



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 : 0 to 35 kPa ~ Max 500 MPa
- 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

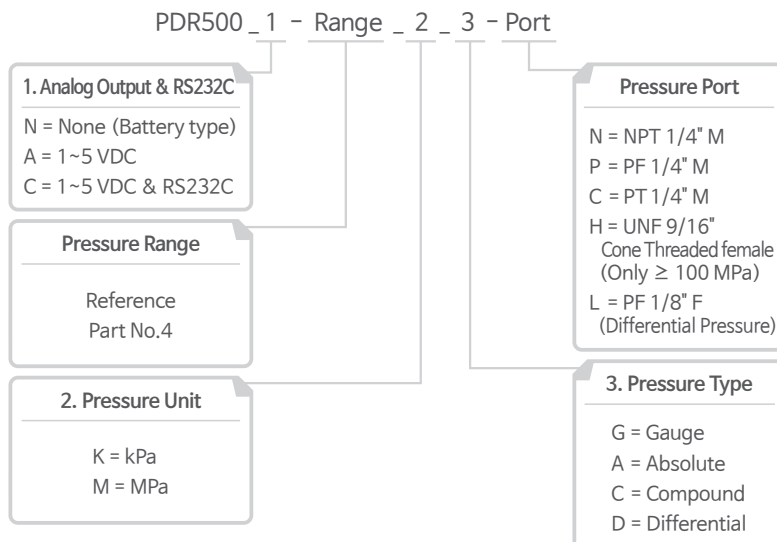
- RS232 Communication (19200 bps Factory set)
- Analog Output function
(External Power Required)
- Wireless communication (Bluetooth)
/ Free App download (Android only)
- Available to use external power
(Power Adaptor Option)



02 Specification

Pressure Range	0 ~ 35 kPa to 0 ~ 250 MPa	0 ~ 400 ... 500 MPa
Accuracy	± 0.1% F.S	± 0.3% F.S (400 MPa) / ± 0.5% F.S (500 MPa)
	(Included Nonlinearity, Hysteresis, Repeatability, Errors for - 10 ~ 50 °C)	
Over Pressure Limit	300 % of FS (Up to 20 MPa), 200 % of FS (Up to 70 MPa), 120 % of FS (Up to 500 MPa)	
Burst Pressure	1,000 % of FS (Up to 20 MPa), 600 % of FS (Up to 35 MPa), 300 % of FS (Up to 70 MPa), 150 % of FS (Up to 500 MPa)	
Pressure Unit	kPa, MPa, kgf/cm ² , psi, mbar, bar, 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	NPT 1/4", PF 1/4", PT 1/4", UNF 9/16" Cone Threaded female (Over 100 MPa) (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 private 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) PDR500N-70MG-N None(Battery type), Range 70 MPa, Gauge Pressure, NPT 1/4"

** 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	Burst Pressure
	SI Unit	bar			
35KG	35 kPa	350 mbar	0.1 %	gas	4 times
100KG	100 kPa	1 bar	0.1 %	gas / liquid	4 times
200KG	200 kPa	2 bar	0.1 %	gas / liquid	4 times
350KG	350 kPa	3.5 bar	0.1 %	gas / liquid	4 times
700KG	700 kPa	7 bar	0.1 %	gas / liquid	4 times
2MG	2 MPa	20 bar	0.1 %	gas / liquid	4 times
3.5MG	3.5 MPa	35 bar	0.1 %	gas / liquid	4 times
7MG	7 MPa	70 bar	0.1 %	gas / liquid	4 times
20MG	20 MPa	200 bar	0.1 %	gas / liquid	4 times
35MG	35 MPa	350 bar	0.1 %	gas / liquid	4 times
70MG	70 MPa	700 bar	0.1 %	gas / liquid	4 times
100MG	100 MPa	1000 bar	0.1 %	gas / liquid	2 times
150MG	150 MPa	1500 bar	0.1 %	gas / liquid	1.5 times
250MG	250 MPa	2500 bar	0.1 %	gas / liquid	1.2 times
400MG	400 MPa	4000 bar	0.3 %	gas / liquid	1.2 times
500MG	500 MPa	5000 bar	0.5 %	gas / liquid	1.2 times

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

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



04 Pressure Type & Range

Differential Pressure						
Part No.	Pressure Range		Accuracy		Media	Burst Pressure
	SI Unit	mbar	of Full Scale	of Reading		
± 0.1KD	± 100 Pa	± 1 mbar	0.1 %	n/a	gas	200 times
± 0.25KD	± 250 Pa	± 2.5 mbar	0.1 %	n/a	gas	100 times
± 1KD	± 1 kPa	± 10 mbar	0.1 %	n/a	gas	50 times
± 2.5KD	± 2.5 kPa	± 25 mbar	0.1 %	n/a	gas	30 times
± 2KD	± 7.5 kPa	± 75 mbar	0.1 %	n/a	gas	15 times
± 15KD	± 15 kPa	± 150 mbar	0.1 %	n/a	gas	15 times
± 35KD	± 35 kPa	± 350 mbar	0.1 %	n/a	gas	5 times
± 100KD	± 100 kPa	± 1000 mbar	0.1 %	n/a	gas	5 times
0.1KD	100 Pa	1 mbar	0.1 %	n/a	gas	200 times
0.25KD	250 Pa	2.5 mbar	0.1 %	n/a	gas	100 times
1KD	1 kPa	10 mbar	0.1 %	n/a	gas	50 times
2.5KD	2.5 kPa	25 mbar	0.1 %	n/a	gas	30 times
2KD	7.5 kPa	75 mbar	0.1 %	n/a	gas	15 times
15KD	15 kPa	150 mbar	0.1 %	n/a	gas	15 times
35KD	35 kPa	350 mbar	0.1 %	n/a	gas	5 times
100KD	100 kPa	1000 mbar	0.1 %	n/a	gas	5 times

05 Option



External Power Adaptor



Analog Output
& Power Adaptor



Analog Output & RS232C
& Power Adaptor



Panel mounted Bracket



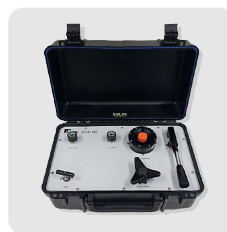
Pneumatic Hand Pump
(Model : 700PTP-1)



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