: mm

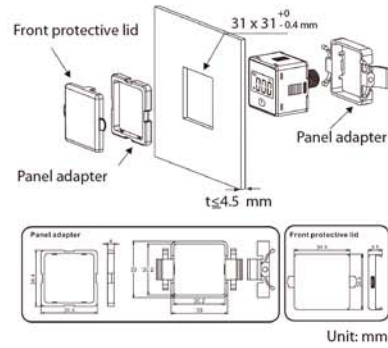


## E. OPTIONAL PART DIMENSIONS

### 1. Mounting Bracket



### 2. Panel Mount

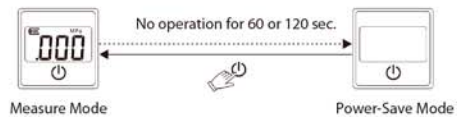


## F. PRESSURE UNIT CONVERSION TABLE

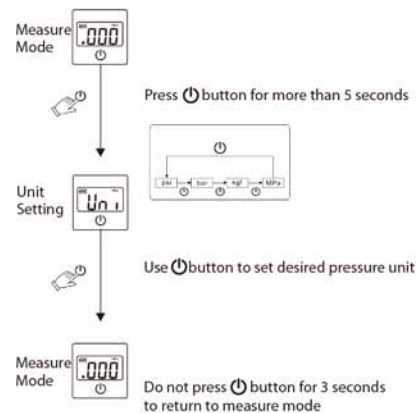
From /To	kPa	MPa	kgf/cm <sup>2</sup>	mmHg	psi	bar
1 kPa	1	0.001000	0.010197	7.500616	0.145038	0.010000
1MPa	1000	1	10.197	7500.616	145.038	10
1kgf/cm <sup>2</sup>	98.0665	0.0980665	1	735.559	14.2233	0.980665
1mmHg	0.13332	0.000133	0.0013595	1	0.019336	0.0013332
1 psi	6.895	0.006895	0.07031	51.7157	1	0.06895
1 bar	100.0000	0.100000	1.01972	750.062	14.5038	1

## G. POWER-SAVE MODE

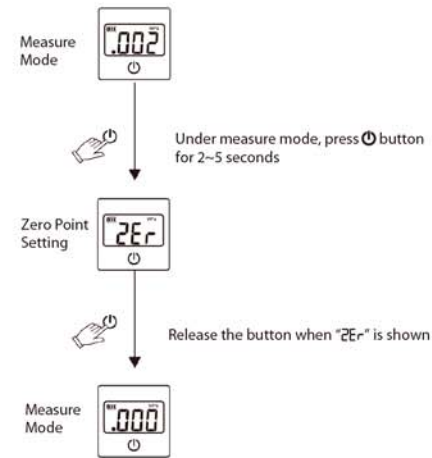
- The pressure gauge will enter power saving mode if the button is not pressed within 60 sec.
- In measure mode, press the button to extend display for 120 sec.



## H. PRESSURE UNIT SETTING MODE

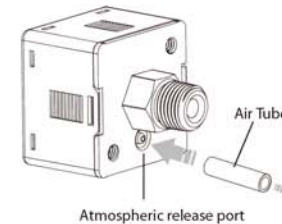


## I. ZERO POINT RESET



## J. DUST AND SPLASH ENVIRONMENT

- To maintain IP65, please insert an air tube (O.D. 4 mm) into atmospheric release port and pipe the other end away from dust / splattering liquid environment
- Use proper air tube dimension of O.D. 4 mm, I.D. 2.5 mm and the length depending on the user's environment



## K. ERROR CODE INSTRUCTION

Error Type	Error Code	Error Condition	Troubleshooting
Residual Pressure Error	Err	During zero reset, ambient pressure is over $\pm 3\%$ F. S.	Change input pressure to ambient pressure and perform zero reset again
Applied Pressure Error	HHH	Supply pressure exceeds the upper limit of pressure setting	Adjust the pressure within operating pressure range
	LLL	Supply pressure exceeds the lower limit of pressure setting	
Battery Error	bRE	When battery level is under 2.40V, the battery symbol and bRE will flash 4 times then enter power save mode	Replace battery