



CE



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: $\pm 0.02\%$ F.S ~ 0.05% F.S
(-10 to 50 °C Temperature)
- Convenient to read and large 5~6 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



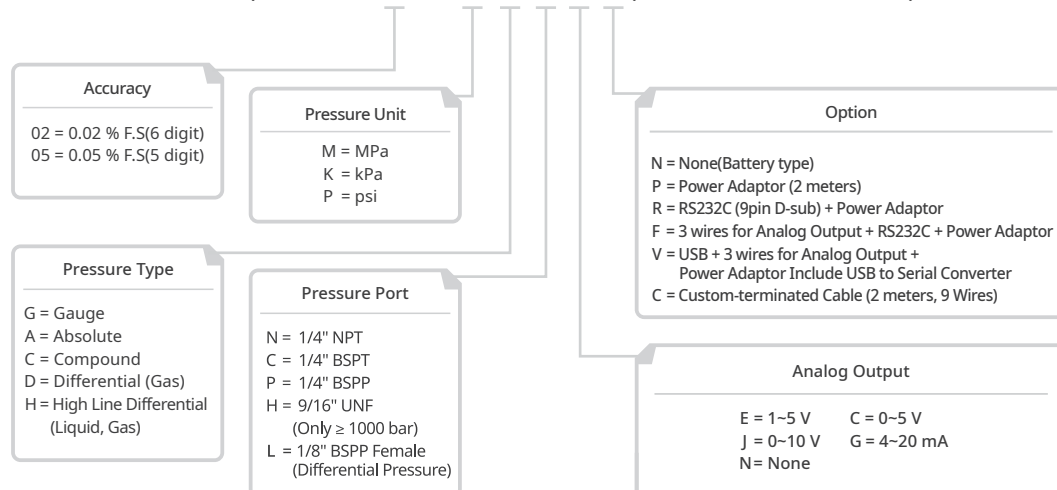
PDR1000

01 Specification

Model		02 (0.02 % F.S, 6 digit)	05 (0.05 % F.S, 5 digit)
Pressure Range	Gauge	0 ~ 150 mbar ... 5000 bar	
	Absolute	0 ~ 1 bar ... 70 bar	
	Compound	±150 mbar, -1 bar ~ 1 ... 35 bar	
	Differential	±1 mbar...±1 bar, ±70 mbar ... 35 bar	
Accuracy (Included Nonlinearity, Hysteresis, Repeatability, errors for -10 ~ 50 °C Temperature range)	Gauge	±0.02% F.S	±0.05% F.S
	Absolute Compound Differential	±0.035% F.S	±0.05% F.S
Over Pressure limit		Refer to below range table	
Burst Pressure			
Pressure Unit		mbar, bar, kPa, MPa, kgf/cm², psi, inHg, inH₂O, mmH₂O, mmHg, mSW, fSW (Only 02 models can display mSW and fSW.)	
Workable Temperature Range		-20 ~ 70 °C	
Storage Temperature Range		-30 ~ 80 °C	
Temperature Compensated Range		-10 ~ 50 °C	
RS232 Communication		Refer to ‘ Programmers reference Manual ’ in PDK website	
Power Requirement		AA Alkaline battery 3 ea, External power supply(Optional), Hours of battery use approximately 1000 hours	
Media of Use		Gas & Liquid (Use Gas only under 1 bar Range)	
Display		6 Digits, Backlight On/Off, Auto Off	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 3wire, 0 ~ 5 VDC , 1 ~ 5 VDC, 0 ~ 10 VDC	
		(Must use external power supply), 0.1% Accuracy	
Pressure Port	Below 1000 bar	1/4" BSPP, 1/4" BSPT, 1/4" NPT	
	Above 1000 bar	9/16" UNF Cone Threaded (HF4/AF250C, Only ≥ 1000 bar)	
	Differential	1/8" BSPP Female (Differential)	
Data Logging		1 time / 1, 3, 5, 30, 60 second, Store Max 10000 data	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) PDR1000-02-70 M G N E N (PDR1000-02-70MGNNEN)



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



PDR1000

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			
			6 digit	5digit				
15KG	15 kPa	150 mbar	0.02 %	0.05 %	n/a	gas	3 times	4 times
35KG	35 kPa	350 mbar	0.02 %	0.05 %	n/a	gas	3 times	4 times
100KG	100 kPa	1 bar	0.02 %	0.05 %	n/a	gas / liquid	3 times	4 times
200KG	200 kPa	2 bar	0.02 %	0.05 %	n/a	gas / liquid	3 times	4 times
350KG	350 kPa	3.5 bar	0.02 %	0.05 %	n/a	gas / liquid	3 times	4 times
700KG	700 kPa	7 bar	0.02 %	0.05 %	n/a	gas / liquid	3 times	4 times
2MG	2 MPa	20 bar	0.02 %	0.05 %	n/a	gas / liquid	3 times	4 times
3.5MG	3.5 MPa	35 bar	0.02 %	0.05 %	n/a	gas / liquid	3 times	4 times
7MG	7 MPa	70 bar	0.02 %	0.05 %	n/a	gas / liquid	3 times	4 times
10MG	10 MPa	100 bar	0.02 %	0.05 %	n/a	gas / liquid	2 times	4 times
20MG	20 MPa	200 bar	0.02 %	0.05 %	n/a	gas / liquid	2 times	4 times
25MG	25 MPa	250 bar	0.02 %	0.05 %	n/a	gas / liquid	2 times	4 times
35MG	35 MPa	350 bar	0.02 %	0.05 %	n/a	gas / liquid	2 times	4 times
40MG	40 MPa	400 bar	0.02 %	0.05 %	n/a	gas / liquid	2 times	4 times
60MG	60 MPa	600 bar	0.02 %	0.05 %	n/a	gas / liquid	2 times	4 times
70MG	70 MPa	700 bar	0.02 %	0.05 %	n/a	gas / liquid	2 times	4 times
100MG	100 MPa	1000 bar	0.02 %	0.05 %	n/a	gas / liquid	1.5 times	2 times
150MG	150 MPa	1500 bar	0.02 %	0.05 %	n/a	gas / liquid	1.1 times	1.5 times
250MG	250 MPa	2500 bar	0.05 %		n/a	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			
			6 digit	5digit				
100KA	100 kPa a	1 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
200KA	200 kPa a	2 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
350KA	350 kPa a	3.5 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
700KA	700 kPa a	7 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
2MA	2 MPa a	20 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
3.5MA	3.5 MPa a	35 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
7MA	7 MPa a	70 bar	0.035 %	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			
			6 digit	5digit				
15KC	±15 kPa	±150 mbar	0.035 %	0.05 %	n/a	gas	3 times	4 times
35KC	±35 kPa	±350 mbar	0.035 %	0.05 %	n/a	gas	3 times	4 times
100KC	±100 kPa	±1 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
200KC	-100 to 200 kPa	-1 to 2 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
350KC	-100 to 350 kPa	-1 to 3.5 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
700KC	-100 to 700 kPa	-1 to 7 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
2MC	-0.1 to 2 MPa	-1 to 20 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times
3.5MC	-0.1 to 3.5 MPa	-1 to 35 bar	0.035 %	0.05 %	n/a	gas / liquid	3 times	4 times



PDR1000

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			
			6 digit	5digit				
±0.1KD	±100 Pa	±1 mbar	0.035 %	0.05 %	n/a	gas	200 times	400 times
±0.25KD	±250 Pa	±2.5 mbar	0.035 %	0.05 %	n/a	gas	100 times	200 times
±1KD	±1 kPa	±10 mbar	0.035 %	0.05 %	n/a	gas	50 times	100 times
±2.5KD	±2.5 kPa	±25 mbar	0.035 %	0.05 %	n/a	gas	20 times	30 times
±7.5KD	±7.5 kPa	±75 mbar	0.035 %	0.05 %	n/a	gas	6 times	25 times
±15KD	±15 kPa	±150 mbar	0.035 %	0.05 %	n/a	gas	3 times	15 times
±35KD	±35 kPa	±350 mbar	0.035 %	0.05 %	n/a	gas	3 times	5 times
±100KD	±100 kPa	±1000 mbar	0.035 %	0.05 %	n/a	gas	3 times	5 times
0.1KD	100 Pa	1 mbar	0.035 %	0.05 %	n/a	gas	200 times	400 times
0.25KD	250 Pa	2.5 mbar	0.035 %	0.05 %	n/a	gas	100 times	200 times
1KD	1 kPa	10 mbar	0.035 %	0.05 %	n/a	gas	50 times	100 times
2.5KD	2.5 kPa	25 mbar	0.035 %	0.05 %	n/a	gas	20 times	30 times
7.5KD	7.5 kPa	75 mbar	0.035 %	0.05 %	n/a	gas	6 times	25 times
15KD	15 kPa	150 mbar	0.035 %	0.05 %	n/a	gas	3 times	15 times
35KD	35 kPa	350 mbar	0.035 %	0.05 %	n/a	gas	3 times	5 times
100KD	100 kPa	1000 mbar	0.035 %	0.05 %	n/a	gas	3 times	5 times

Differential Pressure (High Line: max. 70 bar line pressure)

Part No.	Pressure Range		Accuracy			Media	Over Pressure limit	Burst Pressure
	SI Unit	mbar	of Full Scale		of Reading			
			6 digit	5digit				
±7KH	±7 kPa	±70 mbar	0.035 %	0.05 %	n/a	gas/Liquid	10 times	12 times
±35KH	±35 kPa	±350 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
±100KH	±100 kPa	±1000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
±200KH	-100~200 kPa	-1000~ 2000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
±350KH	-100~350 kPa	-1000~ 3500 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
±700KH	-100~700 kPa	-1000~ 7000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
±2MH	-100 kPa~2 MPa	-1000~20000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
±3.5MH	-100 kPa~3.5 MPa	-1000~35000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
7KH	7 kPa	70 mbar	0.035 %	0.05 %	n/a	gas/Liquid	10 times	12 times
35KH	35 kPa	350 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
100KH	100 kPa	1000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
200KH	200 kPa	2000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
350KH	350 kPa	3500 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
700KH	700 kPa	7000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
2MH	2 MPa	20000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times
3.5MH	3.5 MPa	35000 mbar	0.035 %	0.05 %	n/a	gas/Liquid	3 times	4 times



PDR1000

04 Option



Power Adaptor (2 meters)
(Code "P")



RS232C (9pin D-sub)
+ Power Adaptor (Code "R")



3 wires for Analog Output
+ RS232C + Power Adaptor
(Code "F")



Custom-terminated Cable
(2 meters, 9 Wires)
(Code "C")



USB + 3 wires for Analog Output
+ Power Adaptor Include USB
to Serial Converter (Code "V")



Panel Mounted Bracket
(PDR1000-BK)



Software



Pneumatic Hand Pump
(Model : 700PTP-1)



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



Hydraulic Hand Pump
(Model : 700HTP-2)



Hydraulic High Pressure
Calibration Test Pump
(Model : PTP-H100)



Portable Pneumatic
Pressure Calibrator
(Model : PCS-P100)



Carrying Hard Case

** Specifications subject to change