Additel 673 Advanced Digital Pressure Calibrators



04.0000

00.0000



50.00<u>01</u>

(€ ĽK

Additel 673

- 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.







Metrology Made Simple

SPECIFICATIONS

	107070					
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					
daugo Typoo	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)					
	Pa, kPa, MPa, psi, bar, mbar, kgf/cm², inH ₂ O@4°C					
Pressure Units ^[3]	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)					
Environmental	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					
	\geq 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					
Dewer	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)					
Compliance	Shock Resistance: 8 g/11 ms					
	CE, UKCA					
Communication	USB Type-C and Bluetooth included, RS232 or Wi-Fi (optional)					
Warranty	1 year					

Gauge Pressure ^[1]							
D/N	Pressur	Pressure Range		Accuracy	Burst		
P/N	(psi)	(bar)	Media ^[2]	%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

PRESSURE RANGE

[3] 0.02% FS for gas media only

[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)/ $^{\circ}C$ from -10 $^{\circ}C$ to 8 $^{\circ}C$ and 38 $^{\circ}C$ to 50 $^{\circ}C$

•

•



PRESSURE RANGE

Compound Pressure						Differe	ential Press	ure					
	Pressure	Range		Accuracy				Pressure	e Range	Media	Accuracy (%FS) ^[1]	Burst	Static Pressure
P/N	(psi)	(bar)	Media	%FS	%RD	Burst Pressure	P/N	(inH₂O)	(mbar)	Wedia	(%FS) ^[1]	Pressure	Range
	· · · ·	. ,					DP1	±1	±2.5	G	0.05 ^[2]	100×	±10 psi
CP2	±2	±0.16	G	0.05	N/A	3×	DP2	±2	±5.0	G	0.05 ^[2]	100×	±10 psi
CP5	±5	±0.35	G	0.02 (0.05)	0.1	3×	DP5	±5	±10	G	0.05 ^[2]	50×	±10 psi
CP10	±10	±0.7	G	0.02 (0.05)	0.1	3×	DF5	±5	±10	G		50x	±10 psi
CP15	±15	±1	G	0.02 (0.05)	0.1	3×	DP10	±10	±25	G	0.05 ^[2]	20×	±10 psi
							DP20	±20	±50	G	0.05	20×	±10 psi
CP30	-15 to 30	-1 to 2	G	0.02 (0.05)	0.1	3×	DP30	±30	±75	G	0.05	20×	±10 psi
CP100	-15 to 100	-1 to 7	G, L	0.02 (0.05)	0.1	З×	DP50	±50	±125	G	0.05	3×	±10 psi
CP150	-15 to 150	-1 to 10	G, L	0.02(0.05)	0.1	3×	DP100	±100	±250	G	0.02	3×	±15 psi
CP300	-15 to 300	-1 to 20	G, L	0.02 (0.05)	0.1	3×	DP100	±100	±250	G	0.02	3x	±15 psi
CP500	-15 to 500	-1 to 35	G, L	0.02 (0.05)	N/A	3×	DP150	±150	±350	G	0.02	3×	50 psi
CP500	-15 10 500	-1 10 35	G, L	0.02 (0.05)	IN/A	3X	DP300	±300	±700	G	0.02	3×	50 psi
CP600	-15 to 600	-1 to 40	G, L	0.02 (0.05)	N/A	3×	• • •		n applies t	o the sp	an of the rar	nge. Accur	acy includes
CP1K	-15 to 1000	-1 to 70	G, L	0.02 (0.05)	0.02 (0.05) N/A 3× [2] 0.05%FS accuracy (incl 6 months stability). One y 0.05%FS calibration accuracy combined with 0.05%FS or 0.05%FS calibration accuracy combined with 0.05%FS calibration accuracy combined with 0.05%FS calibration accuracy combined with 0.05%FS or 0.05%FS calibration accuracy combined with 0.05%FS calibration accuracy								

Barometric Pressure

P/N	Pressure	e Range	Media Accuracy		Burst	
E/IN	Low	High	Weula	Accuracy	Pressure	
BP	60 kPa	110 kPa	G	55 Pa	3х	

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

O Optional

Additel Software Compatibility Matrix								
Model	A	DT685//	ADT685E	Ξx	ADT686/ADT673			
Comm	ACal	LogII	Land	Link	ACal	LogII	Land	Link
RS232	•	•	•		•	•	•	
RS485 only for ADT685	$\mathbf{O}^{[2]}$	$\mathbf{O}^{[2]}$	$\mathbf{O}^{[2]}$					
WiFi					•	•	•	•[1]
USB	•	•	•		•	•	•	
Bluetooth(BLE)				•				•

• Supported • Non Ex models only

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

•

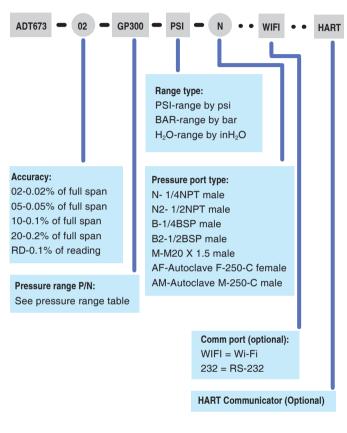
Included



ADT673 Advanced Digital Pressure Calibrators

ORDERING INFORMATION

Model Number



Accessories Included

Rubber boot
Test leads (1) set
Rechargeable Lion battery (1 pc)
USB cable (type-C) (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
9260	Screen protector kit
9257	Field rain cover

Note: For oil-free applications contact Additel.