

Additel 680A

Digital Pressure Gauges



- Pressure ranges up to 60,000 psi (4,200 bar)
- 0.1% or 0.2%FS accuracy
- 400,000 data logging records
- Intrinsically safe (ADT680AEx)
- IP67, Stainless steel shell, fully welded sensor
- Battery life up to 4000 hours
- Large, easy-to-read display
- Backlit display
- Bluetooth and RS232 capable
- Communication with Additel's Link Mobile App



ADT680A&ADT680AEx with data logging and Bluetooth

OVERVIEW

Additel's 680A Series Digital Pressure Gauges are designed with a wide range of pressure measurement and calibration applications in mind. 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 when accuracy and dependability are a must. 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.

Durability

The model ADT680A has been built with the finest materials to ensure that it can hold up to the elements. Everything from the stainless steel 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 resistant wetted parts help to protect the inner workings of these durable Additel gauges.

Easy-to-use






Technicians often have tight schedules and heavy workloads, which leaves little extra time for correcting mistakes or doing rework. The ADT680A prevents these errors with button functions that are smooth and easy to use. 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. The 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 ADT680A is designed with membrane buttons, making them easy to clean and maintain. Coupled with the extra-long battery life of these easy-to-use gauges, you will find that maintenance is minimal and infrequent.



SPECIFICATIONS

| Model | ADT680A | ADT680AEx |
|--|---|---|
| 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 (For detailed accuracy, please see pressure range table) | 0.1% , 0.2% of full span | |
| Gauge Types | Gauge pressure and compound pressure | |
| Display | Description: Wide viewing angle FSTN segment code LCD, three partition design | |
| | White backlight | |
| | 4 or 5 digit display (switchable). Numeral display height: 14.5mm (0.57") | |
| Pressure Units | Pa, kPa, MPa, psi, bar, mbar, kgf/cm ² , %, inH ₂ O@4°C, mmH ₂ O@4°C, inHg@0°C, mmHg@0°C | |
| | 6 engineering water columns: inH ₂ O(20°C) , inH ₂ O(60°F) , mmH ₂ O(20°C) , mmH ₂ O(15°C) , ftH ₂ O(60°F) , ftH ₂ O(4°C) | |
| | 1 custom unit: identified by the USER icon. The conversion coefficient can be set via Additel Link mobile app | |
| 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: <3000 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 | 3 pcs 9V alkaline battery (included), it can also be powered externally through the RS232 cable | |
| | Power auto-off: 120, 90, 60, 45, 30, 15, minute auto-off options | |
| | The factory default of power auto-off feature is inactive | |
| Enclosure | Shell material: 304 SS | |
| | Wetted parts material: 316L SS | |
| | Dimension: Ø4.13" x 1.83" x 5.84"(105mm x 46.5 mm x 148.5 mm) | |
| | Weight: 1.27 lbs (0.58 kg) | |
| Compliance | Protection Level: IP67(working media is liquid) | |
| | Vibration: 5 g (20-2000 Hz) | |
| | Shock Resistance: 10 g | |
| 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, RS232 *(Do not use the RS-232 connector in a hazardous areas) | |
| Calibration | ISO 17025 Accredited Calibration Certificate with data | |
| Warranty | 1 year | |

Note: Do not connect to the RS232 port in hazardous areas, and do not replace batteries in hazardous areas.



Metrology Made Simple

PRESSURE RANGE

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

[1] Sealed gauge pressure for above 1,000 psi

[2] G=Gas, L=Liquid

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

[1] G=Gas, L=Liquid

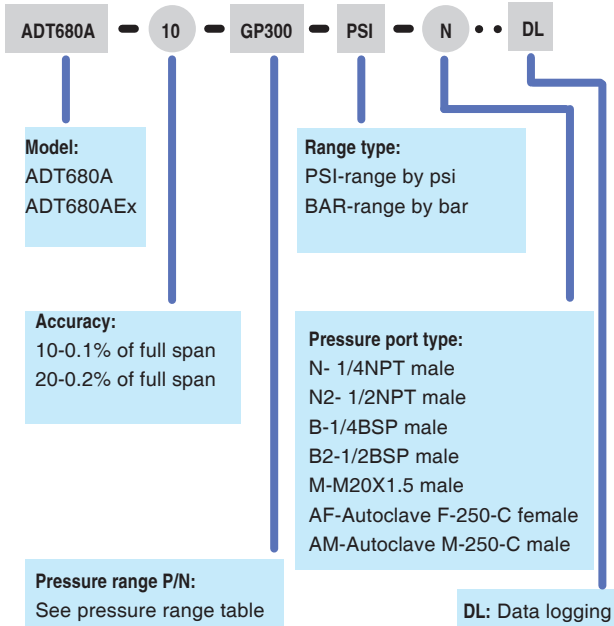
[2] FS specification applies to the span of the range



Metrology Made Simple

ORDERING INFORMATION

Model Number



Accessories Included

| |
|--|
| Rubber boot |
| AA alkaline battery (3 pc) |
| ISO 17025 accredited calibration certificate |

Optional Accessories

| Model number | Description |
|--------------|---|
| 9258 | Rubber Boot for 680A gauge(Blue) |
| 9259 | Rubber Boot for 680AEx & 601Ex gauge (Red) |
| 9040 | Hanging strap with magnet |
| 9257 | Field rain cover |
| 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 |
| 9814-X | Power supply kit (including power adapter and RS232 communication line) |
| 9050-EXT | RS 232 (DB9/M) extension cable, 9 feet |
| 9919-1 | Carrying case for 1 digital pressure gauge |