



# PDR1000

Digital Pressure Gauge

*'Digital Pressure Test Gauge of  
Best Performance'*

- Field and laboratory calibration of the pressure gauge
- Process precision pressure measurement for outdoors and plant.
- Over pressure and explosion test
- Pressure safety valve(PSV) test
- Pressure valve and Regulator test
- Pipeline static pressure test
- Substitute Chart Recorder
- Filter performance test & Leaks test
- Available to use Analog output when external power use
- RS232 Communication
- 3 years Warranty
- CE Certificated

PDK produced **PDR1000** with PDK's unique pressure calibration technology and production that has best performance in its class.

PDR1000 is digital pressure gauge for precise pressure measurement and test with Built-in various features. QR code has been applied for traceability of the product.

- Simple button touch for various function setting change and unit change
- Durable die-cast outer case
- Range: -1 bar to 1 mbar ~ Max 5000 bar
- Accuracy:  $\pm 0.025\%$  F.S (-10 to 50 °C Temperature)
- Convenient to read and large 5-digit display
- Quick and easy to change the 10 of pressure unit
- RS232 Communication, Analog Output
- Pressure switch test, Peak, Min/Max, Alarm and etc functions

Combine Pressure comparator or hand pump for using pressure calibrator in field and calibration lab for simple pressure measurement and calibration provides an excellent solution.

- Peak function
- External Hold function
- Min/Max function
- Alarm electronic contact function
- Pressure switch test function (NO/NC Cable option)
- Data logging function
- Auto-Off function
- RS232 Communication (Default 19200 bps set)
- Calibration function (Zero, Span)
- Analog output function (Use external power)
- Backlight On/Off
- Auto-Zero function
- Available to use external power (Power supply adaptor option)
- Indicate Overpressure function
- Use QR code for traceability management for product

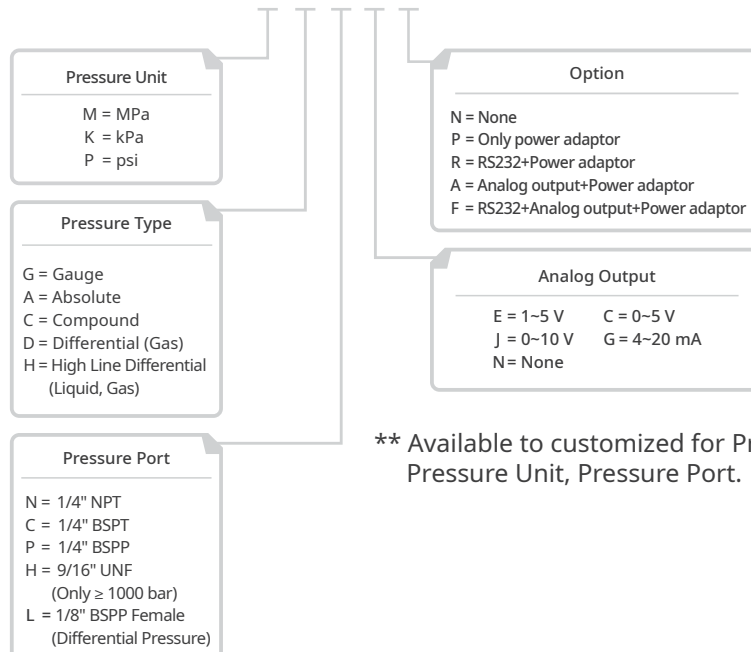


## 01 Specification

Pressure Range	0 ~ 150 mbar ... 5000 bar (Gauge)
	0 ~ 1 bar ... 70 bar (Absolute)
	±150 mbar, -1 bar ~ 1 ... 35 bar (Compound)
	±1 mbar ... ±1000 mbar, -1 ~ 35 bar (Differential)
Accuracy	Gauge : ±0.025% F.S or ±0.05% or ±0.1% of reading
	Absolute, Compound, Differential: ±0.05% F.S
	(Included Nonlinearity, Hysteresis, Repeatability, errors for -10 ~ 50 °C Temperature range)
Over Pressure limit	Refer to below range table
Burst Pressure	
Pressure Unit	mbar, bar, kPa, MPa, kgf/cm <sup>2</sup> , psi, inHg, inH <sub>2</sub> O, mmH <sub>2</sub> O, mmHg
Workable Temperature Range	-20 ~ 70 °C
Storage Temperature Range	-30 ~ 80 °C
Temperature Compensated Range	-10 ~ 50 °C
RS232 Communication	Provided Commands in manual, Available to use communication cable (Option)
Power Requirement	AA Alkaline battery 3 ea, External power supply (Option), Hours of battery use approximately 1000 hours
Media of Use	Gas & Liquid (Use Gas only under 1 bar Range)
Display	5 Digits, Backlight On/Off, Auto Off
Sampling rate	4 Hz (Can be set up to 50 Hz) , Accuracy guarantees are based on 4 Hz
Analog Output (Option)	4 ~ 20 mA , 0 ~ 5 VDC , 1 ~ 5 VDC , 0 ~ 10 VDC
	(Must use external power supply), 0.1% Accuracy
Pressure Port	1/4" BSPP, 1/4" BSPT, 1/4" NPT
	9/16" UNF Cone Threaded (HF4/AF250C, Only ≥ 1000 bar)
	1/8" BSPP Female (Differential)
Data Logging	1 time / 1, 3, 5, 30, 60 second, Store Max 3000 data
Size	Dia. 110 mm x 38 mm , 150 mm Included Pressure Port
Weight	530 g

## 02 Order Information

Ex) PDR1000-70 M G N E N (PDR1000-70MGNN)



\*\* Available to customized for Pressure Range, Pressure Unit, Pressure Port.



03 Pressure Type & Range

Gauge Pressure

Part No.	Pressure Range		Accuracy		Media	Over Pressure limit	Burst Pressure
	SI Unit	bar	of Full Scale	of Reading			
15KG	15 kPa	150 mbar	0.025 %	0.1 %	gas	3 times	4 times
35KG	35 kPa	350 mbar	0.025 %	0.1 %	gas	3 times	4 times
100KG	100 kPa	1 bar	0.025 %	0.1 %	gas / liquid	3 times	4 times
200KG	200 kPa	2 bar	0.025 %	0.1 %	gas / liquid	3 times	4 times
350KG	350 kPa	3.5 bar	0.025 %	0.1 %	gas / liquid	3 times	4 times
700KG	700 kPa	7 bar	0.025 %	0.1 %	gas / liquid	3 times	4 times
2MG	2 MPa	20 bar	0.025 %	0.1 %	gas / liquid	3 times	4 times
3.5MG	3.5 MPa	35 bar	0.025 %	0.1 %	gas / liquid	3 times	4 times
7MG	7 MPa	70 bar	0.025 %	0.1 %	gas / liquid	3 times	4 times
10MG	10 MPa	100 bar	0.025 %	0.1 %	gas / liquid	2 times	4 times
20MG	20 MPa	200 bar	0.025 %	0.1 %	gas / liquid	2 times	4 times
25MG	25 MPa	250 bar	0.025 %	0.1 %	gas / liquid	2 times	4 times
35MG	35 MPa	350 bar	0.025 %	0.1 %	gas / liquid	2 times	4 times
40MG	40 MPa	400 bar	0.025 %	0.1 %	gas / liquid	2 times	4 times
60MG	60 MPa	600 bar	0.025 %	0.1 %	gas / liquid	2 times	4 times
70MG	70 MPa	700 bar	0.025 %	0.1 %	gas / liquid	2 times	4 times
100MG	100 MPa	1000 bar	0.025 %	0.1 %	gas / liquid	1.5 times	2 times
150MG	150 MPa	1500 bar	0.025 %	0.1 %	gas / liquid	1.1 times	1.5 times
250MG	250 MPa	2500 bar	0.05 %	0.1 %	gas / liquid	1.1 times	1.2 times
400MG	400 MPa	4000 bar	0.1 %	n/a	gas / liquid	1.1 times	1.2 times
500MG	500 MPa	5000 bar	0.1 %	n/a	gas / liquid	1.1 times	1.2 times

Absolute Pressure

Part No.	Pressure Range		Accuracy		Media	Over Pressure limit	Burst Pressure
	SI Unit	bar	of Full Scale	of Reading			
100KA	100 kPa a	1 bar	0.05 %	n/a	gas / liquid	3 times	4 times
200KA	200 kPa a	2 bar	0.05 %	n/a	gas / liquid	3 times	4 times
350KA	350 kPa a	3.5 bar	0.05 %	n/a	gas / liquid	3 times	4 times
700KA	700 kPa a	7 bar	0.05 %	n/a	gas / liquid	3 times	4 times
2MA	2 MPa a	20 bar	0.05 %	n/a	gas / liquid	3 times	4 times
3.5MA	3.5 MPa a	35 bar	0.05 %	n/a	gas / liquid	3 times	4 times
7MA	7 MPa a	70 bar	0.05 %	n/a	gas / liquid	2 times	4 times

Compound Pressure

Part No.	Pressure Range		Accuracy		Media	Over Pressure limit	Burst Pressure
	SI Unit	bar	of Full Scale	of Reading			
15KC	±15 kPa	±150 mbar	0.05 %	0.1 %	gas	3 times	4 times
35KC	±35 kPa	±350 mbar	0.05 %	0.1 %	gas	3 times	4 times
100KC	±100 kPa	±1 bar	0.05 %	n/a	gas / liquid	3 times	4 times
200KC	-100 to 200 kPa	-1 to 2 bar	0.05 %	n/a	gas / liquid	3 times	4 times
350KC	-100 to 350 kPa	-1 to 3.5 bar	0.05 %	n/a	gas / liquid	3 times	4 times
700KC	-100 to 700 kPa	-1 to 7 bar	0.05 %	n/a	gas / liquid	3 times	4 times
2MC	-0.1 to 2 MPa	-1 to 20 bar	0.05 %	n/a	gas / liquid	3 times	4 times
3.5MC	-0.1 to 3.5 MPa	-1 to 35 bar	0.05 %	n/a	gas / liquid	3 times	4 times



03 Pressure Type & Range

Differential Pressure

Part No.	Pressure Range		Accuracy		Media	Over Pressure limit	Burst Pressure
	SI Unit	mbar	of Full Scale	of Reading			
±0.1KD	±100 Pa	±1 mbar	0.05 %	n/a	gas	200 times	400 times
±0.25KD	±250 Pa	±2.5 mbar	0.05 %	n/a	gas	100 times	200 times
±1KD	±1 kPa	±10 mbar	0.05 %	n/a	gas	40 times	60 times
±2.5KD	±2.5 kPa	±25 mbar	0.05 %	n/a	gas	20 times	30 times
±7.5KD	±7.5 kPa	±75 mbar	0.05 %	n/a	gas	6 times	25 times
±15KD	±15 kPa	±150 mbar	0.05 %	n/a	gas	3 times	15 times
±35KD	±35 kPa	±350 mbar	0.05 %	n/a	gas	3 times	5 times
±100KD	±100 kPa	±1000 mbar	0.05 %	n/a	gas	3 times	5 times
0.1KD	100 Pa	1 mbar	0.05 %	n/a	gas	200 times	400 times
0.25KD	250 Pa	2.5 mbar	0.05 %	n/a	gas	100 times	200 times
1KD	1 kPa	10 mbar	0.05 %	n/a	gas	40 times	60 times
2.5KD	2.5 kPa	25 mbar	0.05 %	n/a	gas	20 times	30 times
7.5KD	7.5 kPa	75 mbar	0.05 %	n/a	gas	6 times	25 times
15KD	15 kPa	150 mbar	0.05 %	n/a	gas	3 times	15 times
35KD	35 kPa	350 mbar	0.05 %	n/a	gas	3 times	5 times
100KD	100 kPa	1000 mbar	0.05 %	n/a	gas	3 times	5 times

Differential Pressure (High Line: max. 7 MPa line pressure)

Part No.	Pressure Range		Accuracy		Media	Over Pressure limit	Burst Pressure
	SI Unit	mbar	of Full Scale	of Reading			
±7KH	±7 kPa	±70 mbar	0.05 %	n/a	gas/Liquid	10 times	12 times
±35KH	±35 kPa	±350 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
±100KH	±100 kPa	±1000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
±200KH	-100~200 kPa	-1000~ 2000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
±350KH	-100~350 kPa	-1000~ 3500 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
±700KH	-100~700 kPa	-1000~ 7000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
±2MH	-100 kPa~2 MPa	-1000~20000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
±3.5MH	-100 kPa~3.5 MPa	-1000~35000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
7KH	7 kPa	70 mbar	0.05 %	n/a	gas/Liquid	10 times	12 times
35KH	35 kPa	350 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
100KH	100 kPa	1000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
200KH	200 kPa	2000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
350KH	350 kPa	3500 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
700KH	700 kPa	7000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
2MH	2 MPa	20000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times
3.5MH	3.5 MPa	35000 mbar	0.05 %	n/a	gas/Liquid	3 times	4 times



04 Option



External Power Adaptor



RS232C + Power Adaptor  
(RS232 Only)



Multifunctional Cable



Panel Mounted Bracket



Software



Pneumatic Hand Pump  
(Model : 700PTP-1)



Low Pressure Hand Pump  
(Model : 700LTP-1)



Hydraulic Hand Pump  
(Model : 700HTP-2)



Portable Hydraulic Pressure  
Generator / controller  
(Model : PCS-HC)



Portable Pneumatic  
Pressure Calibrator  
(Model : PCS-P100)



Carrying Case

\*\* Specifications subject to change