Additel 680P
Digital Pressure Gauges

- Stainless steel housing
- Fully welded sensor
- Backlight display
- Intrinsically safe (ADT680PEx)
- IP67 rated

OVERVIEW

Additel's 680P Series Digital Pressure Gauges are designed to be used in panel mount applications. With features such as datalogging and Bluetooth technology included, you will find these gauges to be high in value at a reasonable cost. These durable IP67 rated gauges have been built with outdoor elements in mind and are the perfect fit for field work as well as in the laboratory. If you are working in an intrinsically sensitive area, look to our Ex-versions of this amazing digital pressure gauge to provide that extra level of safety in sensitive areas.

Durable:

The model ADT680P has been built with the finest materials to ensure that is can hold up to elements. Everything from the stainless outer shell to the innermost sensor design have been optimized to ensure that this gauge will keep you informed with on-demand and logged pressure readings for years to come. The IP67 rating ensures that dusty and wet environments won't hamper these gauges ability to perform while the shock and vibration resistance (5g vibration 10g shock) coupled with the corrosion resist wetted parts help to protect the inner workings of these durable.

Easy to use:

Technicians often have tight schedules and heavy workloads; this leaves little extra time for correcting mistakes or doing rework. The ADT680P series products are carefully designed with button functions and menus that are smooth and easy to use which saves on valuable time. The display is clear in bright sunlight, and the backlight can be turned on with a one-button press for use in low light situations. Pressure value can be displayed in large fonts and can be read from a few meters away making this gauge the perfect device for no-nonsense measurement, calibration, and verification work.

Easy to maintain:

The ADT680P is designed with membrane buttons, which can simply be wiped clean for quick and simple cleaning. Coupled with the extra-long battery life of these easy-to-use gauges, you will find that maintenance is minimal and infrequent.

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SPECIFICATIONS

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Model	ADT680P	ADT680PEx
Description	Digital Pressure Gauge	Intrinsically Safe Digital Pressure Gauge
Intrinsic Safety & European Compliance	CE marked	CE marked
		EU: II 1G EX ia IIC T4 Ga T4 at -20~50°C
		North America: CLASS I, Division 1, Groups A, B, C and D, T4 CLASS I, Zone 0, AEx ia IIC T4 Ga T4 at -20~50°C
		International:EX ia IIC T4 Ga T4 at -20~50°C
Accuracy	0.02%, 0.05%, 0.1%, 0.2% of full span (For detailed accuracy, please see pressure range table)	
Gauge Types	Gauge pressure, compound pressure	
Installation direction	Installed axially	
Display	Description: Wide viewing angle FSTN segment code LCD , three partition design	
	White backlight, the lighting time can be set: ON, 15 seconds, 30 seconds, 45 seconds, 60 seconds, the default is 15 seconds	
	4~5 digit display can be switched,numeral display height: 16mm (0.62")	
Display Rate	3 readings per second in low power mode (default setting) Adjustable from 10 readings per second to 1 reading every 10 seconds	
Pressure Units	Pa, kPa, MPa, psi, bar, mbar, kgf/cm^2, %, inH_2O@4°C, mmH_2O@4°C, inHg@0°C, mmHg@0°C	
	6 engineering water columns:inH2O(20°C), inH2O(60°F), mmH2O(20°C), mmH2O(15°C), ftH2O(60°F), ftH2O(4°C)	
	1 custom unit: identified by the USER icon, and the conversion coefficient can be set through Additel-Link	
Environmental	Compensated Temperature: 14°F to 122°F (-10°C to 50°C)	
	Operating Temperature: -4°F to 122°F (-20°C to 50°C)	
	Storage Temperature: -40°F to 167°F (-40°C to 75°C)	
	Humidity: 5%-95%,no condensation Working altitude: <3,000 meters	
Pressure Port	≤15,000 psi: 1/4NPT male, 1/2NPT male, 1/4BSP male, 1/2BSP male, M20×1.5 male	
	>15,000 psi: 1/4HP female or 1/4HP male *1/4HP female: Autoclave F-250-C, 9/16" - 18 UNF-2B *1/4HP male: Autoclave M-250-C, 9/16" - 18 UNF-2A	
Power	External power supply through RS232 cable, and 3 AA alkaline batteries can also be installed as backup power	
	Battery life: 1. Super stable mode[1]: 4000 hours (3 reading/s, default), 1000 hours (10 reading/s) 2. Low power mode[2]: 5000 hours (2 reading/s), 9000 hours (1 reading/s), 18000 hours (1 reading/10s)	
	Power auto-off: 120, 90, 60, 45, 30, 15 minutes auto-off options	
	The factory default of power auto-off feature is inactive	
Enclosure	Case material:304 SS; Front panel material: anti-static PET; Rubber boot material (optional): anti-static TPU	
	Wetted parts material: 316L SS	
	Dimension: Ø3.62" x 4.52"depth, flange Ø5.43" (Ø92mm x115 mm depth, flange Ø138mm)	
	Weight: 1.32 lbs (0.6 kg)	
Compliance	Protection Level: IP67	
	Vibration: 5g (20-2000 Hz)	
	Shock Resistance: 10g	
Data Logging (Optional)	Data storage: 800,000 records (time and pressure) or 400,000 records (time, pressure and temperature)	
	Rate: user-selectable from 1 to 99,999 second intervals	
Communication	Bluetooth (BLE5.3), RS232 *(Do not use the RS-232 connector in a hazardous area)	
Warranty	1 year	

Note:
[1] The pressure sensor has been powered continuously when the gauge is on, to improve the measurement resolution and reduce the impact of ambient humidity.
[2] The pressure sensor will be powered off after each sampling, to improve the continuous working hours.

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PRESSURE RANGE

Gauge Pressure [1]						
P/N	Pressure Range		Media[2]	Accuracy		Burst Pressure
	(psi)	(bar)		%FS	%RD[3]	
V15	-15	-1	G, L[4]	0.02, 0.05, 0.1, 0.2	N/A	3×
GP5	5	0.35	G, L[4]	0.02, 0.05, 0.1, 0.2	0.1	3×
GP10	10	0.7	G, L[4]	0.02, 0.05, 0.1, 0.2	0.1	3×
GP15	15	1.0	G, L[4]	0.02, 0.05, 0.1, 0.2	0.1	3×
GP30	30	2.0	G, L[4]	0.02, 0.05, 0.1, 0.2	0.1	3×
GP50	50	3.5	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP100	100	7.0	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP150	150	10	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP300	300	20	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP500	500	35	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP600	600	40	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP1K	1,000	70	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP1.5K	1,500	100	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP2K	2,000	140	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP3K	3,000	200	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP5K	5,000	350	G, L	0.02, 0.05, 0.1, 0.2	0.1	3×
GP10K	10,000	700	G, L	0.02, 0.05, 0.1, 0.2	0.1	1.5×
GP15K	15,000	1,000	G, L	0.05, 0.1, 0.2	0.1	1.5×
GP20K	20,000	1,400	G, L	0.05, 0.1, 0.2	N/A	1.5×
GP25K	25,000	1,600	G, L	0.05, 0.1, 0.2	N/A	1.5×
GP30K	30,000	2,000	G, L	0.05, 0.1, 0.2	N/A	1.5×
GP36K	36,000	2,500	G, L	0.05, 0.1, 0.2	N/A	1.5×
GP40K	40,000	2,800	G, L	0.05, 0.1, 0.2	N/A	1.35×
GP50K	50,000	3,500	G, L	0.1, 0.2	N/A	1.2×
GP60K	60,000	4,200	G, L	0.1, 0.2	N/A	1.1×

[1] Sealed gauge pressure for above 1,000 psi
[2] G=Gas, L=Liquid
[3] %RD accuracy: 0% to 20% of range: ± (0.02% of full span),20% to 110% of range: ± (0.1% of reading)
vacuum: ± (0.25% of FS), FS=-14.5psi
[4] 0.02%FS for gas media only

Compound Pressure						
P/N	Pressure Range		Media [1]	Accuracy		Burst Pressure
	(psi)	(bar)		%FS[2]	%RD[3]	
CP5	±5	±0.35	G, L	0.1, 0.2	N/A	3×
CP10	±10	±0.7	G, L	0.05, 0.1,0.2	0.2	3×
CP15	±15	±1	G, L	0.05, 0.1, 0.2	0.2	3×
CP30	-15 to 30	-1 to 2	G, L	0.05, 0.1, 0.2	0.2	3×
CP50	-15 to 50	-1 to 3.5	G, L	0.05, 0.1, 0.2	0.2	3×
CP100	-15 to 100	-1 to 7	G, L	0.05, 0.1, 0.2	0.2	3×
CP150	-15 to 150	-1 to 10	G, L	0.05, 0.1, 0.2	0.2	3×
CP300	-15 to 300	-1 to 20	G, L	0.05, 0.1, 0.2	0.2	3×
CP500	-15 to 500	-1 to 35	G, L	0.05, 0.1, 0.2	N/A	3×
CP600	-15 to 600	-1 to 40	G, L	0.05, 0.1, 0.2	N/A	3×
CP1K	-15 to 1K	-1 to 70	G, L	0.05, 0.1, 0.2	N/A	3×

[1] G=Gas, L=Liquid
[2] FS specification applies to the span of the range
[3] %RD accuracy: 0% to 20% of range: ± (0.02% of full span),20% to 110% of range: ± (0.2% of reading)
vacuum: ± (0.25% of FS), FS=-14.5psi

Barometric Pressure					
P/N	Pressure Range		Media[1]	Annual Accuracy	Burst Pressure
	Low	High			
BP	60 kPa	110 kPa	G	±55Pa	3×
BPH	60 kPa	110 kPa	G	±22Pa	3×

[1] G=Gas

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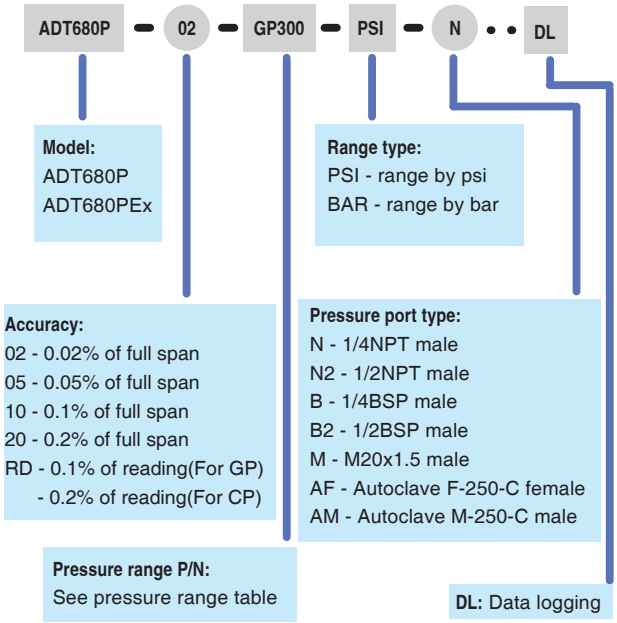
ORDERING INFORMATION

Model Number



Accessories Included

AA alkaline battery (3 pcs)
ISO 17025 accredited calibration certificate

Optional Accessories

Model number	Description
9530-BASIC	Additel Acal Automated calibration software with asset management, basic version
9530-NET	Additel Acal Automated calibration software with asset management, network version, Includes server installation and 1 user license
9502	Additel Log II data logging software (PC)
9814-X	Power supply kit (including power adapter and RS232 communication line)
9530-PRO	Additel Acal Automated calibration software with asset management, professional version for single PC
9050	USB to RS232 (DB9/M) Adapter
9050-EXT	RS 232 (DB9/M) extension cable, 9 feet

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