

# **Additel 226, 226Ex Multifunction Process Calibrator**



- Sourcing, Simulating and Measuring Pressure, **Temperature and Electrical Signals**
- **■** 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 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. The ADT226 is a powerful yet cost effective process calibrator, which has an ATEX certified intrinsically safe option - ADT226Ex allowing you to perform calibration work 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 ADT226 series brings an all new user interface to the world of process calibrators. With a menu driven interface and small size/weight, the ADT226 is the industry's smallest multifunctional process calibrator with an intrinsically safe version to boot (ADT226Ex).

It adopts advanced human hand engineering design for the most convenient field handheld process calibrator available. The ADT226 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 ADT226 series provides much improved accuracies including an electrical accuracy of 0.015% RD + 0.005% FS, high-static differential pressure mode accuracy to 0.002% FS and across the board improvements in temperature measurement accuracies.

# **Thermocouple Measurement Performance**

The ADT226 series delivers highly improved thermocouple measurement capabilities by vastly improving the cold junction compensation(CJC) specifications and a much improved stabilization time.





#### **Features**

Metrology Made Simple

# **Time Saving Features**



In addition to all the great features mentioned above, the ADT226 series 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.

# **Portable and Robust**



The demands of remote calibration work can be challenging. The ADT226 series 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 ADT226 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 226Ex series calibrators have passed the most stringent testing by certified organizations to acquire intrinsically safe certificates, ATEX, IECEX. 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 advanced transflective 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 226 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 other errors caused by various waveforms

# **Targeted Application Features**

The onboard applications provide a useful selection of features including 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.



#### **Connectivity & Battery**



Users can remotely connect mobile devices to the ADT226 via Bluetooth with an unobstructed distance up 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 12 hours of run time.

### **SPECIFICATIONS**

## **Electrical Specification**



Source Accuracy							
Specifications			ADT226Ex				
орсолюштонз	Range	Resolution	Accuracy	Range	Resolution	Accuracy	
	-150 to 150 mV	5 uV	0.015%RDG + 15 uV		0.2 mV	0.02%RDG + 0.5 mV	
Voltage DC	-1.5 to 1.5 V	0.05 mV	0.015%RDG + 0.15 mV	0 to 10.5 V			
	-15 to 15 V	0.5 mV	0.015%RDG + 1.5 mV				
Current DC	0 to 25 mA	0.5 uA	0.015%RDG + 1.2 uA	0 to 25 mA	0.5 uA	0.02%RDG + 1.2 uA	
Resistance	0 to 400 Ω	10 m $\Omega$	$0.015\%$ RDG + 20 m $\Omega$	0 to 400 Ω	10 mΩ	$0.02\%$ RDG + 20 m $\Omega$	
nesistance	0 to 4000 Ω	100 mΩ	0.015%RDG + 200 mΩ	0 to 4000 Ω	100mΩ	0.02%RDG + 200 mΩ	
	(0.01 ~ 5) Hz	0.00001 Hz	0.005%RDG + 0.00005 Hz	(0.01 ~ 5) Hz	0.00001 Hz	0.005%RDG + 0.00005 Hz	
	(5 ~ 50) Hz	0.0001 Hz	0.005%RDG + 0.0005 Hz	(5 ~ 50) Hz	0.0001 Hz	0.005%RDG + 0.0005 Hz	
Frequency (Square wave)	(50 ~ 500) Hz	0.001 Hz	0.005%RDG + 0.005 Hz	(50 ~ 500) Hz	0.001 Hz	0.005%RDG + 0.005 Hz	
	(500 ~ 5000) Hz	0.01 Hz	0.005%RDG + 0.05 Hz	(500 ~ 5000) Hz	0.01 Hz	0.005%RDG + 0.05 Hz	
	(5000 ~ 50000) Hz	0.1 Hz	0.005%RDG + 0.5 Hz	(5000 ~ 50000) Hz	0.1 Hz	0.005%RDG + 0.5 Hz	
	(0.1~ 50) Hz	0.001 Hz	0.004 Hz	N/A			
Frequency (Sine wave &	(50 ~ 500) Hz	0.01 Hz	0.04 Hz				
Triangular wave)	(500 ~ 5000) Hz	0.1 Hz	0.4 Hz				
	(5000 ~ 50000) Hz	1Hz	4 Hz				
Duty Cycle	(1%~99%)@≤10000Hz	0.05%	0.1% / kHz + 0.1%	Eiv	vod 50% @ (0.01 50000) U→		
Duty Cycle	(5%~99%)@≤50000Hz	0.5%	0.1707 KHZ + 0.170	Fixed 50%@(0.01~50000)Hz			
Voltage mV (TC)	-10 to 75 mV	1.5 uV	0.015%RDG + 4.0 uV	-10 to 75 mV 1.5 uV 0.02%RD0		0.02%RDG + 4.0 uV	
Pulse	0 to 9999999	1	N/A	0 to 9999999	1	N/A	
ruise	Optional rising edge and	falling edge, mini	mum threshold voltage: 2.5V				
Loop power (max 25mA)	24 V	N/A	±1 V	22 V	N/A	± 10%	

Note 1: When the environment temperature is  $(-10 \sim +10)^{\circ}$ C and  $(30 \sim 50)^{\circ}$ C, the temperature coefficient is:

Voltage, current, thermocouple, thermal resistance output:  $\pm$  5 ppm FS/°C (for Non-Ex version);

When the environment temperature is  $(-20 \sim -10)^{\circ}$ C, the temperature coefficient is:

Voltage, current, thermocouple, thermal resistance output: ± 5 ppm FS/℃ (for Ex version);

#### Note 2: Output features:

 $Voltage\ output:\ \pm 150\ mV\ / \pm 1.5V\ /\ \pm\ 15V,\ Maximum\ load\ current:\ 10\ mA,\ (For\ Ex-version\ load\ current\ 5mA),\ load\ effect:\ 50\ uV\ /\ mA;$ 

 $Current \ output \ (0 \sim 25) \ mA; \ Maximum \ open \ circuit \ voltage: 24 \ V, \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ maximum \ external \ voltage: 50 \ V; \ driving \ capacity: 1 \ k\Omega \ / \ 20 \ mA, \ driving \ capacity: 1 \ k\Omega$ 

(For Ex-version,Maximum open circuit voltage: 15 V, impedance: 400Ω, driving capacity: 6 V / 20 mA, maximum external voltage: 30 V)

Frequency output: square wave, adjustable duty cycle, square wave amplitude (0~15) V adjustable, amplitude accuracy ± 0.2%FS(for Non-Ex version);

Frequency output: square wave, 50% duty cycle, square wave amplitude (0~10.5) V adjustable, amplitude accuracy ± 0.2%FS(for Ex version);

maximum load current: 10mA (For Ex-version,1mA);

Supported units: Hz, kHz, MHz, CPM, CPH, s, ms;

Zero-crossing sine wave / triangular wave amplitude: (0.1  $\sim$  30) Vp-p adjustable(only for Non-Ex version),

Amplitude accuracy 3 % Vp-p + 75 mV, supporting display valid value.  $^{[1]}$ 

Thermocouple output: maximum load current: 5mA, load effect: < 5 uV / mA;

Thermal resistance output: maximum excitation current: lex\*400<1.6V(0 ~ 400) Ω, lex\*Rsim<1.6V(400 ~ 4000) Ω;

minimum excitation current: 0.2 mA@(0 ~ 400)  $\Omega$ , 0.1 mA@(400 ~ 4000)  $\Omega$ ;

support 1ms pulse excitation. (For Non-Ex version)

Thermal resistance output: Excitation current: (0.2~2) mA@(0 ~ 400)  $\Omega$ , (0.1~0.3) mA@(400 ~ 4000)  $\Omega$ ;

support 1ms pulse excitation. (For Ex version)



#### **SPECIFICATIONS**

#### Metrology Made Simple

Specifications	ADT226			ADT226Ex					
Specifications	Range	Resolution	Accuracy	Range		Resolution	Accuracy		
Voltage DC	-300 to 300 mV	1 μV	0.015% RDG + 15 μV	-300 to 300 mV		1µV	0.02% RDG + 15 μV		
	-30 to 30 V	0.1 mV	0.015%RDG + 1.5 mV	-30 to 30 V	/	0.1 mV	0.02% RDG + 1.5 mV		
	Impedance: -300 mV to -30 V to 30		00 ΜΩ						
	-300 to 300 V	10 mV	0.05% RDG + 30 mV						
DO Hink Waltana	The highest input voltage is 300 V, IEC61010 300V CATII								
DC High Voltage	Common mode rejection	n: >100 dB (at	50 or 60 Hz)			N/A			
	Impedance: > 4 MΩ, DC coupling								
	300V (40 to 500 Hz)	10 mV	0.5% RDG + 150 mV						
	The highest input voltage	e is 300 V, IE0	C61010 300V CATII						
AC High Voltage	9% to 100% of range is	suitable for the	N/A						
	Impedance: >4 MΩ, <100pF, AC coupling								
Current DC	-30 to 30 mA	0.1 μΑ	0.015% RDG + 1.5 μA	-30 to 30 mA	(	0.1 μΑ	0.02% RDG + 1.5 μA		
	0 to 400 Ω	1 mΩ	0.015% RDG + 20 mΩ	0 to 400 Ω	1 mΩ		0.02% RDG + 20 mΩ		
Resistance	0 to 4000 Ω	10 mΩ	$0.015\%~\text{RDG} + 200~\text{m}\Omega$	0 to 4000 Ω 10 mΩ 0.02% RDG + 200 mΩ					
(4-Wire)	2-Wire + 50 mΩ, 3-wire + 10 mΩ								
	Excitation current: 0.2 n		I	<u> </u>		I	I		
Voltage mV (TC)	-10 to 75 mV	0.1uV	0.015% RDG + 4.0 μV	-10 to 75 n	nV	0.1uV	0.02% RDG + 4.0 μ\		
	Impedance: >100 MΩ								
	(0.01 ~ 5) Hz	0.00001 Hz	0.005%RDG + 0.00005 Hz	(0.01 ~ 5) Hz 0.00		0.00001 Hz	0.005%RDG + 0.00005		
	(5 ~ 50) Hz	0.0001 Hz	0.005%RDG + 0.0005 Hz	(5 ~ 50) Hz 0.0001 Hz		0.005%RDG + 0.0005			
	(50 ~ 500) Hz	0.001 Hz	0.005%RDG + 0.005 Hz	(50 ~ 500) Hz 0.001 Hz		0.001 Hz	0.005%RDG + 0.005		
Frequency	(500 ~ 5000) Hz	0.01 Hz	0.005%RDG + 0.05 Hz	(500 ~ 5000) Hz 0.01 Hz		0.01 Hz	0.005%RDG + 0.05 H		
	(5000 ~ 50000) Hz	0.1 Hz	0.005%RDG + 0.5 Hz	(5000 ~ 5000	0) Hz	0.1 Hz	0.005%RDG + 0.5 H		
	Minimum threshold volta	Minimum threshold voltage: 2.5 V							
	Supported units: Hz, kHz, MHz, CPM, CPH, s, ms, µs								
Duty Cycle	(1%~99%)@≤10000Hz	0.01%	0.1% kHz + 0.05%	N/A					
_ 0., 0,0.0	(5%~99%)@≤50000Hz	0.1%	23.75 10.12 1 0.00 70						
Pulse	0 to 9999999	1	N/A	0 to 99999	99	1	N/A		
i uise	Optional rising edge and falling edge, minimum threshold voltage: 2.5V								
Switch	Support for dry or wet s	witch voltage	range of 3 to 30 V, response	speed of < 10 n	ns				

Voltage, current, thermocouple, thermal resistance output: ± 5 ppm FS/℃ (for Non-Ex version);

When the environment temperature is (-20  $\sim$  -10)  $^{\circ}\!\!\mathrm{C}$  , the temperature coefficient is:

Voltage, current, thermocouple, thermal resistance output: ± 5 ppm FS/°C (for Ex version);

AC High Voltage TRMS measurement: ± (250 ppmRDG + 25 ppmFS)/°C;

DC High Voltage measurement:± 25ppmFS/°C

Note 2: Input features:

Voltage range: (-300 ~ 300) mV, input impedance >100 M $\Omega$ ; (-30 ~ 30) V, input impedance >1M $\Omega$ ;

Current measurement: input impedance < 40  $\Omega$ ;

TC measurement: input impedance >100 M $\Omega$ ;

AC High Voltage TRMS measurement: input impedance: > 4MΩ , <100pF, AC coupling; Maximum input voltage: 300 V, IEC61010 300V CATII;

 $9\% \sim 100\%$  of the range is applicable to the accuracy index above.

DC High Voltage measurement: > 4 MΩ, DC coupling; Maximum input voltage: 300 V, IEC61010 300V CATII; Common-mode rejection:>100 dB (in 50 or 60 Hz) Note 3: The thermal resistance measurement excitation power supply is 0.2mA. There are four wire system, three wire system and two wire system measurement modes at each gear position. The accuracy indicators are as follows:

The accuracy data given in the table is the accuracy data in 4-line system; 3-wire system accuracy is +10 mΩ on the basis of 4-wire system accuracy; 2-wire accuracy is  $+50 \text{ m}\Omega$  on the basis of 4-wire accuracy;

Note 4: Minimum threshold voltage for frequency and pulse measurement: 2.5V; Note 5: Frequency measurement unit: Hz, kHz, MHz, CPM, CPH, s, ms, µs;

Note 6: Optional rising edge or descending edge trigger mode for pulse measurement.



Specifications	ADT226	ADT226Ex				
Operating Temperature	-10°C to 50°C	Metrology Made Simple -20°C to 50°C				
Specification guaranteed temperature range	10°C to 30°C	-10°C to 50°C				
Storage Temperature	-30°C to 70°C	-30°C to 70°C				
Humidity	<95%, non-condensing	<95%, non-condensing				
Power supply	6600mAh, 23.8Wh lithium battery, charging time about 6 hours, battery pack can be charged independently	4000mAh 14.4Wh Explosion-proof lithium battery packcharging time about 6 hours, battery pack can be charged independently				
User interface	Icon drive menus	Icon driven menus with navigation buttons				
Ports protection voltage	50V max (Only for the top ports)	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  Screen protector: tempered glass film (replaceable)				
Maximum altitude	300	00 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	i-ion battery (included)				
Battery Life	Typically 12 hours	Typically 35 hours				
Battery Charge	110V/220V external power adapter included. Battery can be charged external to the unit.					
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					
Barometric Accuracy (Built-in barometer)	55Pa					
IP protection level	IP67, 1 meter drop test					
Communication	Isolate USB-TYPEC (slave), Bluetooth BLE					
User Interface Localization	English, German, French, Italian, Spanish, Portuguese, Simplified Chinese, Traditional Chinese, Japanese, Russian, Czech, Slovak	English, Simplified Chinese, Traditional Chinese, Japanese				
Calibration	ISO 17025 accredited calibration with data					
Warranty	3 years					



# **Pressure Specification**

# Pressure Specification( ADT226 & ADT226Ex)

The 161 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.

# **SPECIFICATIONS**

# **Temperature Specification**

ieriiioco	uple Measuremer	it and Source Act	curacy					
	ADT226				ADT226Ex			
Туре	Standard	Temperatu	re Range (°C)	Accuracy (°C)	Standard	Temperatur	e Range (°C)	Accuracy (°C)
		•	- 3 ( )	Measure / Source				Measure / Source
<b>S</b> IEC 584			-50~0	0.96			-50~100	0.96
	-50 to 1768	0~100	0.69	IEC 584	-50 to 1768	100~1000	0.69	
			100~1768	0.64			1000~1768	0.73
			-50~0	1.02			-50~0	1.03
R	IEC 584	-50 to 1768	0~200	0.71	IEC 584	-50 to 1768	0~200	0.71
			200~1768	0.56			200~1768	0.65
			200~300	1.89			200~300	1.90
В	IEC 584	0 to 1820	300~500	1.25	IEC 584	0 to 1820	300~500	1.26
_	120 004	0 10 1020	500~800	0.78	120 004	0 10 1020	500~800	0.79
			800~1820	0.55			800~1820	0.57
			-250 to -200	0.97			-250 to -200	1.04
K	IEC 584	-270 to 1372	-200 to -100	0.30	IEC 584	-270 to 1372	-200 to -100	0.32
.`	120 304	270 10 1072	-100 to 600	0.18	120 304		-100 to 600	0.21
			600 to 1372	0.35			600 to 1372	0.43
			-250 to -200	1.50		-270 to 1300	-250 to -200	1.58
N	N IEC 584	-270 to 1300	-200 to -100	0.44	IEC 584		-200 to -100	0.46
			-100 to 1300	0.30			-100 to 1300	0.37
			-250~-200	0.54			-250~-200	0.59
E IEC 584	-270 to 1000	-200~-100	0.20	IEC 504	-270 to 1000	-200~-100	0.22	
		-100~700	0.15	IEC 584		-100~700	0.18	
			700~1000	0.20			700~1000	0.25
		-210~1200	-210~-100	0.26		-210~1200	-210~-100	0.28
J	IEC 584		-100~700	0.15	IEC 584		-100~700	0.19
			700~1200	0.25			700~1200	0.31
			-250~-100	0.74			-250~-100	0.79
Т	IEC 584	-270 to 400	-100~0	0.15	IEC 584	-270 to 400	-100~0	0.16
			0~400	0.11			0~400	0.13
			0 to 1000	0.35		0 to 2315	0 to 1000	0.40
С	ASTM E988	0 to 2315	1000 to 1800	0.62	ASTM E988		1000 to 1800	0.73
			1800 to 2315	1.02			1800 to 2315	1.22
			0~100	0.39			0~100	0.39
_	AOTA FOOS	0.0045	100~1200	0.37	AOTA FOSS	988 0~2315	100~1200	0.43
D	ASTM E988	0~2315	1200~2000	0.65	ASTM E988		1200~2000	0.77
			2000~2315	1.03			2000~2315	1.24
		50~100 1.12		50~100	1.12			
			100~200	0.72		TM E1751 0 to 2315	100~200	0.72
G ASTM E17	ASTM E1751	0 to 2315	200~400	0.45	ASTM E1751		200~400	0.46
			400~1500	0.37			400~1500	0.43
			1500~2315	0.77			1500~2315	0.92
			-200 to -100	0.15			-200 to -100	0.16
L	DIN43710	-200 to 900	-100 to 400	0.13	DIN43710	-200 to 900	-100 to 400	0.14
			400 to 900	0.17		200 10 000	400 to 900	0.20
	DIMICOTIC	000 1 005	-200 to 0	0.28			-200 to 0	0.29
U	DIN43710	-200 to 600	0 to 600	0.13	DIN43710	-200 to 600	0 to 600	0.15

Note: Internal CJC is  $\pm 0.2^{\circ}$ C (-10°C to 50°C ambient temperature) Accuracy with external cold junction only, for internal cold junction add 0.2°C (k=2)

# **SPECIFICATIONS**



Measurement and Source	Accuracy				
		(20)	Accuracy (°C)		
Measure and Simulate		Temperature Range (°C)	ADT226	ADT226Ex	
		-200~200	0.62	0.64	
PT10(385)	-200 to 850	200~600	0.77	0.82	
		600~850	0.88	0.95	
		-200~200	0.29	0.31	
PT25(385)	-200 to 850	200~600	0.40	0.44	
		600~850	0.47	0.54	
		-200~200	0.18	0.20	
PT50(3916)	-200 to 850	200~600	0.27	0.32	
		600~850	0.34	0.40	
PT100(385)		-200~200	0.13	0.15	
PT100(391) PT100(3916)	-200 to 850	200~600	0.21	0.26	
PT100(3926)		600~850	0.27	0.34	
		-200~200	0.34	0.37	
PT000(005)	-200 to 850	200~300	0.37	0.40	
PT200(385)		300~600	0.46	0.51	
		600~850	0.54	0.61	
		-200~0	0.17	0.18	
PT 400 (005)	-200 to 850	0~200	0.21	0.23	
PT400(385)		200~600	0.30	0.35	
		600~850	0.37	0.44	
		-200~200	0.18	0.20	
PT500(385)	-200 to 850	200~600	0.27	0.32	
		600~850	0.34	0.40	
		-200~200	0.13	0.15	
PT1000(385)	-200 to 850	200~600	0.21	0.26	
		600~850	0.27	0.34	
Cu10(427)	-200~260	-200~260	0.59	0.61	
Cu50(428)	200~260	-200~260	0.15	0.17	
Cu100(428)	-200~260	-200~260	0.10	0.12	
Ni100(617)	60, 100	-60~0	0.06	0.07	
Ni100(618)	-60~180	0~180	0.06	0.08	
Ni120(672)	80~260	-80~260	0.06	0.07	
Ni1000	-50~150	-50~150	0.08	0.09	

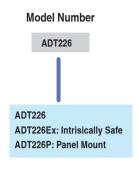
<sup>\*</sup>Note: Ambient temperature of  $20^{\circ}C\pm10^{\circ}C$ .

<sup>4-</sup>wire accuracy. For 2-wire add 50 m $\Omega,$  for 3-wire add 10 m $\Omega$ 



# ORDERING INFORMATION

# **Metrology Made Simple**





**Panel Mount Version** 

Accessories (included)							
Model number	Description	QTY	Picture				
9811-X	110V/220V external power adapter (Only for ADT226, 226P)	1 pc					
9811Ex-X	110V/220V external power adapter (Only for ADT226Ex)	1 pc					
9704	Chargeable Li-ion battery (Only for ADT226, 226P)	1 pc	Total Arcs				
9704Ex	Chargeable Li-ion battery (Only for ADT226Ex)	1 pc	profess				
9023	Test leads	1 set (6 pcs)	***				
9027	Right angle test leads (Non-Ex models only)	1 set (2 pcs)					
9060	Pressure module connection cable	1 pc					
9052	USB Cable type A to type C (Non-Ex models only)	1 pc	O				
9052Ex	Ex USB Cable type A to type C (For Ex models only)	1 pc					
9040	Hanging strap with magnet	1 pc					
9028	Multimeter Test Hook, Flexible Electronic Probe	1 set (2 pcs)	1				
	ISO 17025 accredited calibration certificate	1 pc					

Optional Accessories								
Model number	Description	Picture	Model number	Description	Picture			
ADT161 - XXX	Digital Pressure Modules		9082	HART 250 ohm resistor adapter for ADT226, 226Pand ADT227, 227P	99-01			
ADT161Ex - XXX	Intrinsically Safe Digital Pressure Modules	2 I	9704	Battery, rechargeable Li-ion polymer battery for Additel Handheld Series	Distriction			
ADT129-X	Differential Pressure Manifold, -15 to 3,000 psi	-13	9704Ex	Battery, rechargeable Li-ion polymer battery for Ex Additel Handheld Series	POT ECH			
9061	Current output cable (for ADT226, 226P and ADT227, 227P)		9811-X	110 V/220 V external power adapter for handheld models				
9062	Connection adapter cable for Fluke style pressure modules to non- explosion-proof Additel readouts	1	9811Ex-X	110 V/220 V external power adapter for Ex handheld models				
AM1602-6FT	Class A, PT100/385 Industrial RTD, -40°C to 160°C, 3/16 (4.76 mm) inch x 2 inch (50 mm) with 6 foot (1.8 Meters) cable w/ banana jack connectors		9906A	Hard carrying case for handheld instrument with accessories				
9080	Cable kit (including TC plug, compensation cable, S,R,K,J,T,E,N)	184778	9918-SC	Soft carrying case, with space for handheld instrument, test leads, and accessories				
9081	Universal TC easy-press adapter for ADT226, 226P and ADT227, 227P		9530-BASIC	Additel/Acal Task management software for multifunction calibrator				
9079-X	Thermocouple connection wire, mini male to alligator clips (X = type K, N, J, T, E)	**	9530-NET	Additel/Acal Automated calibration software with asset management, network version, Includes server installation and 1 user license				
9071-BJ	Connector Adapter from smart connector female to 4-wire with banana plugs for AM17XX-ADT PRTs							

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<sup>\*</sup> Additel/Land software can be downloaded for free at www.additel.com