

Additel 673

Advanced Digital Pressure Calibrators

- Pressure ranges up to 60,000 psi (4,200 bar)
- 0.02%, 0.05% FS or 0.1% RD Accuracy
- Color Touchscreen Display
- Every model measures Gauge or Absolute Pressure
- Built-in Barometer
- Intuitive Smartphone Like Interface
- Bluetooth and USB Communication
- Wi-Fi (optional)
- Measure mA or V, and with 24V loop power
- Full HART Field Communicator (Optional)
- Data logging
- Communicates with Additel's Link Mobile App



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OVERVIEW

Additel's 673 Advanced Digital Pressure Calibrators will redefine the way you want to measure and calibrate pressure readings and devices! With wireless remote connectivity, microprocessor technology, state of-the-art silicon pressure sensors and optional onboard storage capacity, these attractive and fully temperature compensated calibrators will provide the performance, durability and reliability you've come to expect from genuine Additel products. The all new modern menu structure and control interface brings a new and refreshing experience to pressure calibration work. This completely new way of interfacing with our pressure calibrators makes the ADT673 a real pleasure to use. The handy Additel Link app gives users the ability to remotely monitor these calibrators from the convenience of a personal device or cell phone. With an abundance of options to choose from, you can configure these pressure calibrators to precisely fit your specific pressure calibration and measurement needs. With an IP67 rating, you will find that these amazing pressure calibrators can be used in the field or laboratory to meet the most demanding pressure calibration needs.

A Modern User Experience:

Additel has gone above and beyond to provide our customers with the best possible experience when using this new and revolutionary calibrator. The 3.4 inch color touchscreen display comes with a protective replaceable tempered glass screen and is a refreshing update to the traditional push button or blister pad interface. With an easy to navigate menu structure and fast touchscreen response, you will find these ADT673 calibrators simple yet powerful to use. The easy to read display isn't just fun to use, but it's built rugged to handle the demands of a busy technician in the field or the laboratory.



HART Field Communicator :

With full support for HART communication protocols, the ADT673 Advanced Digital Pressure Calibrators provide a pressure calibration solution for transmitters over a wide pressure range. The ADT673 is a very portable device and can measure pressure precisely with a built-in pressure sensor, as well as read the current or mV produced by a transducer. It can even supply an excitation voltage (loop power) to power sensors or transmitters during calibration.



SPECIFICATIONS

| | |
|---|--|
| Accuracy | ADT673-02: 0.02% of full span |
| | ADT673-05: 0.05% of full span |
| | 673-RD: 0% to 20% of Range: 0.02% of full span |
| | 20% to 110% of Range: 0.1% of reading Vacuum: 0.25% of full span[1][2] |
| Barometric Accuracy (built-in barometer) | 50Pa |
| Gauge Types | Gauge pressure, compound pressure, absolute pressure, differential pressure |
| Display | Color Touchscreen (capacitive) |
| | Screen protector: tempered glass film (replaceable) |
| | Display rate: 3 readings per second (Default setting). Adjustable from 10 readings per second to 1 reading every 20 seconds |
| | Resolution: 4,5 or 6 digits (user selectable) |
| Pressure Units | Pa, kPa, MPa, psi, bar, mbar, kgf/cm ² , inH ₂ O@4°C mmHg@4°C, inHg@0°C, mmHg@0°C and 5 customizable units |
| 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) |
| | Storage Temperature: -4°F to 158°F (-20°C to 70°C) |
| | Humidity: 0 - 95%, Non-condensing |
| 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 |
| | Differential Pressure: Barb fitting |
| | Other connections available per request |
| Over Pressure Warning | 120% |
| Power | Battery: Rechargeable Li-ion battery |
| | Li-Battery life: 16 hours typical |
| | Recharge time: 4 hours typical |
| | External power: 110V/220V power adapter (5 VDC) |
| Enclosure | Case material: 304 SS |
| | Wetted parts: 316 SS ^[3] |
| | Dimensions: 4.65" (118mm) width X 1.77" (42mm) depth 6.89" (175mm) height |
| | Weight: 1.58 lbs. (0.715 kg) |
| | Protection Level: IP67 |
| Electrical Measurement Accuracy (23 ± 15°C) | Voltage DC: ±30.0000 V, ± (0.01%RD + 1.5 mV) |
| | Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 µA) |
| | DC 24 V: 24 V± 1%, MAX:30 mA |
| | Switch ^[4] : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches |
| Data Logging | Data storage: 8GB (100M+ records) |
| | Mode: manual and automatic |
| | Interval-record: user selectable |
| Compliance | Protection Level: IP67 |
| | Vibration: 5 g (10-500 Hz) |
| | Shock Resistance: 8 g/11 ms |
| | CE |
| Communication | USB Type-C and Bluetooth included, RS232 or Wi-Fi (optional) |
| Warranty | 1 year |

[1] FS = -14.5 psi

[2] Applicable ADT673-RD-CPX

[3] Wetted parts material types may vary by pressure range.

Please refer to manual or contact to Additel for more information.

[4] Trigger voltage 2.7V

PRESSURE RANGE

Metrology Made Simple

| Gauge Pressure ^[1] | | | | | | |
|-------------------------------|----------------|-------|----------------------|-------------|-----|----------------|
| P/N | Pressure Range | | Media ^[2] | Accuracy | | Burst Pressure |
| | (psi) | (bar) | | %FS | %RD | |
| V15 | -15 | -1.0 | G | 0.02 (0.05) | N/A | 3x |
| GP2 | 2 | 0.16 | G, L | 0.05 | N/A | 3x |
| GP5 | 5 | 0.35 | G, L | 0.05 | N/A | 3x |
| GP10 | 10 | 0.7 | G, L ^[3] | 0.02 (0.05) | 0.1 | 3x |
| GP15 | 15 | 1.0 | G, L ^[3] | 0.02 (0.05) | 0.1 | 3x |
| GP30 | 30 | 2.0 | G, L ^[3] | 0.02 (0.05) | 0.1 | 3x |
| GP50 | 50 | 3.5 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP100 | 100 | 7.0 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP150 | 150 | 10 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP300 | 300 | 20 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP500 | 500 | 35 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP600 | 600 | 40 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP1K | 1,000 | 70 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP1.5K | 1,500 | 100 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP2K | 2,000 | 140 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP3K | 3,000 | 200 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP5K | 5,000 | 350 | G, L | 0.02 (0.05) | 0.1 | 3x |
| GP10K | 10,000 | 700 | G, L | 0.02 (0.05) | 0.1 | 1.5x |
| GP15K | 15,000 | 1,000 | G, L | 0.05 (0.1) | 0.1 | 1.5x |
| GP20K | 20,000 | 1,400 | G, L | 0.05 (0.1) | N/A | 1.5x |
| GP25K | 25,000 | 1,600 | G, L | 0.05 (0.1) | N/A | 1.5x |
| GP30K | 30,000 | 2,000 | G, L | 0.05 (0.1) | N/A | 1.5x |
| GP36K | 36,000 | 2,500 | G, L | 0.05 (0.1) | N/A | 1.5x |
| GP40K | 40,000 | 2,800 | G, L | 0.05 (0.1) | N/A | 1.35x |
| GP50K | 50,000 | 3,500 | G, L | 0.1 (0.2) | N/A | 1.2x |
| GP60K | 60,000 | 4,200 | G, L | 0.1 (0.2) | N/A | 1.1x |

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

[2] G=Gas, L=Liquid

[3] 0.02% FS for gas media only

| Compound Pressure | | | | | | |
|-------------------|----------------|----------|-------|--------------------|-----|----------------|
| P/N | Pressure Range | | Media | Accuracy | | Burst Pressure |
| | (psi) | (bar) | | %FS ^[1] | %RD | |
| CP2 | ±2 | ±0.16 | G | 0.05 | N/A | 3x |
| CP5 | ±5 | ±0.35 | G | 0.02 (0.05) | 0.1 | 3x |
| CP10 | ±10 | ±0.7 | G | 0.02 (0.05) | 0.1 | 3x |
| CP15 | ±15 | ±1 | G | 0.02 (0.05) | 0.1 | 3x |
| CP30 | -15 to 30 | -1 to 2 | G | 0.02 (0.05) | 0.1 | 3x |
| CP100 | -15 to 100 | -1 to 7 | G, L | 0.02 (0.05) | 0.1 | 3x |
| CP300 | -15 to 300 | -1 to 20 | G, L | 0.02 (0.05) | 0.1 | 3x |
| CP500 | -15 to 500 | -1 to 35 | G, L | 0.02 (0.05) | 0.1 | 3x |
| CP600 | -15 to 600 | -1 to 40 | G, L | 0.02 (0.05) | 0.1 | 3x |
| CP1K | -15 to 1000 | -1 to 70 | G, L | 0.02 (0.05) | 0.1 | 3x |

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

| Absolute Pressure | | | | | |
|-------------------|----------------|-------|-------|---------------|----------------|
| P/N | Pressure Range | | Media | Accuracy(%FS) | Burst Pressure |
| | (psi) | (bar) | | | |
| AP5 | 5 | 0.35 | G, L | 0.1 | 3x |
| AP10 | 10 | 0.7 | G, L | 0.1 | 3x |
| AP15 | 15 | 1.0 | G, L | 0.1 | 3x |
| AP30 | 30 | 2.0 | G, L | 0.1 | 3x |
| AP50 | 50 | 3.5 | G, L | 0.1 | 3x |
| AP100 | 100 | 7.0 | G, L | 0.05 (0.1) | 3x |
| AP300 | 300 | 20 | G, L | 0.05 (0.1) | 3x |
| AP500 | 500 | 35 | G, L | 0.05 (0.1) | 3x |
| AP1K | 1,000 | 70 | G, L | 0.05 (0.1) | 3x |
| AP3K | 3,000 | 200 | G, L | 0.05 (0.1) | 3x |
| AP5K | 5,000 | 350 | G, L | 0.05 (0.1) | 3x |

| Differential Pressure | | | | | | |
|-----------------------|----------------------|--------|-------|-------------------------------|----------------|-----------------------|
| P/N | Pressure Range | | Media | Accuracy (%FS) ^[1] | Burst Pressure | Static Pressure Range |
| | (inH ₂ O) | (mbar) | | | | |
| DP1 | ±1 | ±2.5 | G | 0.05 ^[2] | 100x | ±10 psi |
| DP2 | ±2 | ±5.0 | G | 0.05 ^[2] | 100x | ±10 psi |
| DP5 | ±5 | ±10 | G | 0.05 ^[2] | 50x | ±10 psi |
| DP10 | ±10 | ±25 | G | 0.05 ^[2] | 20x | ±10 psi |
| DP20 | ±20 | ±50 | G | 0.05 | 20x | ±10 psi |
| DP30 | ±30 | ±75 | G | 0.05 | 20x | ±10 psi |
| DP50 | ±50 | ±125 | G | 0.05 | 3x | ±10 psi |
| DP100 | ±100 | ±250 | G | 0.02 | 3x | ±15 psi |
| DP150 | ±150 | ±350 | G | 0.02 | 3x | 50 psi |
| DP300 | ±300 | ±700 | G | 0.02 | 3x | 50 psi |

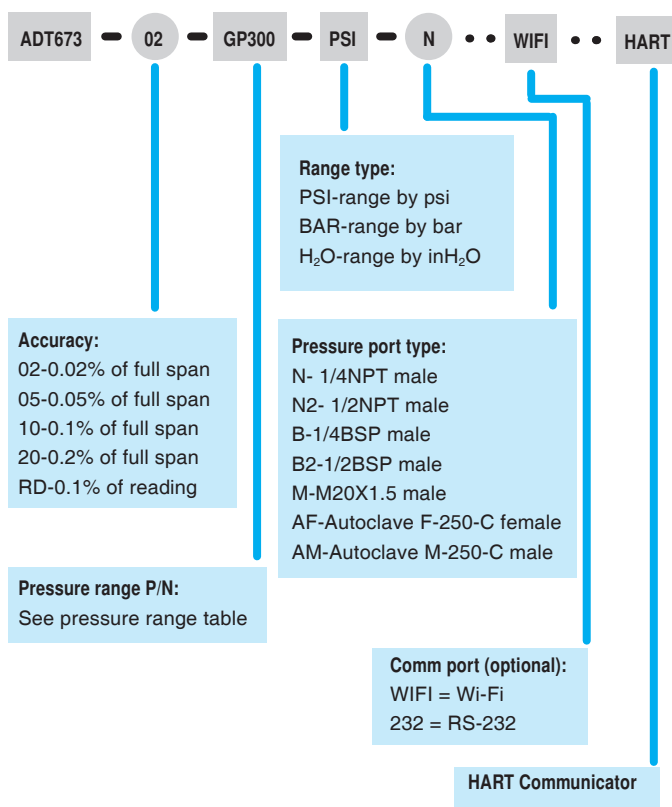
[1] FS specification applies to the span of the range. Accuracy includes one year stability.

[2] 0.05%FS accuracy (incl 6 months stability). One year accuracy is 0.05%FS calibration accuracy combined with 0.05%FS one year stability.

| Barometric Pressure | | | | | |
|---------------------|----------------|---------|-------|----------|----------------|
| P/N | Pressure Range | | Media | Accuracy | Burst Pressure |
| | Low | High | | | |
| BP | 60 kPa | 110 kPa | G | 40 Pa | 3x |

ORDERING INFORMATION

Model Number



Accessories Included

| |
|---|
| Rubber boot |
| Test leads (1) set |
| Rechargeable Lion battery (1 pc) |
| USB cable (type-C) |
| Power adapter |
| Hanging strap |
| Silicone tube - 1 meter each (2 pcs for DP models only) |
| Manual |
| ISO 17025 accredited calibration certificate |

Optional Accessories

| Model number | Description |
|--------------|---|
| 9903 | Carrying case for (1) digital pressure gauge |
| 9502 | Additel/Log II real time data logging and graphical software |
| 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 |
| 9050-EXT | RS 232 (DB9/M) extension cable, 9 feet |

Note: For oil-free applications contact Additel.