Pressure / Process Calibration Equipment

Additel 161, 161Ex Intelligent Digital Pressure Modules



Metrology Made Simple

- 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

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

OVERVIEW

- 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	Burst	Static Pressure	
P/IN	(inH ₂ 0)	(mbar)	wedia	(%FS)	Pressure	Range	
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	±160	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 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	Pressur	e Range	Media	Accuracy(%FS)	Burst	
F/IN	(psi)	(bar)	[2]	Accuracy(%F3)	Pressure	
V15	-15	-1.0	G	0.02	3×	
GP2	2	0.16	G	0.05	3×	
GP5	5	0.35	G	0.05	3×	
GP10	10	0.7	G	0.02	3×	
GP15	15	1.0	G	0.02	3×	
GP30	30	2.0	G	0.02	3×	
GP50	50	3.5	G,L	0.02	3×	
GP100	100	7.0	G,L	0.02	3×	
GP150	150	10	G,L	0.02	3×	
GP300	300	20	G,L	0.02	3×	
GP500	500	35	G,L	0.02	3×	
GP600	600	40	G,L	0.02	3×	
GP1K	1,000	70	G,L	0.02	3×	
GP1.5K	1,500	100	G,L	0.02	3×	
GP2K	2,000	140	G,L	0.02	3×	
GP3K	3,000	200	G,L	0.02	3×	
GP5K	5,000	350	G,L	0.02	3×	
GP10K	10,000	700	G,L	0.02	2×	
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

Addite

SPECIFICATIONS

Metrology Made Simple

Compound Pres	Compound Pressure					
P/N	Pressure Range		Media		Pressure Rating	
P/N	psig	bar.g	Wedia	Accuracy	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
СРЗК	-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 Pressi	ıre					
P/N	Pressure Range		Media	Accuracy(%FS)	Burst Pressure	
P/IN	(psi)	(bar)	Wedia	Accuracy(%F3)	Duist Flessure	
AP5	5	0.35	G	0.1	3×	
AP10	10	0.7	G	0.1	3×	
AP15	15	1.0	G	0.1	3×	
AP30	30	2.0	G	0.1	3×	
AP50	50	3.5	G	0.1	3×	
AP100	100	7.0	G,L	0.05 (0.1)	3×	
AP300	300	20	G,L	0.05 (0.1)	3×	
AP500	500	35	G,L	0.05 (0.1)	3×	
AP1K	1,000	70	G,L	0.05 (0.1)	3×	
АР3К	3,000	200	G,L	0.05 (0.1)	3×	
AP5K	5,000	350	G,L	0.05 (0.1)	3×	

Barometric Pressure								
P/N	Pressure Range		Media	A	Burst Pressure			
F/IN	Low	High	ivieuia	Accuracy	Duist Flessule			
BP	60 kPa	110 kPa	G	40 Pa	3×			



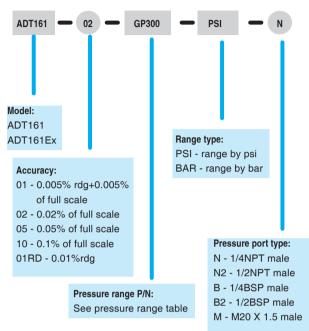
Metrology Made Simple

Precision Sensors ^{[1] [3]} - Absolute Pressure						
	Pressure Range			- [3]	Pressure Rating	
P/N	psi.a	bar.a	Media	Accuracy ^[2]	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	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.

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		



Additel 226Ex with ADT161Ex Pressure Module

SPECIFICATIONS

or Editionation								
	Standard Accuracy			Precision	Precision Accuracy			
	CPXXX DPXXX GPXXX		APXXQ	APXXR				
Operating temperature	-10°C	-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, 1/2N	IPT, 1/4BSP, 1/2	BPS, M20x15	1/4NPT, 1/2NPT, 1/4BSP, 1/2BSP, M20x15				
Enclosure (for external use only)	SS enclosure		SS en	SS enclosure				
Intrinisic Safety (ADT161Ex models only)	(C)	certified intrinsica II 1G EX ia IIC T TUR 16.0023X	•	nfe N/A				
Dimensions (Dia x H)	33 mm	33 mm x 123 mm (1.3" x 4.84")		Depends on the model	44 mm x 195 mm (1.7" x7.7")			
Weight		0.4 kg (0.99 lb)		Depends on the model	0.7 kg (1.5 lb)			
Warranty	1 Year		1 Year	1 Year				