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### Additel 673

## **Advanced Digital Pressure Calibrators**



- 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







Additel 673

#### **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.





02



#### **SPECIFICATIONS**

	NS				
	ADT673-02: 0.02% of full span				
Accuracy	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	50Pa				
(built-in barometer)	Gauga proceura compound proceura absoluta				
Gauge Types	Gauge pressure, compound pressure, absolute pressure, differential pressure				
	Color Touchscreen (capacitive)				
	Screen protector: tempered glass film (replaceable)				
	Display rate: 3 readings per second (Default setting).				
Display	Adjustable from 10 readings per second to 1 reading				
	every 20 seconds				
	Resolution: 4,5 or 6 digits (user selectable)				
	Pa, kPa, MPa, psi, bar, mbar, kgf/cm², inH <sub>2</sub> O@4°C				
Pressure Units	mmH <sub>2</sub> O@4°C, inHg@0°C, mmHg@0°C and				
	5 customizable units				
	Compensated Temperature: 14°F to 122°F (-10°C to				
	50°C)				
Environmental	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				
	-				
	≤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				
Pressure Port	*1/4HP male: Autoclave M-250-C, 9/16" - 18 UNF-2A				
	Differential Pressure: Barb fitting				
	Other connections available per request				
Over Pressure	120%				
Warning					
	Battery: Rechargeable Li-ion battery				
Power	Li-Battery life: 16 hours typical				
Power					
	Recharge time: 4 hours typical				
	Recharge time: 4 hours typical  External power: 110V/220V power adapter (5 VDC)				
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Englacura	External power: 110V/220V power adapter (5 VDC) Case material: 304 SS				
Enclosure	External power: 110V/220V power adapter (5 VDC)  Case material: 304 SS  Wetted parts: 316 SS [3]				
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Electrical	External power: 110V/220V power adapter (5 VDC)  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				
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Electrical Measurement Accuracy (23 ± 15°C)	External power: 110V/220V power adapter (5 VDC)  Case material: 304 SS  Wetted parts: 316 SS <sup>[3]</sup> Dimensions: 4.65" (118mm) width X 1.77" (42mm) depth 6.89" (175mm) height  Weight: 1.58 lbs. (0.715 kg)  Protection Level: IP67  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 <sup>[4]</sup> : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches  Data storage: 8GB (100M+ records)				
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Electrical Measurement Accuracy (23 ± 15°C)  Data Logging	External power: 110V/220V power adapter (5 VDC)  Case material: 304 SS  Wetted parts: 316 SS <sup>[3]</sup> Dimensions: 4.65" (118mm) width X 1.77" (42mm) depth 6.89" (175mm) height  Weight: 1.58 lbs. (0.715 kg)  Protection Level: IP67  Voltage DC: ±30.0000 V, ± (0.01%RD + 1.5 mV)  Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 mV)  DC 24 V: 24 V± 1%, MAX:30 mA  Switch <sup>[4]</sup> : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches  Data storage: 8GB (100M+ records)  Mode: manual and automatic  Interval-record: user selectable  Protection Level: IP67  Vibration: 5 g (10-500 Hz)				
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Electrical Measurement Accuracy (23 ± 15°C)  Data Logging	External power: 110V/220V power adapter (5 VDC)  Case material: 304 SS  Wetted parts: 316 SS <sup>[3]</sup> Dimensions: 4.65" (118mm) width X 1.77" (42mm) depth 6.89" (175mm) height  Weight: 1.58 lbs. (0.715 kg)  Protection Level: IP67  Voltage DC: ±30.0000 V, ± (0.01%RD + 1.5 mV)  Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 mV)  Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 mV)  DC 24 V: 24 V± 1%, MAX:30 mA  Switch <sup>[4]</sup> : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches  Data storage: 8GB (100M+ records)  Mode: manual and automatic  Interval-record: user selectable  Protection Level: IP67  Vibration: 5 g (10-500 Hz)  Shock Resistance: 8 g/11 ms  CE				
Electrical Measurement Accuracy (23 ± 15°C)  Data Logging	External power: 110V/220V power adapter (5 VDC)  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  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 <sup>[4]</sup> : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches  Data storage: 8GB (100M+ records)  Mode: manual and automatic  Interval-record: user selectable  Protection Level: IP67  Vibration: 5 g (10-500 Hz)  Shock Resistance: 8 g/11 ms  CE  USB Type-C and Bluetooth included,				
Electrical Measurement Accuracy (23 ± 15°C)  Data Logging  Compliance	External power: 110V/220V power adapter (5 VDC)  Case material: 304 SS  Wetted parts: 316 SS <sup>[3]</sup> Dimensions: 4.65" (118mm) width X 1.77" (42mm) depth 6.89" (175mm) height  Weight: 1.58 lbs. (0.715 kg)  Protection Level: IP67  Voltage DC: ±30.0000 V, ± (0.01%RD + 1.5 mV)  Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 mV)  Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 mV)  DC 24 V: 24 V± 1%, MAX:30 mA  Switch <sup>[4]</sup> : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches  Data storage: 8GB (100M+ records)  Mode: manual and automatic  Interval-record: user selectable  Protection Level: IP67  Vibration: 5 g (10-500 Hz)  Shock Resistance: 8 g/11 ms  CE				

- [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]						
D/N	Pressur	e Range	Media <sup>[2]</sup>	Accı	Burst	
P/N	(psi)	(bar)	iviedia.	%FS	%RD	Pressure
V15	-15	-1.0	G	0.02 (0.05)	N/A	3×
GP2	2	0.16	G, L	0.05	N/A	3×
GP5	5	0.35	G, L	0.05	N/A	3×
GP10	10	0.7	G, L <sup>[3]</sup>	0.02 (0.05)	0.1	3×
GP15	15	1.0	G, L <sup>[3]</sup>	0.02 (0.05)	0.1	3×
GP30	30	2.0	G, L <sup>[3]</sup>	0.02 (0.05)	0.1	3×
GP50	50	3.5	G, L	0.02 (0.05)	0.1	3×
GP100	100	7.0	G, L	0.02 (0.05)	0.1	3×
GP150	150	10	G, L	0.02 (0.05)	0.1	3×
GP300	300	20	G, L	0.02 (0.05)	0.1	3×
GP500	500	35	G, L	0.02 (0.05)	0.1	3×
GP600	600	40	G, L	0.02 (0.05)	0.1	3×
GP1K	1,000	70	G, L	0.02 (0.05)	0.1	3×
GP1.5K	1,500	100	G, L	0.02 (0.05)	0.1	3×
GP2K	2,000	140	G, L	0.02 (0.05)	0.1	3×
GP3K	3,000	200	G, L	0.02 (0.05)	0.1	3×
GP5K	5,000	350	G, L	0.02 (0.05)	0.1	3×
GP10K	10,000	700	G, L	0.02 (0.05)	0.1	1.5×
GP15K	15,000	1,000	G, L	0.05 (0.1)	0.1	1.5×
GP20K	20,000	1,400	G, L	0.05 (0.1)	N/A	1.5×
GP25K	25,000	1,600	G, L	0.05 (0.1)	N/A	1.5×
GP30K	30,000	2,000	G, L	0.05 (0.1)	N/A	1.5×
GP36K	36,000	2,500	G, L	0.05 (0.1)	N/A	1.5×
GP40K	40,000	2,800	G, L	0.05 (0.1)	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] 0.02% FS for gas media only

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

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

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#### Metrology Made Simple

Absolute Pressure						
P/N	Pressure Range		Media	A = 0.1/2/ FC)	Burst	
F/IN	(psi)	(bar)	ivieula	Accuracy(%FS)	Pressure	
AP5	5	0.35	G,L	0.1	3×	
AP10	10	0.7	G,L	0.1	3×	
AP15	15	1.0	G,L	0.1	3×	
AP30	30	2.0	G,L	0.1	3×	
AP50	50	3.5	G,L	0.1	3×	
AP100	100	7.0	G,L	0.05 (0.1)	3×	
AP300	300	20	G,L	0.05 (0.1)	3×	
AP500	500	35	G,L	0.05 (0.1)	3×	
AP1K	1,000	70	G,L	0.05 (0.1)	3×	
AP3K	3,000	200	G,L	0.05 (0.1)	3×	
AP5K	5,000	350	G,L	0.05 (0.1)	3×	

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

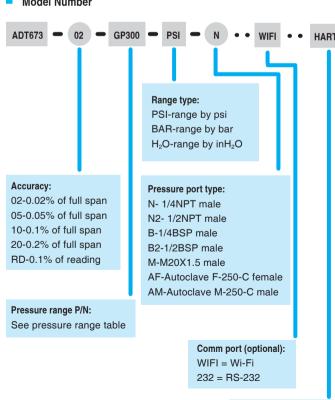
[1] FS specification applies to the span of the range. Accuracy includes one year stability.

[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	
F/IN	Low	High	ivieula	Accuracy	Pressure	
BP	60 kPa	110 kPa	G	40 Pa	3×	

#### **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

- 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.

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Rev # 20210330

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**HART Communicator** 

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