

ADT 672

Digital Pressure Calibrator

OVERVIEW

With advanced microprocessor technology and state-of-the-art silicon pressure sensors, the ADT 672 series precision pressure calibrators provide a pressure calibration solution for gauges, transmitters, and switches over a wide pressure range. The ADT672 is a very portable device and cannot only measure pressure precisely with a built-in pressure sensor, but can also read the current or mV produced by the transducer, and can even supply an excitation voltage to power sensors or transmitters during calibration. In order to reach 0.025% F. S. accuracy over ranges to 10,000 psi (700 bar) and 0.1% F. S. accuracy over range to 36,000 psi (2,500 bar), every silicon pressure sensor in our gauges have been specially aged, tested and screened before assembly. ADT 672 series precision pressure calibrators are unmatched in performance and reliability.



Gauge pressure

Differential pressure

- Pressure ranges to 36,000 psi (2500 bar)
- Hart Communication capability
- Measure mA or V, and provides 24V loop power
- Easy-to-use, inexpensive pressure calibrator with uncertainty better than 0.025%FS

FEATURES

- Pressure measurement uncertainty:
ADT 672-02: 0.025% FS
ADT 672-05: 0.05% FS
- Pressure ranges to 36,000 psi (2500 bar)
- Measure mA or V with 0.02% RD + 0.003%FS accuracy
- Power transmitters during test using 24V loop supply
- Pressure switch test
- Hart Communication capability
- Advanced temperature compensation
- Dual readout
- Min/Max/Hold to capture changing measurements
- Data logging
- Large, easy to read display with 6-digit resolution
- Back lighted display
- Rechargeable battery or AC adapter
- NIST traceable calibration with data (Included)

SPECIFICATIONS

- **Accuracy**
ADT 672-02: 0.025% of full scale
ADT 672-05: 0.05% of full scale
- **Gauge Types**
Gauge pressure
Compound Pressure
Absolute pressure
Differential pressure
- **Display**
Description: Dual-line 6 full digit FSTN LCD with LED Backlight
Display rate: 3.5 readings per second (Default setting)
Numeral display height: 16.5mm (0.65")
- **Pressure Units**
Pa, kPa, MPa, psi, bar, mbar, inH₂O, mmH₂O, inHg, mmHg, kgf/cm²
- **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)

SPECIFICATIONS

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 Ranges

Gauge Pressure					
P/N	Pressure Range (psi)	Pressure Range (bar)	Media ^[2]	Accuracy (% FS)	Burst Pressure
V15	-15	-1.0	G	0.025 (0.05)	3 X
GP2	2	0.16	G	0.025 (0.05)	3 X
GP5	5	0.35	G	0.025 (0.05)	3 X
GP10	10	0.7	G	0.025 (0.05)	3 X
GP15	15	1.0	G,L ^[3]	0.025 (0.05)	3X
GP30	30	2.0	G,L ^[3]	0.025 (0.05)	3X
GP50	50	3.5	G , L	0.025 (0.05)	3X
GP100	100	7.0	G , L	0.025 (0.05)	3X
GP300	300	20	G , L	0.025 (0.05)	3X
GP500	500	35	G , L	0.025 (0.05)	3X
GP600	600	40	G , L	0.025 (0.05)	3X
GP1K	1000	70	G , L	0.025 (0.05)	3X
GP2K	2000	140	G , L	0.025 (0.05)	3X
GP3K	3000	200	G , L	0.025 (0.05)	3X
GP5K	5000	350	G , L	0.025 (0.05)	3X
GP10K	10000	700	G , L	0.025 (0.05)	2X
GP15K	15000	1000	G , L	0.1	2X
GP25K	25000	1600	G , L	0.1	1.5X
GP30K	30000	2000	G , L	0.1	1.5X
GP36K	36000	2500	G , L	0.1	1.5X

Note: [1]. Sealed gauge pressure for above 1000 psi

[2]. G=Gas, L=Liquid (please specify media type when place order)

[3]. 0.025% FS for gas media only

Compound Pressure					
P/N	Pressure Range (psi)	Pressure Range (bar)	Media	Accuracy (% FS)	Burst Pressure
CP2	±2	±0.16	G	0.05	3X
CP5	±5	±0.35	G	0.025 (0.05)	3X
CP10	±10	±0.7	G	0.025 (0.05)	3X
CP15	±15	±1	G	0.025 (0.05)	3X
CP30	-15 to 30	-1 to 2	G	0.025 (0.05)	3X

Absolute Pressure					
P/N	Pressure Range (psi)	Pressure Range (bar)	Media ^[2]	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 ₂ O)	Pressure Range (mbar)	Media ^[2]	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

Electrical Measurement and Source Accuracy		
	Range	Accuracy
Voltage DC	±30.0000V	± (0.02%RD+0.003%FS)
Current DC	±30.0000mA	± (0.02%RD+0.003%FS)
DC 24V	24V±0.5V max:50mA Protect at: 120mA	
Switch ^[1]	Status OPEN/CLOSED	

Note: [1] 1~12V if switch has detective voltage

SPECIFICATIONS

■ Pressure Connections

1/4" NPT male, 1/4" BSP male, M20X1.5 male ($\leq 15,000$ psi)
Autoclave F-250-C female (1/4" HP female) or F-250-C male (1/4" HP male) ($> 15,000$ psi)
1/4" HP female: Autoclave F-250-C, 9/16" - 18 UNF-2B
1/4" HP male: Autoclave F-250-C, 9/16" - 18 UNF-2A
0.156 inch ($\varnothing 4$ mm) test hose (for differential pressure)
Other connections available per request

■ Electrical Connection

0.156 inch (4mm) sockets

■ Over Pressure Warning

120%

■ Data Logger

Storage capacity: 30 files, 40 records per file
Mode: manual and automatic
Hourly-record: record the data every hour
Interval-record: set by user

■ Power

Battery: Rechargeable Li-ion polymer battery
Li-Battery working time: 40 hours
Recharge time: 4 hours
External power: 110V/220V power adapter (DC 10V)

■ Enclosure

Case material: Aluminum alloy
Wetted parts: 316L SS
Dimension: $\varnothing 120$ mm X 46mm depth X 184mm height
Weight: 0.7kg

■ European Compliance

CE marked

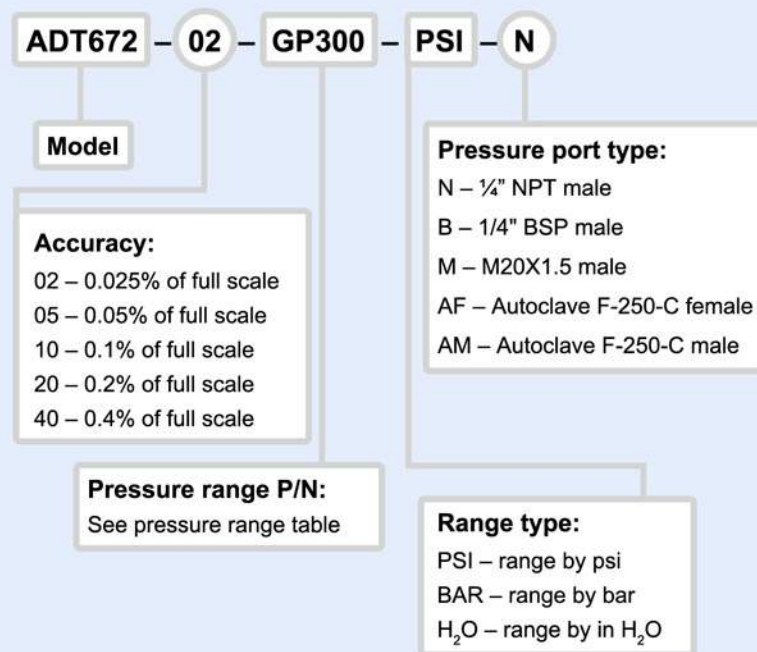
■ Communication

RS232 (DB9/F, environmentally sealed)
Baud rate: 1200,2400,4800,9600
Data length: 8 bits
Stop bit: 2 bits
Address: from 1 to 112

■ Warranty: 1 year

ORDERING INFORMATION

■ Model Number



■ Accessories (included)

110V/220V external power adapter (DC 10V)
2 pieces 1.5-meter test leads
2 pieces 0.156 inch ($\varnothing 4$ mm) test hose (for differential pressure gauge only)
Additel/Land software (free download at www.additel.com)
Manual
NIST traceable calibration certificate

■ Optional Accessories

Model number	Description
9702	Spare rechargeable Li-ion polymer battery for ADT 672
9814	Spare 110V/220V external power adapter (DC 10V) for 672 digital pressure calibrator
9502	Additel/Log II real time data logging and graphical software for ADT681 and ADT672
9050	USB to RS232 (DB9/M) Adapter
9900-672	Carrying Case for one ADT672 digital pressure gauge
9021	Spare 2 pieces test leads (1.5-meter) for ADT 672