

Additel 227, 227Ex Documenting Multifunction Process Calibrator



- Sourcing, Simulating and Measuring Pressure, Temperature and Electrical Signals
- Built-in Full HART Communicator (ADT227-HART)
- Built-in Barometer
- Intrinsically Safe Models Available (Ex)
- Large Smartphone Like Touchscreen User Experience
- USB Type-C and Bluetooth Communications
- IP67 Rated
- High Voltage Measurement Capability (300V AC)
- True RMS Voltage Meter Capability
- Dual Channel Pressure Module Ports
- High Static Differential Pressure Measurement 0.002% FS
- ISO 17025-accredited Calibration w/data Included



OVERVIEW

Additel's new Multi-functional Documenting Process Calibrator series takes portability, functionality, and accuracy to a whole new level and packages it with an intuitive and easy to use color touchscreen display. This series includes an advanced documenting pressure calibrator (ADT227) and an advanced documentation process calibrator with a built-in HART communicator (ADT227-HART). Additionally, each calibrator has an ATEX certified intrinsically safe option (ADT227Ex) allowing you to perform calibration in the harshest of environments. We're confident these new tools will not only meet your calibration requirements but will make metrology simple for you!

Features

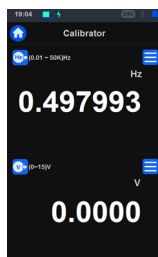
Easy-to-use Cellphone Like Interface

The ADT227 series brings an all new user interface to the world of process calibrators. With a menu driven interface and a small size/weight, the ADT227 is the industry's smallest advanced multifunctional process calibrator with an intrinsically safe version to boot (ADT227Ex). It adopts advanced human hand engineering design for the most convenient field handheld process calibrator available.

The ADT227 has been developed with a powerful embedded operating system which solves common problems of other designs including slow response, cumbersome key operation, high power consumption and overall slow processing.



Accuracy



Additel's new and improved ADT227 series provides much improved accuracies including an electrical accuracy of 0.005% RD + 0.005% FS, high-static differential pressure mode accuracy to 0.002% FS and across the board improvements in temperature measurement accuracies.

Features

Thermocouple Measurement Performance

The ADT227 series delivers highly improved thermocouple measurement capabilities by vastly improving the cold Junction compensation (CJC) specifications and a much improved stabilization time.



Portable and Robust



The demands of remote calibration work can be challenging. The ADT227series is lightweight and highly portable and utilizes an advanced color LCD screen to help ensure you can easily see, even in the (Ex) intrinsically safe versions.

All models in the ADT227 family have been designed with ruggedness and dependability in mind and meet IP67 standards with a 1-meter drop test, 4G vibration, xenon exposure and 130g steel ball drop testing of the display.

Other environmental conditions have also been considered, such as temperature and humidity. To combat these external elements, Additel has designed a unique internal circuit design and process technology to allow for the utmost confidence in your critical calibration and measurement work.

Intrinsically Safe Option

The Additel 227Ex series calibrators have passed the most stringent testing by certified organizations to acquire intrinsically safe certificates, ATEX, IECEx, CSA and UKCA. The explosion-proof grade (Ex ia IIC T4 Ga), can be widely used in potentially explosive environments, such as oil and gas platforms, oil refineries, chemical and petrochemical plants, pharmaceutical industries, energy and gas processing industries.

Each intrinsically safe calibrator has an advance transfective color LCD display which has enhanced visibility when viewed in direct sunlight. No matter where your work takes you, these calibrators are up to the task.



Voltage Meter (RMS)



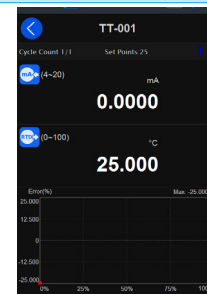
The Additel 227 non-Ex version is equipped with “true effective value” RMS measuring function, which can measure the RMS of various waveforms with no need to consider distortion or waveform parameters and different errors caused by different waveforms

Automated Tasks for Paperless Calibration Management

Additel 227 Series Calibrators come with a power documenting calibration task application which provides a turnkey solution for automation and paperless calibration management.

Tasks are easily created for temperature, pressure, flow and loop instruments. Up to 10,000 documented tasks can be stored in the extensive on-board memory.

Many tasks, when executed, are fully automated in data collection and performance validation, such as pass/fail and hysteresis calculations. All information can be integrated into Additel’s ACal software for additional calibration management.



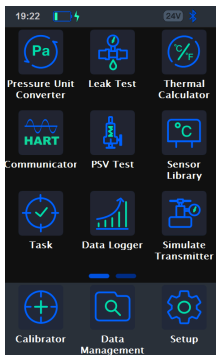
Full HART Communicaton (ADT227-HAR&ADT227Ex-HART)



The built-in full HART communicator will work with most HART or Profibus transmitters for on-line or off-line configuration and testing. The ADTADT227-HART contains an extensive DD library to meet the needs of your smart transmitter. Our DD library is updated on a regular basis and at no additional cost.

Features

Targeted application features



The onboard applications provide a useful selection of features including HART communicator, high static differential pressure mode, pressure leak test, safety valve test, analog transmitter calibration, unit converter, thermal calculator, and snapshots to name a few.

High static differential pressure mode uses two sensors, unique calculation technology to achieve a differential pressure measurement to 0.002% FS at high static pressures. The leak test will automatically calculate the pressure drop to determine a leak condition. The safety valve test is a specialized task which captures the exact pressure release point by taking 10 readings per second during a valve crack test.

You will find this and much more as we continue to develop new apps at Additel.

Data Logger

Record pressure, temperature and electrical signals readings over a long period. Recorded values can be displayed numerically or graphically to identify trending. On-board memory can store up to 10,000 readings or 1,000 readings and is easily exported to Additel application software. Each log session is easily configured at a set interval and each reading is provided with a date and time stamp



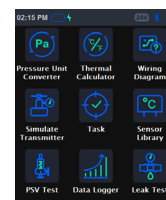
Connectivity & Battery



Users can remotely connect mobile devices to the ADT227 via Bluetooth and Wi-Fi communication with an unobstructed distance up to 20 meters. The included USB type-C comm port and cable provide a hard wired communication option as well as charging for the removeable Li-ion battery, which provides up to 35 hours of run time.

Time Saving Features

In addition to all the great features mentioned above, the ADT227series is loaded with time saving features like our builtin pressure and temperature converter, thermal calculator, wiring diagram guide for assisting with electrical connections, a built-in diagnostic center including intelligent alarm messaging and a real time error report and comprehensive selftesting to help our customers get the very most out of their investment in Additel calibration tools.



SPECIFICATIONS

Electrical Specification

Source Accuracy						
Specifications	ADT227			ADT227Ex		
	Range	Resolution	Accuracy	Range	Resolution	Accuracy
Voltage DC	0 to 15 V	0.1 mV	0.005%RDG+0.005%FS	0 to 10.5 V	0.1 mV	0.01%RDG+0.005%FS
Current DC	0 to 25 mA	0.1 uA	0.01%RDG+0.005%FS	0 to 25 mA	0.1 uA	0.01%RDG+0.005%FS
Resistance	0 to 400 Ω	1 mΩ	0.005%RDG+0.005%FS	0 to 400 Ω	1 mΩ	0.01%RDG+0.005%FS
	0 to 4000 Ω	10 mΩ	0.01%RDG+0.005%FS	0 to 4000 Ω	10 mΩ	0.01%RDG+0.005%FS
Frequency	0.01 to 50000.0 Hz	Auto range, 6-digit	0.002%RDG+2 on last digit	0.01 to 50000.0 Hz	Auto range, 6-digit	0.002%RDG+2 on last digit
Voltage mV (TC)	-10 to 75 mV	0.1 uV	0.0008%RDG + 0.004%FS	-10 to 75 mV	0.1 uV	0.01%RDG + 0.004%FS
Pulse	0 to 9999999	1	N/A	0 to 9999999	1	N/A
	Optional rising edge and falling edge, minimum threshold voltage: 2.5V					
Loop power (max 25mA)	24 V	N/A	±1 V	20 V	N/A	± 10%

SPECIFICATIONS

Measurement Accuracy Cont.						
Specifications	ADT227			ADT227Ex		
	Range	Resolution	Accuracy	Range	Resolution	Accuracy
Voltage DC	-300 to 300 mV	1 μ V	0.005% RDG + 0.005% FS	-300 to 300 mV	1 μ V	0.01% RDG + 0.005% FS
	-30 to 30 V	0.1 mV	0.005% RDG + 0.005% FS	-30 to 30 V	0.1 mV	0.01% RDG + 0.005% FS
	Temperature Coefficient: ± 5 ppm FS/ $^{\circ}$ C (-10 $^{\circ}$ C to 10 $^{\circ}$ C and 30 $^{\circ}$ C to 50 $^{\circ}$ C)					
	Impedance: -300 mV to 300 mV = > 100 M Ω -30 V to 30 V = > 1 M Ω					
DC High Voltage	-3 to 3 V	0.1 mV	0.05% RDG + 0.01% FS	N/A		
	-30 to 30 V	1 mV	0.05% RDG + 0.01% FS			
	-300 to 300 V	10 mV	0.05% RDG + 0.01% FS			
	Temperature coefficient: $\pm 0.0025\%$ FS/ $^{\circ}$ C (-10 $^{\circ}$ C to 10 $^{\circ}$ C and 30 $^{\circ}$ C to 50 $^{\circ}$ C)					
	Maximum input voltage = 300 V, IEC61010 300V CATII					
	Common mode rejection: >100 dB (at 50 or 60 Hz)					
Impedance: > 4 M Ω , DC coupling						
AC High Voltage	3V (40 to 500 Hz)	0.1 mV	0.5% RDG + 0.05% FS	N/A		
	30V (40 to 500 Hz)	1 mV	0.5% RDG + 0.05% FS			
	300V (40 to 500 Hz)	10 mV	0.5% RDG + 0.05% FS			
	Temperature coefficient: $\pm (0.025\% \text{ RD} + 0.0025\% \text{ FS}) / ^{\circ}\text{C}$ (-10 $^{\circ}$ C to 10 $^{\circ}$ C and 30 $^{\circ}$ C to 50 $^{\circ}$ C)					
	Maximum input voltage = 300 V, IEC61010 300V CATII					
	9% to 100% of range is suitable for the above accuracy indicators					
Impedance: >4 M Ω , <100pF, AC coupling						
Current DC	-30 to 30 mA	0.1 μ A	0.01% RDG + 0.005% FS	-30 to 30 mA	0.1 μ A	0.01% RDG + 0.005% FS
	Temperature Coefficient: ± 5 ppm FS/ $^{\circ}$ C (-10 $^{\circ}$ C to 10 $^{\circ}$ C and 30 $^{\circ}$ C to 50 $^{\circ}$ C), Impedance: < 40 Ω					
Resistance (4-Wire)	0 to 400 Ω	1 m Ω	0.005% RDG + 0.005% FS	0 to 400 Ω	1 m Ω	0.01% RDG + 0.005% FS
	0 to 4000 Ω	10 m Ω	0.01% RDG + 0.005% FS	0 to 4000 Ω	10 m Ω	0.01% RDG + 0.005% FS
	Temperature coefficient: ± 5 ppm FS/ $^{\circ}$ C (-10 $^{\circ}$ C to 10 $^{\circ}$ C and 30 $^{\circ}$ C to 50 $^{\circ}$ C)					
	2-Wire + 50 m Ω , 3-wire+ 10 m Ω					
Excitation current: 0.25 mA						
Voltage mV (TC)	-10 to 75 mV	0.1 μ V	0.008% RDG + 0.004% FS	-10 to 75 mV	0.1 μ V	0.01% RDG + 0.004% FS
	Temperature Coefficient: ± 5 ppm FS/ $^{\circ}$ C (-10 $^{\circ}$ C to 10 $^{\circ}$ C and 30 $^{\circ}$ C to 50 $^{\circ}$ C)					
	Impedance: >100 M Ω					
Frequency	0.01 to 50000 Hz	Auto range, 6-digit	0.002% RDG + 2 on last digit	0.01 to 50000 Hz	Auto range, 6-digit	0.002% RDG + 2 on last digit
	Minimum threshold voltage: 2.5 V					
	Supported units: Hz, kHz, MHz, CPM, CPH, s, ms, μ s					
Pulse	0 to 9999999	1	N/A	0 to 9999999	1	N/A
	Optional rising edge and falling edge, minimum threshold voltage: 2.5V					
Switch	Supports dry or wet switches. Voltage range of 3 to 30 V. Response speed < 10 ms					

SPECIFICATIONS

General Specification

Specifications	ADT227	ADT227Ex
Operating Temperature	-10°C to 50°C	-10°C to 50°C
Specification guaranteed temperature range	10°C to 30°C	10°C to 30°C
Storage Temperature	-20°C to 70°C	-20°C to 70°C
Humidity	<95%, non-condensing	<95%, non-condensing
Power supply	6600mAh, 23.8Wh lithium battery, charging time 4~6 hours, battery pack can be charged independently	4000mAh 14.4Wh Explosion-proof lithium battery pack charging time 6~8 hours, battery pack can be charged independently
User interface	Icon drive menus	Icon driven menus with navigation buttons
Ports protection voltage	50V max	30V max
Display	5.0 inch 480 x 800 mm TFT LCD capacitive screen	4.4 inch 640 x 480 mm color display capacitive screen
Maximum altitude	3000 meters	
European Compliance	CE Mark	
Electrical Connection	Ø4mm sockets and flat mini-jack thermocouple socket	
Size	6.97" x 4.13" x 2.04" (177 mm x 105 mm x 52 mm)	
Weight	1.6 lb (0.7 kg)	1.65 lb (0.75Kg)
Battery	Rechargeable Li-ion battery (included)	
Battery Life	Typically 16 hours	Typically 35 hours
Battery Charge	110V/220V external power adapter included. Battery can be charged external to the unit. Typically charge time is 6-8 hours.	
External pressure module	Dual channel serial plug, can connect two digital pressure modules	
Warm-up time	Full specification performance is achieved after a 10 minute warm-up time.	
ROHS compliant	Rohs II Directive 2011/65/EU, EN50581:2012	
Display rate	3 readings per second	
Environmental parameter measurement	Built-in barometer sensor (user-calibrated)	
IP protection level	IP67, 1 meter drop test	
Communication	Isolate USB-TYPEC (slave), Bluetooth BLE	
Calibration	ISO 17025 accredited calibration with data	

Pressure Specification

Pressure Specification (ADT227 & ADT227Ex)

The ADT161 and ADT161Ex series Intelligent Digital Pressure Modules are available for gauge, vacuum and absolute pressure from -15 psi to 60,000 psi (-1 bar to 4200 bar). Accuracy from 0.02% FS includes operation over 14°F to 122°F (-10°C to 50°C), one year stability and calibration uncertainty. For detailed specifications, please refer to the pressure modules datasheet.



Metrology Made Simple

SPECIFICATIONS

Temperature Specification

Thermocouple Measurement and Source Accuracy								
Type	ADT227				ADT227Ex			
	Standard	Temperature Range (°C)	Accuracy (°C)		Standard	Temperature Range (°C)	Accuracy (°C)	
			Measure / Source				Measure / Source	
S	IEC 584	-50 to 1768	-50~0	0.76	IEC 584	-50 to 1768	-50~100	0.77
			0~100	0.56			100~1000	0.42
			100~1768	0.44			1000~1768	0.47
R	IEC 584	-50 to 1768	-50~0	0.82	IEC 584	-50 to 1768	-50~0	0.82
			0~200	0.57			0~200	0.57
			200~1768	0.38			200~1768	0.42
B	IEC 584	0 to 1820	200~300	1.51	IEC 584	0 to 1820	200~300	1.51
			300~500	1.00			300~500	1.00
			500~800	0.62			500~800	0.62
			800~1820	0.43			800~1820	0.43
K	IEC 584	-270 to 1372	-250 to -200	0.72	IEC 584	-270 to 1372	-250 to -200	0.75
			-200 to -100	0.23			-200 to -100	0.24
			-100 to 600	0.12			-100 to 600	0.13
			600 to 1372	0.22			600 to 1372	0.25
N	IEC 584	-270 to 1300	-250 to -200	1.14	IEC 584	-270 to 1300	-250 to -200	1.17
			-200 to -100	0.33			-200 to -100	0.34
			-100 to 1300	0.19			-100 to 1300	0.22
E	IEC 584	-270 to 1000	-250~-200	0.39	IEC 584	-270 to 1000	-250~-200	0.41
			-200~-100	0.15			-200~-100	0.15
			-100~700	0.09			-100~700	0.10
			700~1000	0.12			700~1000	0.14
J	IEC 584	-210~1200	-210~-100	0.19	IEC 584	-210~1200	-210~-100	0.20
			-100~700	0.10			-100~700	0.11
			700~1200	0.15			700~1200	0.17
T	IEC 584	-270 to 400	-250~-100	0.55	IEC 584	-270 to 400	-250~-100	0.57
			-100~0	0.12			-100~0	0.23
			0~400	0.08			0~400	0.08
C	ASTM E988	0 to 2315	0 to 1000	0.24	ASTM E988	0 to 2315	0 to 1000	0.26
			1000 to 1800	0.40			1000 to 1800	0.45
			1800 to 2315	0.65			1800 to 2315	0.73
D	ASTM E988	0~2315	0~100	0.31	ASTM E988	0~2315	0~100	0.31
			100~1200	0.25			100~1200	0.27
			1200~2000	0.42			1200~2000	0.47
			2000~2315	0.65			2000~2315	0.74
G	ASTM E1751	0 to 2315	50~100	0.90	ASTM E1751	0 to 2315	50~100	0.90
			100~200	0.57			100~200	0.57
			200~400	0.35			200~400	0.36
			400~1500	0.25			400~1500	0.27
			1500~2315	0.49			1500~2315	0.55
L	DIN43710	-200 to 900	-200 to -100	0.11	DIN43710	-200 to 900	-200 to -100	0.12
			-100 to 400	0.08			-100 to 400	0.09
			400 to 900	0.10			400 to 900	0.12
U	DIN43710	-200 to 600	-200 to 0	0.21	DIN43710	-200 to 600	-200 to 0	0.21
			0 to 600	0.08			0 to 600	0.09

Note: Internal CJC is $\pm 0.15^{\circ}\text{C}$ (-10°C to 50°C ambient temperature)
 Accuracy with external cold junction only, for internal cold junction add 0.15°C (k=2)

SPECIFICATIONS

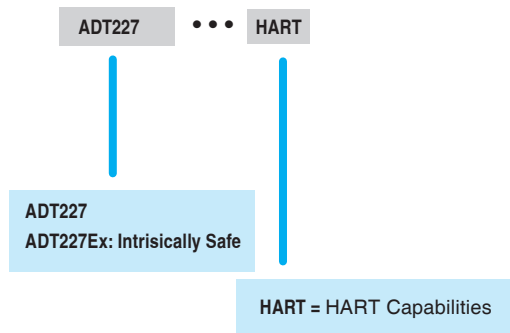
RTD Measurement and Source Accuracy				
Measure and Simulate	Temperature Range (°C)		Accuracy (°C)	
			ADT227	ADT227Ex
PT10(385)	-200 to 850	-200~200	0.57	0.59
		200~600	0.67	0.72
		600~850	0.75	0.82
PT25(385)	-200 to 850	-200~200	0.24	0.27
		200~600	0.30	0.35
		600~850	0.34	0.41
PT50(3916)	-200 to 850	-200~200	0.13	0.16
		200~600	0.17	0.22
		600~850	0.20	0.27
PT100(385) PT100(391) PT100(3916) PT100(3926)	-200 to 850	-200~200	0.08	0.10
		200~600	0.11	0.16
		600~850	0.14	0.20
PT200(385)	-200 to 850	-200~200	0.32	0.08
		200~300	0.34	0.34
		300~600	0.41	0.41
		600~850	0.48	0.48
PT400(385)	-200 to 850	-200~0	0.15	0.04
		0~200	0.18	0.18
		200~600	0.25	0.25
		600~850	0.30	0.30
PT500(385)	-200 to 850	-200~200	0.16	0.16
		200~600	0.22	0.22
		600~850	0.27	0.27
PT1000(385)	-200 to 850	-200~200	0.10	0.10
		200~600	0.16	0.16
		600~850	0.20	0.20
Cu10(427)	-200~260	-200~260	0.54	0.56
Cu50(428)	--200~260	-200~260	0.11	0.13
Cu100(428)	-200~260	-200~260	0.07	0.08
Ni100(617) Ni100(618)	-60~180	-60~0	0.05	0.06
		0~180	0.05	0.05
Ni120(672)	--80~260	-80~260	0.04	0.05
Ni1000	-50~150	-50~150	0.07	0.07

*Note: Ambient temperature of 20°C±10°C.

4-wire accuracy. For 2-wire add 50 mΩ, for 3-wire add 10 mΩ

ORDERING INFORMATION

Model Number



Accessories (included)		
Model number	Description	QTY
9811-X	110V/220V external power adapter	1 pc
9704	Chargeable Li-ion battery	1 pc
9023	Test leads	1 set (6 pcs)
9027	Right angle test leads kit	1 set (2 pcs)
9060	Pressure module connection cable	1 pc
9040	Hanging strap with magnet	1 pc
	Manual	1 pc
	ISO 17025 accredited calibration certificate	1 pc

Optional Accessories	
Model number	Description
ADT161Ex - XXX	Intelligent Digital Pressure Modules
9060	Pressure module connection cable
9081	U type TC MINI-TC cable
9052	USB Cable (TYPE - A to C)
9080	Cable kit (including TC plug, compensation cable, S,R,B,K,J,T,E,N)
9704	Spare chargeable Li-ion battery for multifunction calibrator
9811-X	110 V/220 V external power adapter
9906A	Hard carrying case for handheld instrument with accessories
9918-SC	Soft carrying case, with space for handheld instrument, test leads, and accessories
9530-BASIC	Additel/Acal Automated calibration software with asset management
9530-NET	Additel/Acal Automated calibration software with asset management, network version, Includes server installation and 1 user license

* Additel/Land software can be downloaded for free at www.additel.com

Additel 161, 161Ex

Intelligent Digital Pressure Modules



- Pressure ranges to 60,000 psi (4,200 bar)
- Pressure measurement accuracy of 0.02% FS
- Precision accuracy to 0.01% RD, 0.05% accuracy up to 40K psi
- Intrinsically Safe (Ex) models available
- Fully temperature compensated accuracy



Gauge pressure Differential pressure

OVERVIEW

With advanced microprocessor technology and state-of-the-art silicon pressure sensors, Additel's 161 and 161Ex series Digital Pressure Modules provide an accurate, reliable, and economic solution for wide range of pressure applications. Our intrinsically safe (Ex) models are up to the task of providing the best possible results, even in hazardous environments. In order to reach the best performance, every silicon pressure sensor in the module has been specially aged, tested and screened before assembly. Designed as external pressure modules for Additel's 760 automatic handheld pressure calibrator, the ADT761 automated pressure calibrator, ADT226 series handheld process calibrator and Additel's flagship 780 pressure controller, the Additel 161 is unmatched in performance and reliability. If intrinsic safety is a critical requirement for your workload, we have you covered when you combine our model ADT226Ex process calibrator with any of our ADT161Ex pressure modules.

FEATURES

- Precision sensor measurement accuracy to 0.01% RD
- Gauge pressure measurement accuracy of 0.02% FS
- Absolute Pressure measurement accuracy of 0.1% FS
- Pressure ranges to 60,000 psi (4,200 bar)
- Intrinsically Safe (Ex) models available
- Advanced temperature compensation
- ISO 17025 accredited calibration and data included

PRESSURE RANGE

Differential Pressure						
P/N	Pressure Range ^[1]		Media	Accuracy (%FS)	Burst Pressure	Static Pressure Range
	(inH ₂ O)	(mbar)				
DP1	±1	±2.5	G	0.05 ^[2]	100x	±10 psi
DP2	±2	±5.0	G	0.05 ^[2]	100x	±10 psi
DP5	±5	±10	G	0.05 ^[2]	50x	±10 psi
DP10	±10	±25	G	0.05 ^[2]	20x	±10 psi
DP20	±20	±50	G	0.05	20x	±10 psi
DP30	±30	±75	G	0.05	20x	±10 psi
DP50	±50	±160	G	0.05	3x	±10 psi
DP100	±100	±250	G	0.02	3x	±15 psi
DP150	±150	±350	G	0.02	3x	50 psi
DP300	±300	±700	G	0.02	3x	50 psi

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

Gauge Pressure ^[1]					
P/N	Pressure Range		Media ^[2]	Accuracy(%FS)	Burst Pressure
	(psi)	(bar)			
V15	-15	-1.0	G	0.02	3x
GP2	2	0.16	G	0.05	3x
GP5	5	0.35	G	0.05	3x
GP10	10	0.7	G	0.02	3x
GP15	15	1.0	G	0.02	3x
GP30	30	2.0	G	0.02	3x
GP50	50	3.5	G , L	0.02	3x
GP100	100	7.0	G , L	0.02	3x
GP150	150	10	G , L	0.02	3x
GP300	300	20	G , L	0.02	3x
GP500	500	35	G , L	0.02	3x
GP600	600	40	G , L	0.02	3x
GP1K	1,000	70	G , L	0.02	3x
GP1.5K	1,500	100	G , L	0.02	3x
GP2K	2,000	140	G , L	0.02	3x
GP3K	3,000	200	G , L	0.02	3x
GP5K	5,000	350	G , L	0.02	3x
GP10K	10,000	700	G , L	0.02	2x
GP15K	15,000	1,000	G , L	0.05	2x
GP20K	20,000	1,400	G , L	0.05	1.5x
GP25K	25,000	1,600	G , L	0.05	1.5x
GP30K	30,000	2,000	G , L	0.05	1.5x
GP36K	36,000	2,500	G , L	0.05	1.5x
GP40K	40,000	2,800	G , L	0.05	1.35x
GP50K	50,000	3,500	G , L	0.1	1.2x
GP60K	60,000	4,200	G , L	0.1	1.1x

[1]. Sealed gauge pressure for above 1000 psi

[2]. G=Gas, L=Liquid

Now Offering
0.05% Accuracy
Up to 40K PSI

SPECIFICATIONS

Compound Pressure						
P/N	Pressure Range		Media	Accuracy	Pressure Rating	
	psig	bar.g			Burst	Over Pressure
CP2	±2	±0.16	G	0.05% FS	3x	1.2x
CP5	±5	±0.35	G	0.02% FS	3x	1.2x
CP10	±10	±0.7	G	0.02% FS	3x	1.2x
CP15	±15	±1.0	G	0.02% FS	3x	1.2x
CP30	-15 to 30	-1 to 2.0	G	0.02% FS	3x	1.2x
CP50	-15 to 50	-1 to 3.5	G	0.02% FS	3x	1.2x
CP100	-15 to 100	-1 to 7.0	G,L	0.02% FS	3x	1.2x
CP300	-15 to 300	-1 to 20	G,L	0.02% FS	3x	1.2x
CP500	-15 to 500	-1 to 35	G,L	0.02% FS	3x	1.2x
CP600	-15 to 600	-1 to 40	G,L	0.02% FS	3x	1.2x
CP1K	-15 to 1,000	-1 to 70	G,L	0.02% FS	3x	1.2x
CP2K	-15 to 2,000	-1 to 140	G,L	0.02% FS	3x	1.2x
CP3K	-15 to 3,000	-1 to 200	G,L	0.02% FS	3x	1.2x
CP5K	-15 to 5,000	-1 to 350	G,L	0.02% FS	3x	1.2x
CP10K	-15 to 10,000	-1 to 700	G,L	0.02% FS	2x	1.2x

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

Barometric Pressure					
P/N	Pressure Range		Media	Accuracy	Burst Pressure
	Low	High			
BP	60 kPa	110 kPa	G	40 Pa	3x

Precision Sensors ^{[1] [3]} - Absolute Pressure						
P/N	Pressure Range		Media	Accuracy ^[2]	Pressure Rating	
	psi.a	bar.a			Burst	Over Pressure
AP15R	15	1	G	0.01% FS	2x	1.2x
AP30R	30	2	G	0.01% rdg or 0.003% FS whichever is greater	2x	1.2x
AP50R	50	3.5	G	0.01% rdg or 0.003% FS whichever is greater	2x	1.2x
AP100R	115	8	G,L	0.01% rdg or 0.003% FS whichever is greater	2x	1.2x
AP300R	315	21	G,L	0.01% rdg or 0.003% FS whichever is greater	2x	1.2x
AP500R	515	36	G,L	0.01% rdg or 0.003% FS whichever is greater	2x	1.2x
AP1KR	1,015	71	G,L	0.01% rdg or 0.003% FS whichever is greater	2x	1.2x
AP2KR	2,015	141	G,L	0.01% rdg or 0.003% FS whichever is greater	3x	1.1x
AP3KR	3,015	201	G,L	0.01% rdg or 0.003% FS whichever is greater	3x	1.1x
AP6KQ	6,000	400	G,L	0.01% FS	3x	1.2x
AP10KQ	10,000	700	G,L	0.01% FS	2x	1.2x
AP15KQ	15,000	1,000	G,L	0.01% FS	2x	1.2x
AP20KQ	20,000	1,400	G,L	0.01% FS	2x	1.2x
AP30KQ	30,000	2,000	G,L	0.02% FS	1.5x	1.1x
AP40KQ	40,000	2,800	G,L	0.02% FS	1.5x	1.1x

[1] Contact Additel for other range options.


[2] Accuracy includes calibration uncertainty, linearity and long-term stability.

[3] Precision Sensors (APXR and APXQ) cannot be configured as an Ex model and cannot be read by Ex device.



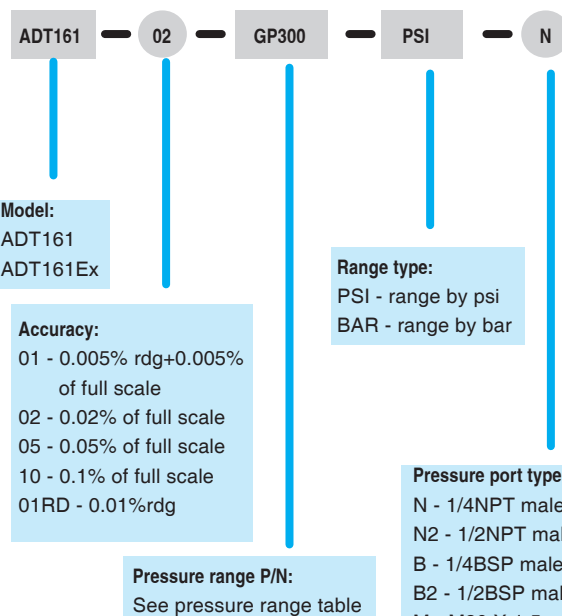
Additel 226Ex with ADT161Ex Pressure Module

SPECIFICATIONS

	Standard Accuracy			Precision Accuracy	
	CPXXX	DPXXX	GPXXX	APXXQ	APXXR
Operating temperature	-10°C to 50°C (14°F to 122°F)			15°C to 25°C (59°F to 77°F)	10°C to 30°C (50°F to 86°F)
Storage temperature	-20°C to 70°C (-4°F to 158°F)			-20°C to 70°C (-4°F to 158°F)	
Relative humidity	95% RH			90% RH	
Pressure connections (for external use only)	1/4NPT, 1/2NPT, 1/4BSP, 1/2BSP, M20x15			1/4NPT, 1/2NPT, 1/4BSP, 1/2BSP, M20x15	
Enclosure (for external use only)	SS enclosure			SS enclosure	
Intrinsic Safety (ADT161Ex models only)	ATEX certified intrinsically safe  II 1G EX ia IIC T4 Ga TUR 16.0023X			N/A	
Dimensions (Dia x H)	33 mm x 123 mm (1.3" x 4.84")			Depends on the model	44 mm x 195 mm (1.7" x 7.7")
Weight	0.4 kg (0.99 lb)			Depends on the model	0.7 kg (1.5 lb)
Warranty	1 Year			1 Year	1 Year

ORDERING INFORMATION

Model Number



Note: Precision Sensors (APXR and APXQ) cannot be configured as an Ex model and cannot be read by Ex device.

Accessories included

ISO 17025 accredited Calibration Certificate

Optional Accessories

Model number	Description	Picture
9060	Pressure module connection cable	