Calibration Experts

ADT 673 Advanced Digital Pressure Calibrators









- Pressure ranges up to 4,200 bar (60,000 psi)
- Accuracy: 0.02%; 0.05% FS or 0.1% RD
- 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 optional on board 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 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			
	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			
	Built-in barometer: 55 Pa			
Gauge Types	Gauge pressure; compound pressure; absolute pressure;			
<u>-</u>	differential pressure and barometric pressure			
	Color Touchscreen (capacitive)			
Diamlay	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/cm ² , inH ₂ O@ 4° C			
Pressure units ^[3]	mmH ₂ O@4°C, inHg@0°C, mmHg@0°C and 5 customizable units			
	Compensated Temperature: -10°C to 50°C (14°F to 122°F)			
	Operating Temperature: -10°C to 50°C (14°F to 122°F)			
Environmental	Storage Temperature: -30°C to 70°C (-4°F to 158°F)			
	Humidity: 0 - 95%, non-condensing			
	≤15,000 psi: 1/4NPT male; 1/2NPT male; 1/4BSP male; 1/2BSP male;			
	M20x1.5 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 polymer battery			
Power	Li-Battery life: 16 hours typically			
	Recharge time: 4 hours typically			
	External power: 110V/220V power adapter (DC 5V)			
	Case material: 304 SS			
Enclosure	Wetted parts: 316 SS ^[1]			
LindioSure	Size: 118 mm x 42 mm x 175 mm			
	Weight: 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± 1V, MAX:30 mA			
(8°c to 38°C)	Switch ^[2] :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 from 0.1 to 9999.9 second intervals			

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Specifications

	Protection Level: IP67			
Compliance	Vibration: 5 g (10-500 Hz)			
	Shock Resistance: 8 g/11 ms			
	CE, UKCA			
Communication	USB Type-C and Bluetooth included, 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 europascal 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)/ °C from -10 °C to 8 °C and 38 °C to 50 °C

Pressure Range

Gauge Pro	essure ⁽¹⁾					
DA	Pressure range		M a allowed (2)	Accura	Burst	
P/N	psi	bar	Medium ⁽²⁾	% FS	% RD	Pressure
V15	-15	-1.0	G	0.02, 0.05	N/A	3x
GP2	2	0.16	G	0.05	N/A	3x
GP5	5	0.35	G	0.05	0.1	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	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	Зx
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 70 bar (1,000psi)

(2) G=Gas, L=Liquid

(3) 0.02% FS only for gas media

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Pressure Range

Compound Pressure							
P/N	Pressure range		Media	Accu	Burst		
1 //	psi	bar	meana	% FS	% RD	Pressure	
CP2	±2	±0.16	Gas	0.05	N/A	3x	
CP5	±5	±0.35	Gas	0.02 (0.05)	0.1	3x	
CP10	±10	±0.7	Gas	0.02 (005)	0.1	3x	
CP15	±15	±1	Gas	0.02 (005)	0.1	3x	
CP30	-15 to 30	-1 to 2	Gas	0.02 (005)	0.1	3x	
CP100	-15 to 100	-1 to 7	Gas / Liquid	0.02 (005)	0.1	3x	
CP150	-15 to 150	-1 to 10	Gas / Liquid	0.02 (005)	0.1	3x	
CP300	-15 to 300	-1 to 20	Gas / Liquid	0.02 (005)	0.1	3x	
CP500	-15 to 500	-1 to 35	Gas / Liquid	0.02 (005)	N/A	3x	
CP600	-15 to 600	-1 to 40	Gas / Liquid	0.02 (005)	N/A	3x	
CP1K	-15 to 1000	-1 to 70	Gas / Liquid	0.02 (005)	N/A	3x	

Differential Pressure							
P/N	Pressure range		Media	Accuracy	Burst Pressure	Static Pressure	
F/IN	inH₂O	mbar	Wieula	(% FS) ⁽¹⁾	Flessule	Range	
DP1	±1	±2.5	Gas	0.05 (2)	100x	±10 psi	
DP2	±2	±5.0	Gas	0.05 (2)	100x	±10 psi	
DP5	±5	±10	Gas	0.05 (2)	50x	±10 psi	
DP10	±10	±25	Gas	0.05 (2)	20x	±10 psi	
DP20	±20	±50	Gas	0.05	20x	±10 psi	
DP30	±30	±75	Gas	0.05	20x	±10 psi	
DP50	±50	±125	Gas	0.05	3x	±10 psi	
DP100	±100	±250	Gas	0.02	3x	±15 psi	
DP150	±150	±350	Gas	0.02	3x	50 psi	
DP300	±300	±700	Gas	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		
F/N	Low	High	Weula	Accuracy	Buist Plessule		
BP	60 kPa	110 kPa	Gas	55 Pa	3x		

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

Additel Software Compatibility Matrix								
Model		ADT685/A	ADT685Ex		ADT686/ADT673			
Comm	ACal	Logll	Land	Link	ACal	Logll	Land	Link
RS232	•	•	•		•	•	•	
RS485 only for ADT685	• [2]	• [2]	• [2]					
WiFi					•	•	•	• [1]
USB	•	•	•		•	•	•	
Bluetooth (BLE)				•				•

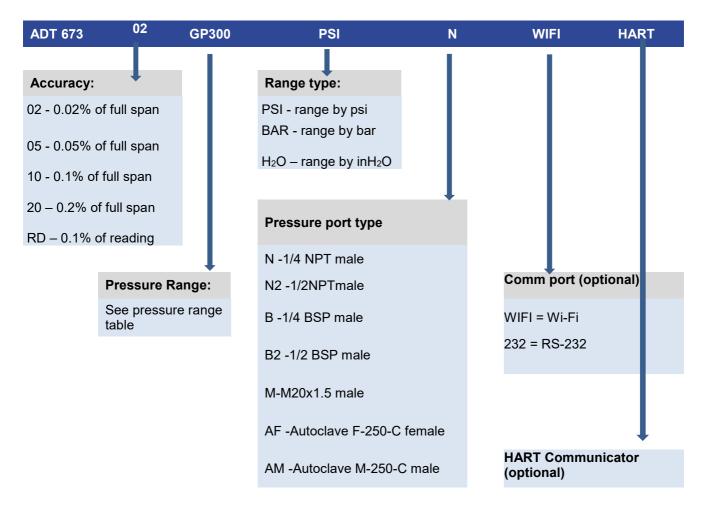
• supported
Non Ex models only

[1]This configuration requires that the device is connected to ACloud via WiFi to utilize the Additel Link app [2] 4-20mA output and RS-485 not available in ADT685Ex models

Accessories included	
Rubber boot	
Test leads (1) set	
Rechargeable Lion battery (1 pc)	
USB cable (type-C) (1pc)	
Batery cover removal tool (1pc)	
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	RS232 (DB9/M) extension cable, 9 feet			
9260	Screen protector kit			

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Your Notes

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This document is subject to change without notice

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