

## 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

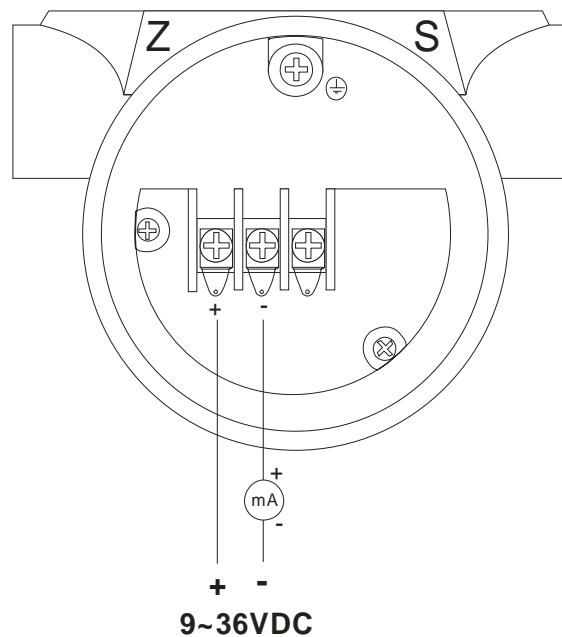
- |  |   |                         |   |
|--|---|-------------------------|---|
| ● Process Fluid  | : Liquid, Gas or Vapor  | ● Display               | : 5 Digits programmable & 0-100% Bargraph   |
| ● Application  | : Absolute Pressure, Gauge Pressure, Vacuum   | ● Display Unit          | : Standard 22 different engineering unit<br>: 5 Digits programmable for special unit                  |
| ● Measuring Range  | : 0... 1.45 PSI / 0... 4.35 PSI ( Minimum )<br>: 0... 4641.2 PSI / 0... 10152.6 PSI ( Maximum ) | ● Keypad                | : 3 internal keys for Programming and output setting  |
| ● Turndown Ratio   | : 100 : 1   | ● Current Output        | : 4 - 20 mA 2 wires<br>with Hart Signal (Compatible)<br>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  | : -13°... 203°F   | ● Damping               | : 0 - 32 seconds  |
| ● Max. Pressure  | : 10152.6 PSI   | ● Response Time         | : 90 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   | : -13°... +185°F  |
| ● Cable Entry  | : M20 Conduit Threads / 1/2" NPT( Female )  | ● Dimensions            | : 4" ( W ) * 6.2" ( H ) * 5.1" ( D )  |
| ● Process Connection   | : 1/2" NPT, 1/2" BSP  | ● Weight                | : 2.2 lbs   |
| ● Temperature Effect   | : +/-0.18% of span per 68°F   | ● Protection Class      | : IP67 ( Standard )<br>: Intrinsically Safe EEx ia IIC T5 (Standard)<br>: 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                 |                         |   |



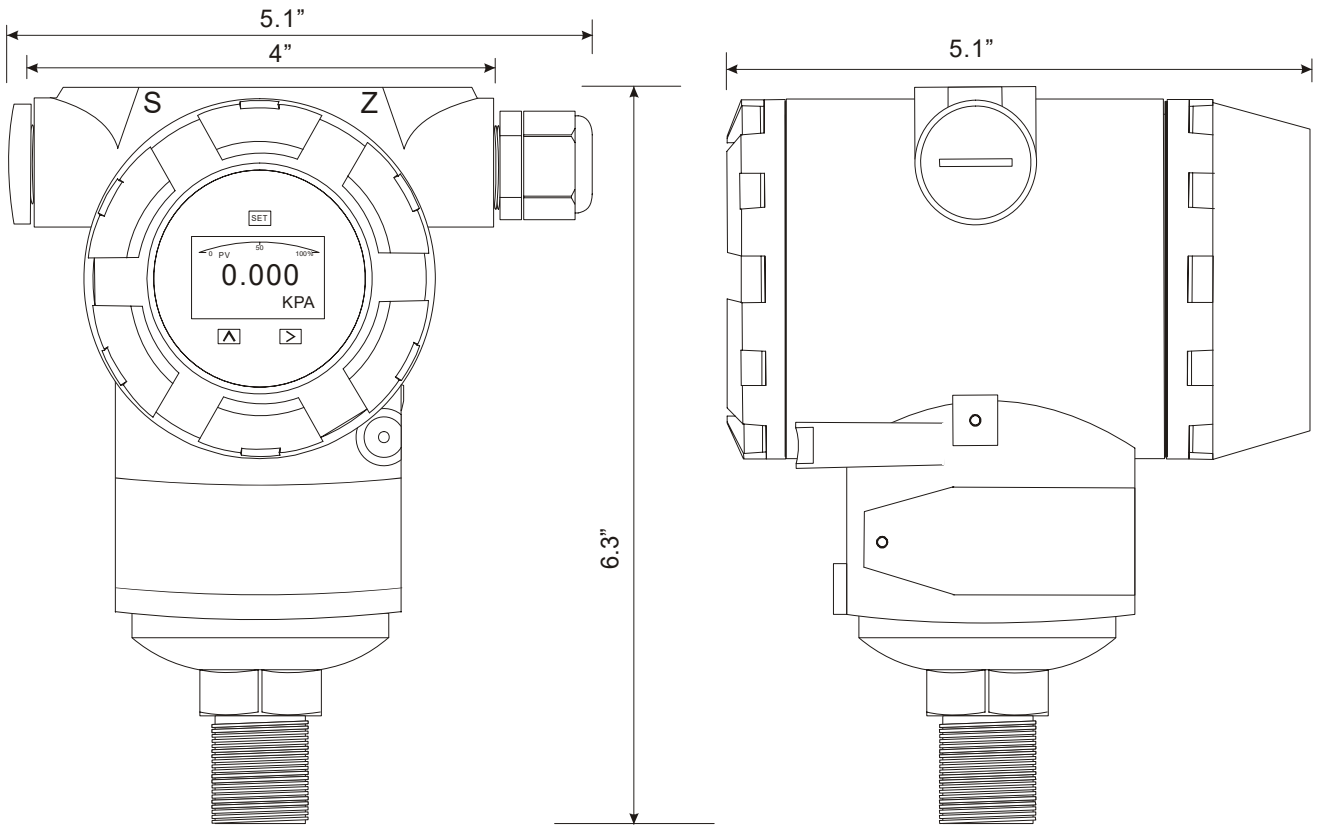
**MEASURING RANGE**

Range Code	Pressure Range				Transmitter	
	Low Range	High Range	Low Range	High Range	Gauge Pressure	Absolute Pressure
<b>2</b>	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		
<b>3</b>	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		
<b>4</b>	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		
<b>5</b>	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		
<b>6</b>	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		
<b>7</b>	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		
<b>8</b>	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		
<b>9</b>	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		
<b>A</b>	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		

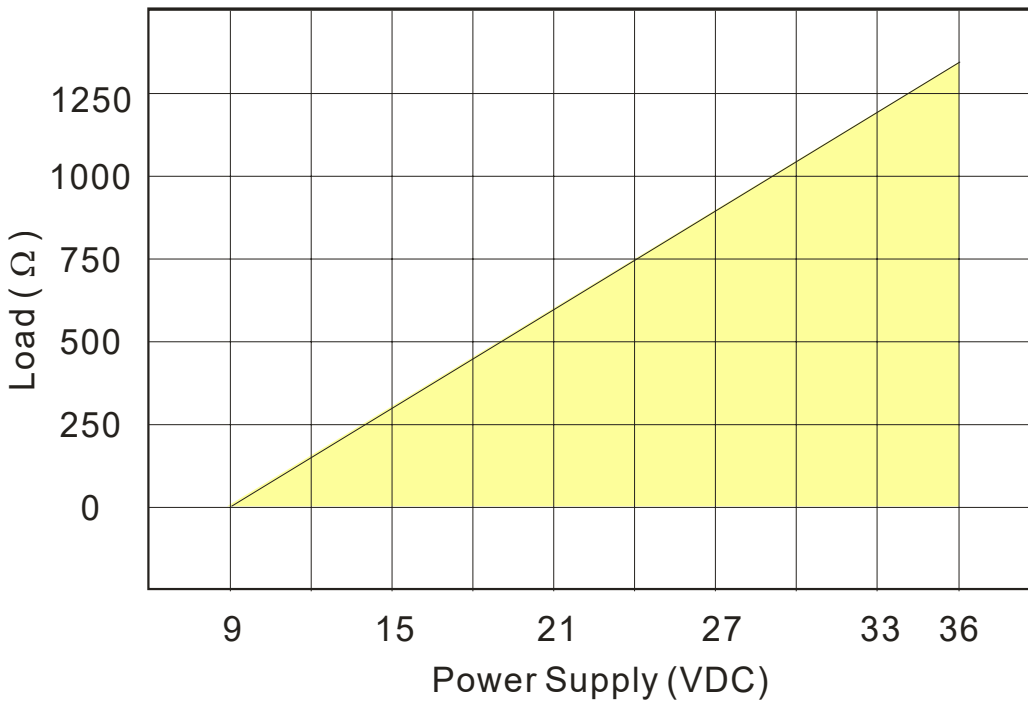
**WIRING DIAGRAM**



**➤ 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 - 40" H2O ... 0 - 120"H2O
	3									0 - 120" H2O ... 0 - 401"H2O
	4									0 - 401" H2O ... 0 - 802"H2O
	5									0 - 802" H2O ... 0 - 2810"H2O
	6									0 - 2810" H2O ... 0 - 246Psi
	7									0 - 246 Psi ... 0 - 507 Psi
	8									0 - 507 Psi ... 0 - 1,015Psi
	9									0 - 1,015 Psi ... 0 - 4,641Psi
	A									0 - 4,641Psi ... 0 - 10,152 Psi
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