



PDR500

Digital Pressure Gauge

*'0.1 % Accuracy portable
Digital Pressure Gauge'*

Digital Pressure Gauge **PDR500** maintains 0.1% of accuracy within -10 to 50 °C.

PDR500 is reliable that can measure precision pressure without a separate external power supply in anytime any place, including on-site and laboratory.

PDR500 can check and record the pressure in smart phone with Bluetooth wireless communication.

PDK produced **PDR500** with PDK's unique pressure calibration technology and production that has excellent performance of Micro-processor technologies.

PDR500 has best economic feasibility in its class with precision pressure measure, variable function and wireless communication.

- Range : -1 ~ 0.001 ... 5000 bar
- Accuracy : $\pm 0.1\%$ or $\pm 0.3\%$ or $\pm 0.5\%$ F.S
(-10 to 50 °C Temperature)
- Convenient to read and large 4 1/2 digit display
- Brightness adjustment Display
- Simple button touch for various function setting change and unit change
- Durable die-cast outer case
- Quick and easy to change the pressure unit
- Small size for easy install
- Silicon protection cover included
- Long time battery life
- Class IP 66 Water-proof
- CE Certificated

- Min/Max function
- Data logging function
- Auto-Off function
- Calibration function (Zero, Span)
- Backlight On/Off & Brightness adjustment

01 Options

- RS232 Communication(19200 bps Factory set)
- Analog Output function
(External Power Required)
- Wireless communication (Bluetooth)
/ Free App download (Android only)
- Available to use external power
(Power Adaptor Option)

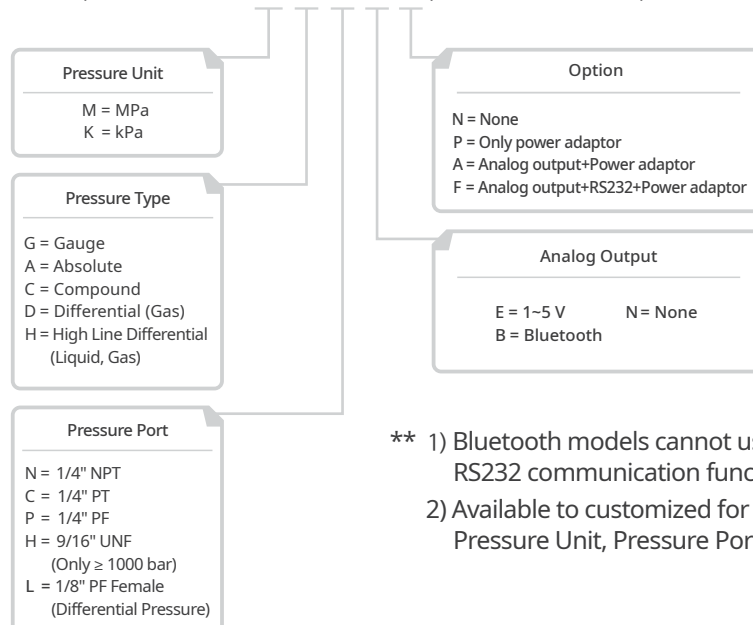


02 Specification

Pressure Range	-1 ~ 0.001 ... 5000 bar (Refer to below range table)
Accuracy	±0.1% F.S (2500 bar) / ±0.3% F.S (4000 bar) / ±0.5% F.S (5000 bar) (Included Nonlinearity, Hysteresis, Repeatability, Errors for -10 ~ 50 °C)
Over Pressure Limit	Refer to below range table
Burst Pressure	
Pressure Unit	mbar, bar, kPa, MPa, kgf/cm ² , psi, inHg, inH ₂ O, mmH ₂ O, mmHg
Workable Range	-20 ~ 70 °C
Storage Range	-30 ~ 80 °C
Compensation range	-10 ~ 50 °C
Power Requirement	AAA Alkaline battery 3 ea, Hours of battery use approximately 500 hours (Lithium Battery - 2000 hours)
Media of Use	Gas & Liquid
Display	4 1/2 Digits, Backlight On/Off, Automatic Off
Display Speed	3 times / second (10 times automatic change if use Peak function)
Pressure Port	1/4" NPT, 1/4" PF, 1/4" PT, 9/16" UNF Cone Threaded female (Over 1000 bar) (Optional)
Weight	350 g
Waterproof	Class IP 66
Size	Dia. 80 mm x 38 mm , 120 mm (Included Pressure Port)
Options	
Data logging	1 time / 1, 3, 5, 30, 60 second, Store Max 10,000 data
Analog output	1 ~ 5 VDC (Must use external power supply), 0.1% accuracy
RS232 communication	Provide commands in manual, Available to use communication cable (Option)
External Power	Power adaptor (12 ~ 32 VDC)
Bracket	Panel mounted Bracket
Wireless Communication	Bluetooth, Free App download (Android only)

03 Order Information

Ex) PDR500 - 70 M G N E N (PDR500-70MGNEN)



** 1) Bluetooth models cannot use Bluetooth functions and RS232 communication functions at the same time.
2) Available to customized for Pressure Range, Pressure Unit, Pressure Port.



04 Pressure Type & Range

Gauge Pressure

Part No.	Pressure Range		Accuracy of Full Scale	Media	Over Pressure limit	Burst Pressure
	SI Unit	bar				
35KG	35 kPa	350 mbar	0.1 %	gas	3 times	4 times
100KG	100 kPa	1 bar	0.1 %	gas / liquid	3 times	4 times
200KG	200 kPa	2 bar	0.1 %	gas / liquid	3 times	4 times
350KG	350 kPa	3.5 bar	0.1 %	gas / liquid	3 times	4 times
700KG	700 kPa	7 bar	0.1 %	gas / liquid	3 times	4 times
2MG	2 MPa	20 bar	0.1 %	gas / liquid	3 times	4 times
3.5MG	3.5 MPa	35 bar	0.1 %	gas / liquid	3 times	4 times
7MG	7 MPa	70 bar	0.1 %	gas / liquid	3 times	4 times
20MG	20 MPa	200 bar	0.1 %	gas / liquid	2 times	4 times
35MG	35 MPa	350 bar	0.1 %	gas / liquid	2 times	4 times
70MG	70 MPa	700 bar	0.1 %	gas / liquid	2 times	4 times
100MG	100 MPa	1000 bar	0.1 %	gas / liquid	1.5 times	2 times
150MG	150 MPa	1500 bar	0.1 %	gas / liquid	1.1 times	1.5 times
250MG	250 MPa	2500 bar	0.2 %	gas / liquid	1.1 times	1.2 times
400MG	400 MPa	4000 bar	0.5 %	gas / liquid	1.1 times	1.2 times
500MG	500 MPa	5000 bar	0.5 %	gas / liquid	1.1 times	1.2 times

Absolute Pressure

Part No.	Pressure Range		Accuracy of Full Scale	Media	Over Pressure limit	Burst Pressure
	SI Unit	bar				
100KA	100 kPa a	1 bar	0.1 %	gas / liquid	3 times	4 times
200KA	200 kPa a	2 bar	0.1 %	gas / liquid	3 times	4 times
350KA	350 kPa a	3.5 bar	0.1 %	gas / liquid	3 times	4 times
700KA	700 kPa a	7 bar	0.1 %	gas / liquid	3 times	4 times
2MA	2 MPa a	20 bar	0.1 %	gas / liquid	3 times	4 times
3.5MA	3.5 MPa a	35 bar	0.1 %	gas / liquid	3 times	4 times
7MA	7 MPa a	70 bar	0.1 %	gas / liquid	3 times	4 times
20MA	20 MPa a	200 bar	0.1 %	gas / liquid	2 times	4 times
35MA	35 MPa a	350 bar	0.1 %	gas / liquid	2 times	4 times
70MA	70 MPa a	700 bar	0.1 %	gas / liquid	2 times	4 times

Compound Pressure

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

04 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	0.1 %	n/a	gas	200 times	400 times
±0.25KD	±250 Pa	±2.5 mbar	0.1 %	n/a	gas	100 times	200 times
±1KD	±1 kPa	±10 mbar	0.1 %	n/a	gas	40 times	60 times
±2.5KD	±2.5 kPa	±25 mbar	0.1 %	n/a	gas	20 times	30 times
±7.5KD	±7.5 kPa	±75 mbar	0.1 %	n/a	gas	6 times	25 times
±15KD	±15 kPa	±150 mbar	0.1 %	n/a	gas	3 times	15 times
±35KD	±35 kPa	±350 mbar	0.1 %	n/a	gas	3 times	5 times
±100KD	±100 kPa	±1000 mbar	0.1 %	n/a	gas	3 times	5 times
0.1KD	100 Pa	1 mbar	0.1 %	n/a	gas	200 times	400 times
0.25KD	250 Pa	2.5 mbar	0.1 %	n/a	gas	100 times	200 times
1KD	1 kPa	10 mbar	0.1 %	n/a	gas	40 times	60 times
2.5KD	2.5 kPa	25 mbar	0.1 %	n/a	gas	20 times	30 times
7.5KD	7.5 kPa	75 mbar	0.1 %	n/a	gas	6 times	25 times
15KD	15 kPa	150 mbar	0.1 %	n/a	gas	3 times	15 times
35KD	35 kPa	350 mbar	0.1 %	n/a	gas	3 times	5 times
100KD	100 kPa	1000 mbar	0.1 %	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	0.1 %	n/a	gas/Liquid	10 times	12 times
±35KH	±35 kPa	±350 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
±100KH	±100 kPa	±1000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
±200KH	-100~200 kPa	-1000~ 2000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
±350KH	-100~350 kPa	-1000~ 3500 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
±700KH	-100~700 kPa	-1000~ 7000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
±2MH	-100 kPa~2 MPa	-1000~20000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
±3.5MH	-100 kPa~3.5 MPa	-1000~35000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
7KH	7 kPa	70 mbar	0.1 %	n/a	gas/Liquid	10 times	12 times
35KH	35 kPa	350 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
100KH	100 kPa	1000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
200KH	200 kPa	2000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
350KH	350 kPa	3500 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
700KH	700 kPa	7000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
2MH	2 MPa	20000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times
3.5MH	3.5 MPa	35000 mbar	0.1 %	n/a	gas/Liquid	3 times	4 times



05 Option



External Power Adaptor



Analog Output
& Power Adaptor



Analog Output & RS232C
& Power Adaptor



Panel mounted Bracket



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
Generator / controller
(Model : PCS-PC)

** Specifications subject to change