



## Technical Catalogue

### DIGITAL PRESSURE GAUGE / MANOMETER (Highly accurate and microprocessor based) MODEL 876

#### Introduction

Pantech's Digital Pressure GAUGE, model 876 is ideal instrument for measurement of pneumatic pressures or vacuums very precisely. And display the same to the resolution of full 5/6 digits in an integrated numeric/alphanumeric LCD structure. High grade electronics and algorithms allows this instrument to be used as a MASTER GAUGE also, thus allowing to calibrate any other gauge (hydraulic or pneumatic) in its respective range, with the condition that the range to be calibrated should be within the maximum range of manometer. Another virtue of the instrument is that a conversion table can be provided, which can convert digital display from one unit to an equivalent digital display of another unit i.e. Display of 5000mmH2O can be converted to 5Kg/cm2 by pressing just one key and so on. The inter-convertible pressure units are given below:

- 1)Kg/cm2
- 2)Bar
- 3)K Pascal
- 4)PSI
- 5)mm Hg
- 6)mm H2O
- 7)Inch Hg
- 8)Inch H2O
- 9)Newton/cm2

The gauge is available in a head mount weatherproof or explosion proof housing. The unit gets powered up by internal rechargeable 9 V DC battery, and a battery charger will be provided with the unit for battery charging.

The modules incorporate state of the art pressure input integrated circuit (USA make), low drift integrated circuits and industrial grade components. Burn in of each module ensures a long trouble free operation.

#### Basic features of Model 876

- 1)In the basic version, the instrument is fixed up to show PRESSURE in fixed type engineering unit and range. The user has to specify the engineering unit and Pressure range clearly. It is – FIX UNIT, FIX RANGE type gauge. The user can always calibrate the instrument for any subset range of the initial specified range.
- 2)In an extended version, the instrument can be equipped with inter-conversion of units algorithms. Thus the user, by press of a key only can view the pressure in any of the above table mentioned engineering units. It is – MULTI UNIT, FIX RANGE type gauge. The user can always calibrate the instrument for any subset range of the initial specified range.
- 3)The user can view VALUE and its ENGG. UNITS along with with the help of POINTER STRUCTURES / DISPLAY SCROLL MODES / Toggles.
- 4)Inbuilt features like - WAKE / AUTO SLEEP / AUTO ON OFF allows the instrument to take maximum usage of 9V DC battery.
- 5)Backlight can be provided.
- 6)All configurations and calibrations by front keys only
- 7)5-9 LINEARISING STEPS are taken while calibrating the instrument for a particular range. This increases the accuracy of the instrument to the highest possible grade.
- 8)Uses world class sensor diaphragms.

#### Specifications

##### Input

Pressure/Vacuum

##### Power consumption

0.5 VA max.

##### Input range

To be specified (predefined)

##### Ambient temperature

0 – 50 C.

##### Display

5/6 digit LCD

##### Storage temperature

0 – 70 C.

##### Range accuracy

+/- 0.1 to +/- 0.2 % of span

##### Humidity

90% RH (non-condensing)

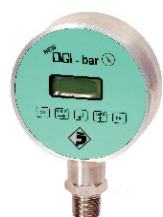
##### Security

##### Power supply

24 V DC (22.5 to 28.0 V DC)  
or Battery operated ( rechargeable battery )



( Numeric LCD display )



( Alpha numeric LCD display )



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Single level password protected.

| Model | Mounting | Input          | Power  | LCD display resolution | Display size |
|-------|----------|----------------|--------|------------------------|--------------|
| 876   | Any      | Press./ Vacuum | 9V DC  | 4 digit                | ½" size      |
|       | Any      | Press./ Vacuum | 24V DC | 4 digit                | ½" size      |

#### Ordering Information

Please confirm the availability of the model by cross checking the table mentioned on the backside.

**Basic Model No.** (Specified by first 3 digits)  
876 -Digital Pressure Gauge

**Enclosure / mouting** (Specified by letter following 3 digits)  
H-Weatherproof / head, pipe  
F-Flameproof / head, pipe  
P-Weatherproof / Panel or mount  
W-Weatherproof / Wall or Surface mount

**Input** (Specified by first digit following the letter)  
1-Pressure  
2-Vacuum

Note: Please specify the input range.

**Unit Display option** (Specified by the third digit)  
1-Single UNIT display only ( FIXED UNIT, FIXED RANGE )  
2-MULTI UNIT display ( MULTI UNIT, FIXED RANGE )



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