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Addite

Metrology Made Simple

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



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 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.





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SPECIFICATIONS

Model	ADT673			
	673-02: 0.02% of full span			
	673-05: 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			
	Built-in barometer: 55 Pa			
Gauge Types	Gauge pressure, compound pressure, absolute pressure, differential pressure and barometric 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)			
Pressure Units ^[3]	Pa, kPa, MPa, psi, bar, mbar, kgf/cm², inH $_2$ O@4°C mmH $_2$ O@4°C, inHg@0°C, mmHg@0°C and 5 customizable units			
	Compensated Temp.: 14°F to 122°F (-10°C to 50°C)			
Foodersonatel	Operating Temp.: 14°F to 122°F (-10°C to 50°C)			
Environmental	Storage Temp.: -4°F to 158°F (-30°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 Warning	120%			
	Battery: rechargeable Li-ion battery			
B	Li-Battery life: 16 hours typically			
Power	Recharge time: 4 hours typically			
	External power: 110V/220V power adapter (5 VDC)			
	Case material: 304 SS			
	Wetted parts: 316 SS [1]			
Enclosure	Size: 4.65" x 1.77" x 6.89"(118 x 42 x175mm)			
	Weight: 1.58 lbs (0.715 kg)			
	Voltage DC: ±30.0000 V, ± (0.01%RD + 1.5 mV)			
Electrical Measurement	Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 µA)			
Accuracy ^[4]	DC 24 V: 24 V ±1 V, MAX: 30 mA			
(8 °C to 38 °C)	Switch ^[2] : status OPEN/CLOSED, support for			
	mechanical switches and NPN/PNP digital switches			
	Data storage: 8GB (100M+ records)			
Data Logging	Mode: manual and automatic Interval-record: user selectable from 0.1 to 9999.9			
	second intervals			
	Protection Level: IP67			
Compliance	Vibration: 5 g (10-500 Hz)			
Compilation	Shock Resistance: 8 g/11 ms			
	CE, UKCA USB Type-C and Bluetooth included,			
Communication	RS232 or Wi-Fi (optional)			
Warranty	1 year			

- [1] Wetted parts material types may vary by pressure range Please refer to manual or contact to Additel for more information
- [2] Trigger voltage 2.7V
- [3] Available units are dependent on the overall pressure range
- [4] Temperature coefficient: (5ppm of RD + 5ppm of FS)/ $^{\circ}\text{C}$ from -10 $^{\circ}\text{C}$ to 8 $^{\circ}\text{C}$ and 38 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$

PRESSURE RANGE

Gauge Pressure [1]							
D/N	Pressur	e Range	A. 1: [2]	Accuracy	/	Burst	
P/N	(psi)) (bar) Media ^[2] %FS		%FS	%RD	Pressure	
V15	-15	-1.0	G	0.02, 0.05	N/A	3×	
GP2	2	0.16	G	0.05	N/A	3×	
GP5	5	0.35	G	0.05	0.1	3×	
GP10	10	0.7	G, L ^[3]	0.02, 0.05	0.1	3×	
GP15	15	1.0	G, L ^[3]	0.02, 0.05	0.1	3×	
GP30	30	2.0	G, L	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



PRESSURE RANGE

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Compound Pressure						
D/M	Pressure	e Range		Accuracy		Burst
P/N	(psi)	(bar)	Media	%FS	%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×
CP150	-15 to 150	-1 to 10	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)	N/A	3×
CP600	-15 to 600	-1 to 40	G, L	0.02 (0.05)	N/A	3×
CP1K	-15 to 1000	-1 to 70	G, L	0.02 (0.05)	N/A	3×

Differential Pressure							
P/N	Pressure	Range		Accuracy	Burst	Static Pressure Range	
P/IN	(inH ₂ O)	(mbar)	Media	(%FS) ^[1]	Pressure		
DP1	±1	±2.5	G	0.05 ^[2]	100×	±10 psi	
DP2	±2	±5.0	G	0.05 ^[2]	100×	±10 psi	
DP5	±5	±10	G	0.05 ^[2]	50×	±10 psi	
DP10	±10	±25	G	0.05 ^[2]	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	Pressure Range		Accuracy	Burst	
F/IN	Low	High	Media	Accuracy	Pressure	
BP	60 kPa	110 kPa	G	55 Pa	3×	

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

Included Optional

Additel Software Compatibility Matrix								
Model	ADT685/ADT685Ex				ADT686/ADT673			
Comm	ACal	LogII	Land	Link	ACal	LogII	Land	Link
RS232	•	•	•		•	•	•	
RS485 only for ADT685	$lackbox{0}^{[2]}$	$lackbox{0}^{[2]}$	$lackbox{0}^{[2]}$					
WiFi					•	•	•	● ^[1]
USB	•	•	•		•	•	•	
Bluetooth(BLE)				•				•

SupportedNon Ex models only

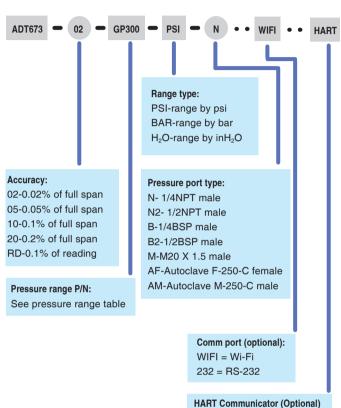
[1] This configuration requires that the device be connected to ACloud via Wi-Fi to utilize the Addited Link app.
[2] 4-20mA output and RS-485 not available in ADT685Ex models.



ADT673 Advanced Digital Pressure Calibrators

ORDERING INFORMATION





Accessories Included

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

Optional Accessories

Model number	Description
9903	Carrying case for (1) digital pressure gauge
9040	Hanging strap with magnet
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
1220610724	Screen protector kit

Note: For oil-free applications contact Additel.

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