# Additel 673

# **Advanced Digital Pressure Calibrators**



AdditeL



- 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



### **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 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 Addited 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.





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### **SPECIFICATIONS**

SPECIFICATIO	NS .					
	ADT673-02: 0.02% of full span					
	ADT673-05: 0.05% of full span					
Accuracy	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	55Pa					
Accuracy (built-in barometer)	oora					
,	Gauge pressure, compound pressure, absolute					
Gauge Types	pressure, differential pressure					
	Color Touchscreen (capacitive)					
	Screen protector: tempered glass film (replaceable)					
Display	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)					
	Pa, kPa, MPa, psi, bar, mbar, kgf/cm², inH <sub>2</sub> O@4°C					
Pressure Units	$mmH_2O@4^{\circ}C$ , $inHg@0^{\circ}C$ , $mmHg@0^{\circ}C$ 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					
Pressure Port	*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	120%					
Warning	Dawara Dasharrashla Lijisa bawara					
	Battery: Rechargeable Li-ion battery					
Power	Li-Battery life: 16 hours typical					
	Recharge time: 4 hours typical					
	External power: 110V/220V power adapter (5 VDC)					
	Case material: 304 SS					
	Wetted parts: 316 SS [3]					
Enclosure	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	Voltage DC: ±30.0000 V, ± (0.01%RD + 1.5 mV)					
Measurement	Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 μA)					
Accuracy	DC 24 V: 24 V ±1 V, MAX: 30 mA					
(23 ± 15°C)	Switch <sup>[4]</sup> : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches					
	Data storage: 8GB (100M+ records)					
Data I v v viv v	Mode: manual and automatic					
Data Logging	Interval-record: user selectable from 0.1 to 9999.9					
	second intervals					
	Protection Level: IP67					
Compliance	Vibration: 5 g (10-500 Hz)					
	Shock Resistance: 8 g/11 ms CE					
Communication	USB Type-C and Bluetooth included,					
Communication	RS232 or Wi-Fi (optional)					
Warranty	1 year					
[1] FS = -14.5 psi						

- [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	A. 1: [2]	Accu	Burst		
P/N	(psi)	(bar)	Media <sup>[2]</sup>	%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	0.1	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	су	Burst		
F/IN	(psi)	(bar)	ivieuia	%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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# **PRESSURE RANGE**

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Absolute Pressure						
P/N	Pressure	Range	Media	Acquire ou/9/ ES)	Burst	
P/N	(psi)	(bar)	iviedia	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×	
АРЗК	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	Burst	Static Pressure	
F/IN	(inH <sub>2</sub> O)	(mbar)	iviedia	(%FS) <sup>[1]</sup>	Pressure	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	

 $\ensuremath{[1]}$  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 P	Barometric Pressure								
P/N	Pressure	e Range	Media	Accuracy	Burst				
F/IN	Low	High	ivieula	Accuracy	Pressure				
BP	60 kPa	110 kPa	G	40 Pa	3×				

Communication Types Supported						
Comm Model	ADT685	ADT685Ex	ADT686	ADT673		
RS232	0	0	0	0		
RS485	0	0				
WiFi			0	0		
USB	•	•	•	•		
Buletooth(BLE)	•	•	•	•		

• Included Optional

Additel Software Compatibility Matrix								
Model	А	DT685/	ADT685E	Ξx		ADT686	/ADT673	1
Comm	ACal	LogII	Land	Link	ACal	LogII	Land	Link
RS232	•	•	•		•	•	•	
RS485	•	•	•					
WiFi					•	•	•	<b>•</b> [1]
USB	•	•	•		•	•	•	
Buletooth(BLE)				•				•

Supported

[1] This configuration requires that the device be connected to ACloud via Wi-Fi to utilize the Additel Link app.

# **ADT673**

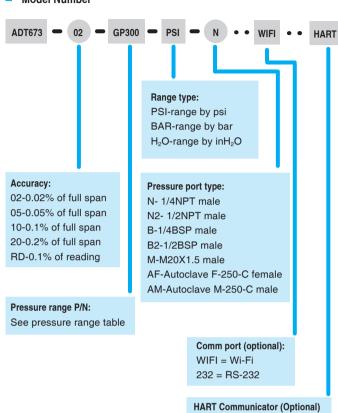
# **Advanced Digital Pressure Calibrators**



#### Metrology Made Simple

## **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
1520000359	Screen protector kit

Note: For oil-free applications contact Additel.

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