

GENERAL

ALIAPT APT8000 series is a digital pressure transmitter designed for industrial pressure measurement applications. The APT8000 offer configurations for gauge pressure, absolute pressure and vacuum including integrated solutions for industrial applications.

FEATURES

- Updating time of output current in 90 ms
- Improved performance, increased accuracy and greater stability
- Two years stability of 0.15%
- 0.075% accuracy
- Parameter setting by keypad directly
- 4-20 mA output plus direct digital HART communication
- Automatic zero calibration by press-button
- Explosion proof and weather proof housing

STANDARD SPECIFICATION

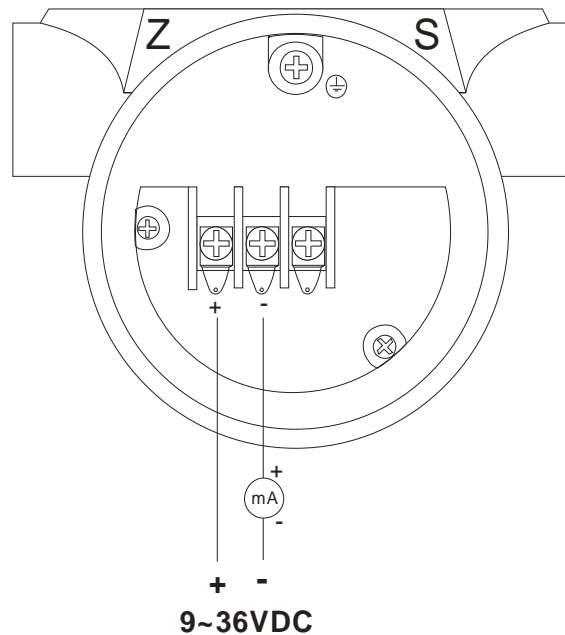
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|--|---|-------------------------|---|
| ● Process Fluid | : Liquid, Gas or Vapor | ● Display | : 5 Digits programmable & 0-100% Bargraph |
| ● Application | : Absolute Pressure, Gauge Pressure, Vacuum | ● Display Unit | : Standard 22 different engineering unit
: 5 Digits programmable for special unit |
| ● Measuring Range | : 0 - 10 Kpa ~ 0 - 30 Kpa (Minimum)
: 0 - 32 Mpa ~ 0 - 70 Mpa (Maximum) | ● Keypad | : 3 internal keys for Programming and output setting |
| ● Turndown Ratio | : 100 : 1 | ● Current Output | : 4 - 20 mA 2 wires
with Hart Signal (Compatible)
Load : Rohm=(Vdc-9)*50 |
| ● Accuracy | : +/- 0.075% of span | ● Power Supply | : 9 ~ 36 VDC |
| ● Stability | : +/-0.15% of URL for 2 years | ● Digital Communication | : Hart Protocol |
| ● Working Temperature | : -25 to +95 °C | ● Damping | : 0 - 32 seconds |
| ● Max. Pressure | : 70 Mpa | ● Response Time | : 100 mS |
| ● Material | | ● Mounting | : Direct installation or bracket on 2" Pipe |
| Connection : SUS 304 / SUS 316 | | ● Humidity Limit | : 0 to 100% Relative Humidity |
| Diaphragm : SUS 316L / Tantalum | | ● Turn on Time | : 2 Seconds with minimum damping |
| Housing : Low copper cast aluminum alloy with polyurethane, light blue paint | | ● Zero Calibration | : Automatic zero calibration by push-button |
| Name / Tag Plate : Stainless Steel 304 / Stainless Steel 316 | | ● Ambient Temperature | : -25 to +85 °C |
| ● Cable Entry | : M20 Conduit Threads / 1/2" NPT (Female) | ● Dimensions | : 102 mm (W) * 160 mm (H) * 130 mm (D) |
| ● Process Connection | : 1/2" NPT, 1/2" BSP | ● Weight | : 1.3 Kg |
| ● Temperature Effect | : +/-0.18% ~ +/-0.5% of span per 20 °C | ● Protection Class | : IP67 (Standard)
: Intrinsically Safe EEx ia IIC T5 (Standard)
: Explosion proof Ex D IIB T5 |
| ● Over Pressure Limit | : 120% of Full Scale | | |
| ● Vibration Effect | : +/-0.05% of URL per g to 200 Hz in any axis | | |
| ● EMI/RFI Effect | : Follow SAMA PMC 33.1 from 20 to 1000 MHz and for field strengths up to 30 V/m | | |



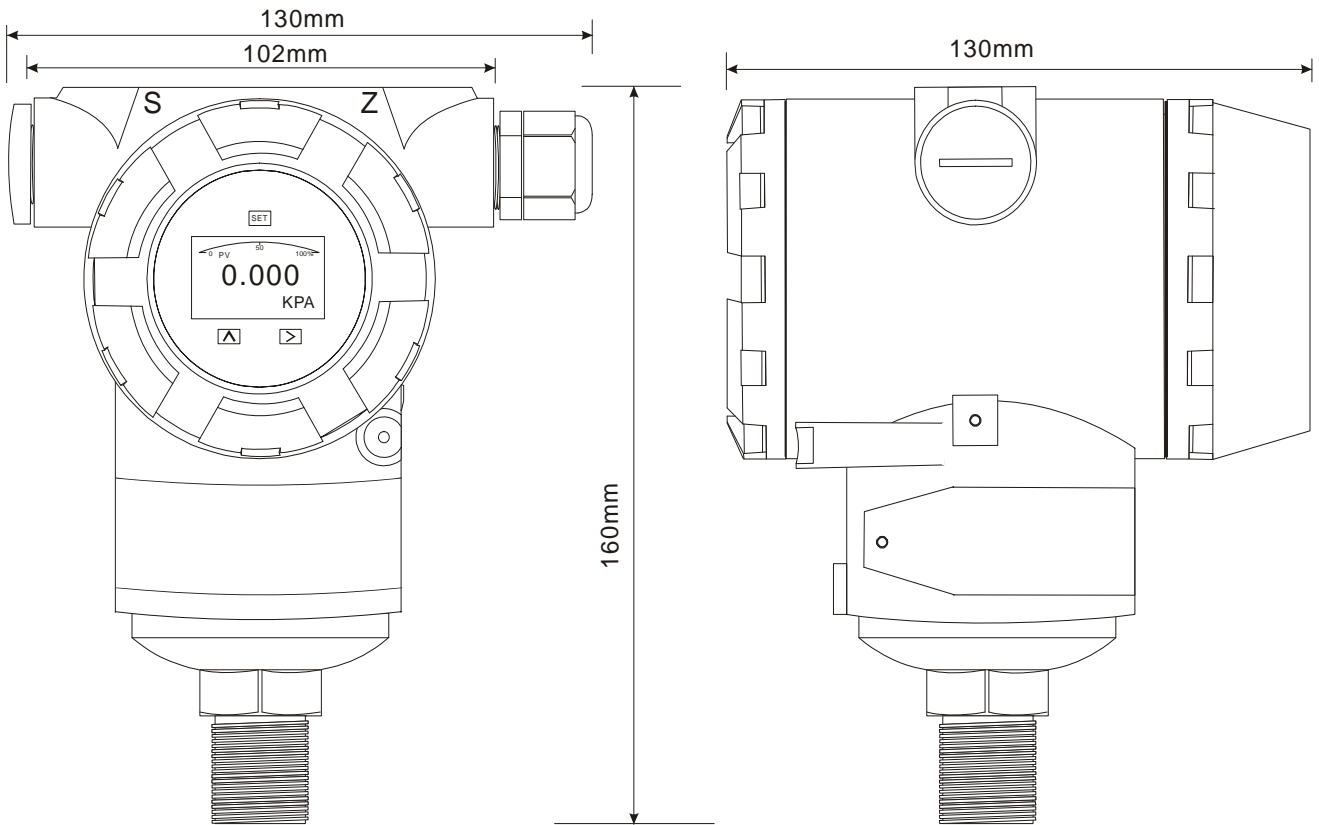
MEASURING RANGE

Range Code	Pressure Range				Transmitter	
	Low Range	High Range	Low Range	High Range	Gauge Pressure	Absolute Pressure
2	0 - 10 Kpa	0 - 30 Kpa	0 - 1020 mmH2O	0 - 3059 mmH2O	◆	◆
	0 - 100 mbar	0 - 300 mbar	0 - 40.15 InH2O	0 - 120.4 InH2O		
	0 - 1.450 psi	0 - 4.351 psi	0 - 0.102 Kg/cm2	0 - 0.306 Kg/cm2		
3	0 - 30Kpa	0 - 100 Kpa	0 - 3059 mmH2O	0 - 10197 mmH2O	◆	◆
	0 - 300 mbar	0 - 1000 mbar	0 - 120.4 InH2O	0 - 401.5 InH2O		
	0 - 4.351 psi	0 - 14.50 psi	0 - 0.306 Kg/cm2	0 - 1.020 Kg/cm2		
4	0 - 100 Kpa	0 - 200 Kpa	0 - 10.20 MH2O	0 - 20.39 MH2O	◆	◆
	0 - 1000 mbar	0 - 2000 mbar	0 - 401.5 InH2O	0 - 802.9 InH2O		
	0 - 14.50 psi	0 - 29 psi	0 - 1.020 Kg/cm2	0 - 2.039 Kg/cm2		
5	0 - 200 Kpa	0 - 700 Kpa	0 - 20.39 MH2O	0 - 71.38 MH2O	◆	◆
	0 - 2.0 Bar	0 - 7.0 Bar	0 - 802.9 InH2O	0 - 2810 InH2O		
	0 - 29psi	0 - 101.5 psi	0 - 2.039 Kg/cm2	0 - 7.138 Kg/cm2		
6	0 - 700 Kpa	0 - 1.7 Mpa	0 - 71.38 MH2O	0 - 173.4 MH2O	◆	◆
	0 - 7.0 Bar	0 - 17.0 Bar	0 - 2810 InH2O	0 - 6825 InH2O		
	0 - 101.5 psi	0 - 246.6 psi	0 - 7.138 Kg/cm2	0 - 17.34 Kg/cm2		
7	0 - 1.7 Mpa	0 - 3.5 Mpa	0 - 173.4 MH2O	0 - 356.9 MH2O	◆	◆
	0 - 17.0 Bar	0 - 35.0 Bar	0 - 6825 InH2O	0 - 14051 InH2O		
	0 - 246.6 psi	0 - 507.6 psi	0 - 17.34 Kg/cm2	0 - 35.69 Kg/cm2		
8	0 - 3.5 Mpa	0 - 7.0 Mpa	0 - 356.9 MH2O	0 - 713.8 MH2O	◆	◆
	0 - 35.0 Bar	0 - 70.0 Bar	0 - 14051 InH2O	0 - 28102 InH2O		
	0 - 507.6 psi	0 - 1015 psi	0 - 35.69 Kg/cm2	0 - 71.38 Kg/cm2		
9	0 - 7.0 Mpa	0 - 32 Mpa	0 - 713.8 MH2O	0 - 3263 MH2O	◆	◆
	0 - 70.0 Bar	0 - 320.0 Bar	0 - 28102 InH2O	0 - 128468 InH2O		
	0 - 1015 psi	0 - 4641.2 psi	0 - 71.38 Kg/cm2	0 - 326.3 Kg/cm2		
A	0 - 32 Mpa	0 - 70 Mpa	0 - 3263 MH2O	0 - 7137.9 MH2O	◆	◆
	0 - 320 Bar	0 - 700.0 Bar	0 - 128468 InH2O	0 - 281024 InH2O		
	0 - 4641.2 psi	0 - 10152.6 psi	0 - 326.3 Kg/cm2	0 - 713.8 Kg/cm2		

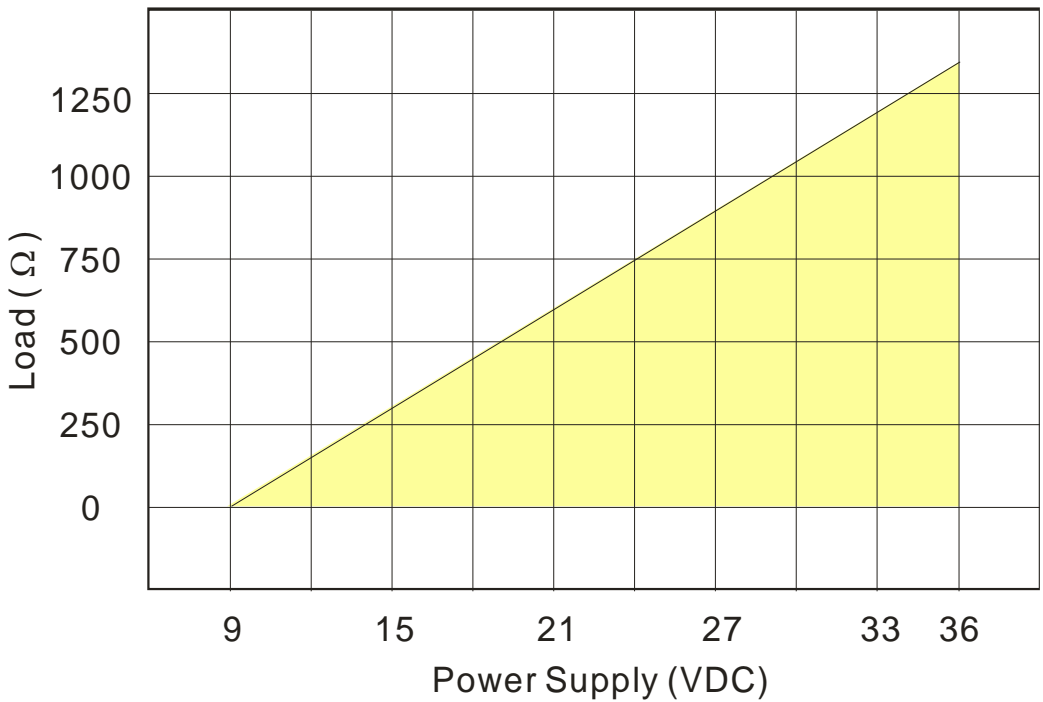
WIRING DIAGRAM



➤ DIMENSIONS



➤ Supply Voltage VS Loop Load



MODEL SELECTION GUIDE

APT8000 Series										
Example: APT8000-G36N-N6NN-NN										
APT8000-	X	X	X	X	-X	X	X	X	-XX	Description
Type	G									Gauge Pressure Transmitter
	A									Absolute Pressure Transmitter
Pressure Range	2									0 - 10(0.3) Kpa ... 0 - 30 Kpa
	3									0 - 30(1.0) Kpa ... 0 - 100 Kpa
	4									0 - 100(2.0) Kpa ... 0 - 200 Kpa
	5									0 - 200(7.0) Kpa ... 0 - 700 Kpa
	6									0 - 700(17) Kpa ... 0 - 1.7 Mpa
	7									0 - 1.7(0.035) Mpa ... 0 - 3.5 Mpa
	8									0 - 3.5(0.07) Mpa ... 0 - 7.0 Mpa
	9									0 - 7.0(0.32) Mpa ... 0 - 32 Mpa
	A									0 - 32(0.70) Mpa ... 0 - 70 Mpa
Process Connector material	N									Stainless Steel 304
	6									Stainless Steel 316
Diaphragm Material	N									Stainless Steel 316L
	T									Tantalum
	Z									Other
Process Connection	-N									1/2" NPT
	-B									1/2" BSP
	-Z									Other
Name Plate Material	N									Stainless Steel 304
	6									Stainless Steel 316
Cable Entry	N									M20 Conduit Threads
	P									1/2" NPT (Female)
	Z									Other
Mounting Bracket Material	N									None
	4									Stainless Steel 304
	6									Stainless Steel 316
Option	-NN									none
	-EX									Explosion proof Ex D IIB T5
	-HT									Hart Signal (Compatible)
	-ZZ									Others