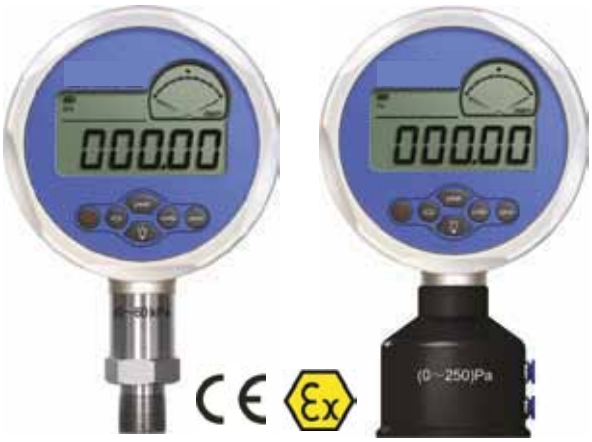
Digital Pressure Gauges



OVERVIEW

With advanced microprocessor technology and state-of-the-art silicon pressure sensors, the ADT681 series digital pressure gauges provide an accurate, reliable, and economic solution for wide range of pressure applications. They are loaded with functionality and remarkably easy to use. To reach the best performance, every silicon pressure sensor in gauges has been specially aged, tested and screened before assembly. ADT681 series digital pressure gauges are unmatched in performance and reliability. Best of all, they are surprisingly affordable.

FEATURES

- 0.025% full scale accuracy (-02)
- 0.05% full scale accuracy (-05)
- 0.1% full scale accuracy (-10)
- 0.2% full scale accuracy (-20)
- Pressure ranges to 36,000 psi (2500 bar)
- Fully temperature compensated accuracy from 14° F to 122° F (-10° C to 50° C)
- Up to eleven selectable pressure units
- Large, easy to read display with 5-digit resolution
- Back lighted display
- % pressure indication with fan-shaped graph scale for visual reference
- Display flash warning when pressure over 120% of FS
- ATEX certified intrinsically safe
- NIM traceable calibration certificate (optional)
- 9V battery power or AC adapter (optional)

APPLICATIONS

Precision pressure measurement
Field gauge calibration
Pressure safety valve (PSV) testing
Pressure regulator testing

SPECIFICATIONS

› Model
: Regular gauge
: ATEX certified intrinsically safe

› Ac curacy
(IS)-02: 0.025% of full scale
(IS)-05: 0.05% of full scale
(IS)-10: 0.1% of full scale
(IS)-20: 0.2% of full scale
(For detail accuracy, please see pressure range table)

› Gauge types
Gauge pressure
Compound Pressure
Absolute pressure
Differential pressure

› Pressure Ranges

Gauge Pressure [1]					
P/N	Pressure Range (psi)	Pressure Range (bar)	Media [2]	Accuracy (% FS)	Burst Pressure
V15	-15	-1.0	G	0.025 (0.05, 0.1, 0.2)	3 X
GP2	2	0.16	G	0.05 (0.1, 0.2)	3 X
GP5	5	0.35	G	0.025 (0.05, 0.1, 0.2)	3 X
GP10	10	0.7	G	0.025 (0.05, 0.1, 0.2)	3 X
GP15	15	1.0	G , L [3]	0.025 (0.05, 0.1, 0.2)	3 X
GP30	30	2.0	G , L [3]	0.025 (0.05, 0.1, 0.2)	3 X
GP50	50	3.5	G , L	0.025 (0.05, 0.1, 0.2)	3 X
GP100	100	7.0	G , L	0.025 (0.05, 0.1, 0.2)	3 X
GP300	300	20	G , L	0.025 (0.05, 0.1, 0.2)	3 X
GP500	500	35	G , L	0.025 (0.05, 0.1, 0.2)	3 X
GP1K	1000	70	G , L	0.025 (0.05, 0.1, 0.2)	3 X
GP3K	3000	200	G , L	0.025 (0.05, 0.1, 0.2)	3 X
GP5K	5000	350	G , L	0.025 (0.05, 0.1, 0.2)	3 X
GP10K	10000	700	G , L	0.025 (0.05, 0.1, 0.2)	2 X
GP15K	15000	1000	G , L	0.1 (0.2)	2 X
GP25K	25000	1600	G , L	0.1 (0.2)	1.5 X
GP30K	30000	2000	G , L	0.1 (0.2)	1.5 X
GP36K	36000	2500	G , L	0.1 (0.2)	1.5 X

Note:
[1]. Sealed gauge pressure for above 1000 psi
[2]. G=Gas, L=Liquid
[3]. 0.025% FS for gas media only

Digital Pressure Gauges

Absolute Pressure					
P/N	Pressure Range (psi)	Pressure Range (bar)	Media	Accuracy (% FS)	Burst Pressure
AP5	5	0.35	G	0.1 (0.2)	3 X
AP10	10	0.7	G	0.1 (0.2)	3 X
AP15	15	1.0	G	0.1 (0.2)	3 X
AP30	30	2.0	G	0.1 (0.2)	3 X
AP50	50	3.5	G	0.1 (0.2)	3 X
AP100	100	7.0	G , L	0.1 (0.2)	3 X
AP300	300	20	G , L	0.1 (0.2)	3 X
AP500	500	35	G , L	0.1 (0.2)	3 X
AP1K	1000	70	G , L	0.1 (0.2)	3 X
AP3K	3000	200	G , L	0.1 (0.2)	3 X
AP5K	5000	350	G , L	0.1 (0.2)	3 X
Differential Pressure					
P/N	Pressure Range (inH_2O)	Pressure Range (mbar)	Media	Accuracy (% FS)	Burst Pressure
DP1	1	2.5	G	0.4	100 X
DP2	2	5.0	G	0.2	100 X
DP5	5	10	G	0.1	50 X
DP10	10	25	G	0.1	20 X
DP20	20	50	G	0.05	20 X
DP30	30	100	G	0.05	20 X
Compound Pressure					
P/N	Pressure Range (psi)	Pressure Range (bar)	Media	Accuracy (%FS)	Burst Pressure
CP2	±2	±0.16	G	0.05 (0.1, 0.2)	3X
CP5	±5	±0.35	G	0.025(0.05,0.1,0.2)	3X
CP10	±10	±0.7	G	0.025(0.05,0.1,0.2)	3X
CP15	±15	±1	G	0.025(0.05,0.1,0.2)	3X
CP30	-15 to 30	-1 to 2	G	0.025(0.05,0.1,0.2)	3X

› Display
Description: 5 full digit FSTN LCD
Display rate: 3 readings per second (Default setting)
Adjustable from 10 readings per second to 1 reading every ten seconds
Numeral display height: 16.5mm (0.65”)

› Fan-shaped Graph Scale
Similar to analog dial, including pressure swing, % indication with fan-shaped graph scale for visual reference, low/high alarm

› Pressure Units
Pa, kPa, MPa, psi, bar, mbar, kgf/cm^2, inH_2O, mmH_2O, inHg, mmHg

› Environmental
Compensated Temperature: 14° F to 122° F (-10° C to 50° C)
Operating Temperature*: 14° F to 122° F (-10° C to 50° C)
*0.025%FS accuracy guaranteed only over the ambient temperature range of 68° F to 79° F (20° C to 26° C)
Storage Temperature: -4° F to 158° F (-20° C to 70° C)
Humidity: <95%

› Media Compatibility
(0 – 30) psi: Clean dry non-corrosive gases
(50 – 36,000) psi: media compatible with 316L SS

› Pressure Port
¼"NPT(≤15,000psi)
Autoclave F-250-C, 9/16" - 18 UNF female or Autoclave M-250-C, 9/16"-18 UNF male (>15,000psi)
0.156 inch (4mm) test hose (for differential pressure)
Other connections available per request

› Power
Battery: One 9V alkaline battery (included)
Battery life: 300 hours (10 readings/s), 600 hours (3 reading/s), or 6000 hours (1 reading/10s)
Power auto-off: 60 minutes power auto-off. Auto-off may be disable
External power: 110/220V external power adapter (optional)
(Do not use the external power adapter in a hazardous atmosphere)

› Enclosure
Case material: Aluminum alloy
Wetted parts: 316L SS
Dimension: 120mm diameter X 40mm depth
Weight: 0.6kg

› Intrinsic Safety and European Compliance
CE marked
ATEX certified intrinsically safe (ConST 211IS)

› Communication
RS232 (Do not use the RS-232 connector in a hazardous atmosphere)

ORDERING INFORMATION

Model Number

–02 –GP300 –PSI – N

Model:
C
C

Accuracy:
02-0.025% of full scale
05-0.05% of full scale
10-0.1% of full scale
20-0.2% of full scale
40-0.4% of full scale

Pressure range P/N:
See pressure range table

Range type:
PSI-range by psi
BAR-range by bar
H_2O-range by inH_2O

Pressure port type:
N- ¼" NPT male
AF-AutoclaveF-250-C
AM-AutoclaveM-250-C
X-Customize

Optional Accessories

Model Number	Description
9812	110V/220V external power adapter (DC 9V) for digital pressure gauge
9902	Carrying case for digital pressure gauge (up to 4 pcs ConST211)
9101	NIM traceable calibration certificate for series gauges(≤10,000psi)
9102	NIM traceable calibration certificate for series gauges(>10,000psi)
9502	Log II real time logging and graphical software

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