

## GENERAL

**ALIAPT** The 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

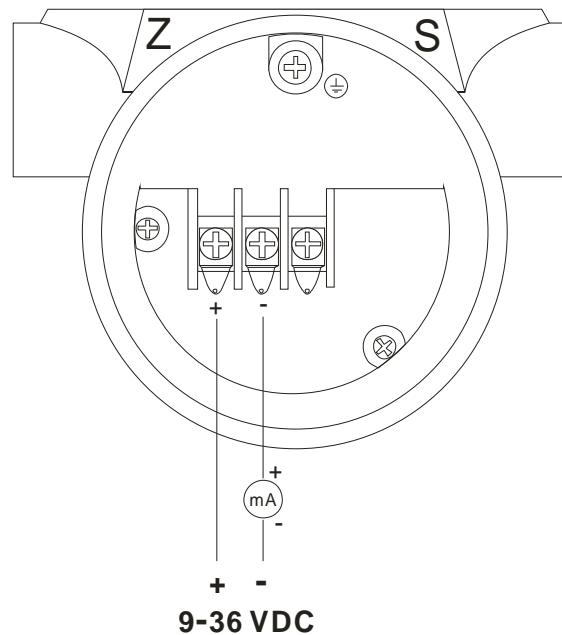
- |                       |  |                         |   |
|-----------------------|--|-------------------------|---|
| ● Process Fluid       | : Liquid, Gas, Vapor   | ● Display               | : 5 Digits programmable & 0-100% Bargraph   |
| ● Application         | : Absolute Pressure, Gauge Pressure, Vacuum                                  | ● Display Unit          | : Standard 22 different engineering unit<br>: 5 Digits programmable for special unit                  |
| ● Measuring Range     | : 0-10 kPa~0-30 kPa (Minimum)<br>: 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<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 | : -25~95 °C  | ● Damping               | : 0-32 Seconds  |
| ● Max. Pressure       | : 70 MPa   | ● Response Time         | : 100 ms  |
| ● Material            |  | ● Mounting              | : Direct installation or bracket on 2" Pipe   |
| Connection            | : Stainless Steel 304 / Stainless Steel 316                                  | ● Humidity Limit        | : 0-100% Relative Humidity  |
| Diaphragm             | : Stainless Steel 316 / 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   | : -25~85 °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)<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 20-1000 MHz and for field strengths up to 30 V/m |                         |   |



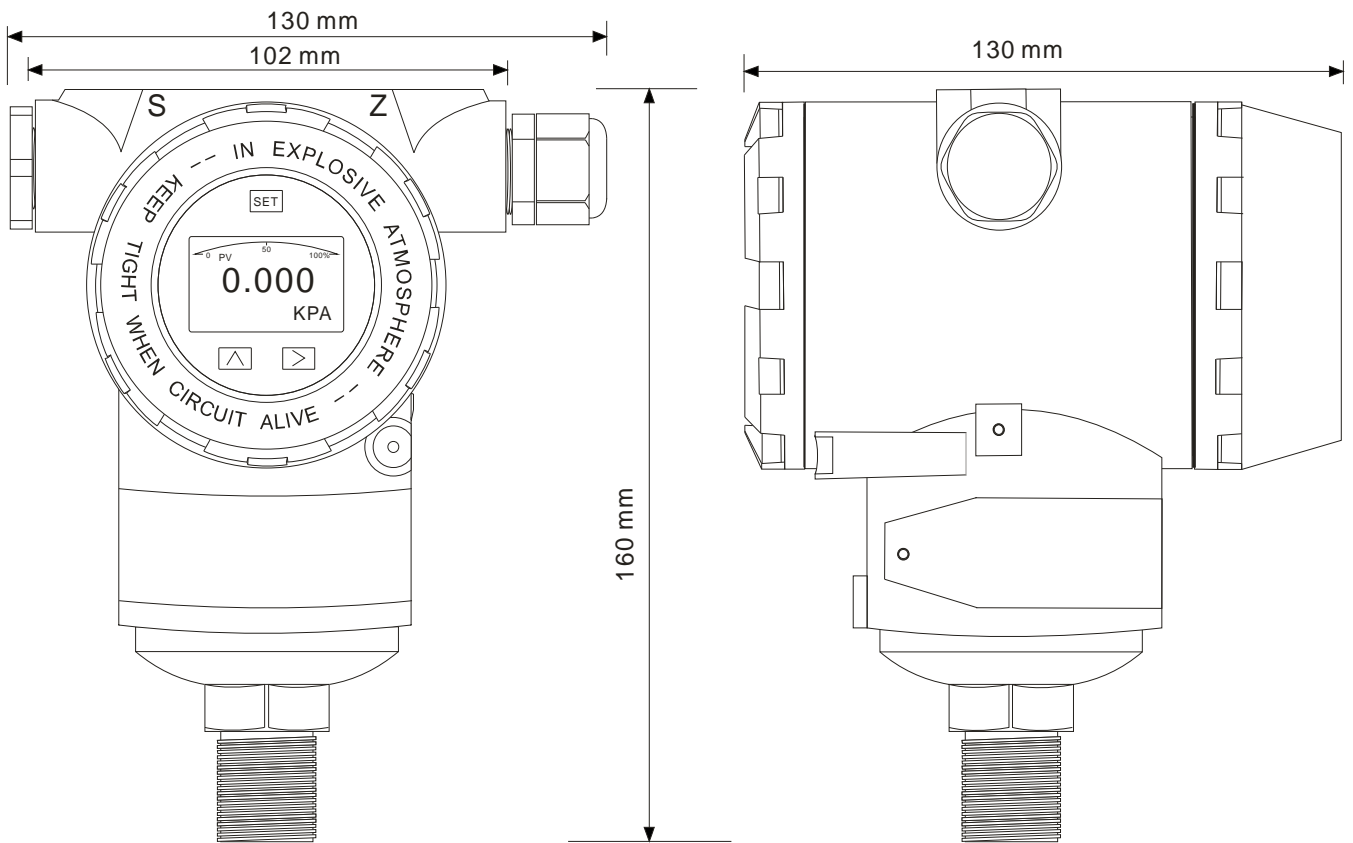
**MEASURING RANGE**

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 mmH <sub>2</sub> O	0-3059 mmH <sub>2</sub> O	◆	◆
	0-100 mbar	0-300 mbar	0-40.15 inH <sub>2</sub> O	0-120.4 inH <sub>2</sub> O		
	0-1.450 psi	0-4.351 psi	0-0.102 kgf/cm <sup>2</sup>	0-0.306 kgf/cm <sup>2</sup>		
<b>3</b>	0-30 kPa	0-100 kPa	0-3059 mmH <sub>2</sub> O	0-10197 mmH <sub>2</sub> O	◆	◆
	0-300 mbar	0-1000 mbar	0-120.4 inH <sub>2</sub> O	0-401.5 inH <sub>2</sub> O		
	0-4.351 psi	0-14.50 psi	0-0.306 kgf/cm <sup>2</sup>	0-1.020 kgf/cm <sup>2</sup>		
<b>4</b>	0-100 kPa	0-200 kPa	0-10.20 mH <sub>2</sub> O	0-20.39 mH <sub>2</sub> O	◆	◆
	0-1000 mbar	0-2000 mbar	0-401.5 inH <sub>2</sub> O	0-802.9 inH <sub>2</sub> O		
	0-14.50 psi	0-29 psi	0-1.020 kgf/cm <sup>2</sup>	0-2.039 kgf/cm <sup>2</sup>		
<b>5</b>	0-200 kPa	0-700 kPa	0-20.39 mH <sub>2</sub> O	0-71.38 mH <sub>2</sub> O	◆	◆
	0-2.0 bar	0-7.0 bar	0-802.9 inH <sub>2</sub> O	0-2810 inH <sub>2</sub> O		
	0-29 psi	0-101.5 psi	0-2.039 kgf/cm <sup>2</sup>	0-7.138 kgf/cm <sup>2</sup>		
<b>6</b>	0-700 kPa	0-1.7 MPa	0-71.38 mH <sub>2</sub> O	0-173.4 mH <sub>2</sub> O	◆	◆
	0-7.0 bar	0-17.0 bar	0-2810 inH <sub>2</sub> O	0-6825 inH <sub>2</sub> O		
	0-101.5 psi	0-246.6 psi	0-7.138 kgf/cm <sup>2</sup>	0-17.34 kgf/cm <sup>2</sup>		
<b>7</b>	0-1.7 MPa	0-3.5 MPa	0-173.4 mH <sub>2</sub> O	0-356.9 mH <sub>2</sub> O	◆	◆
	0-17.0 bar	0-35.0 bar	0-6825 inH <sub>2</sub> O	0-14051 inH <sub>2</sub> O		
	0-246.6 psi	0-507.6 psi	0-17.34 kgf/cm <sup>2</sup>	0-35.69 kgf/cm <sup>2</sup>		
<b>8</b>	0-3.5 MPa	0-7.0 MPa	0-356.9 mH <sub>2</sub> O	0-713.8 mH <sub>2</sub> O	◆	◆
	0-35.0 bar	0-70.0 bar	0-14051 inH <sub>2</sub> O	0-28102 inH <sub>2</sub> O		
	0-507.6 psi	0-1015 psi	0-35.69 kgf/cm <sup>2</sup>	0-71.38 kgf/cm <sup>2</sup>		
<b>9</b>	0-7.0 MPa	0-32 MPa	0-713.8 mH <sub>2</sub> O	0-3263 mH <sub>2</sub> O	◆	◆
	0-70.0 bar	0-320.0 bar	0-28102 inH <sub>2</sub> O	0-128468 inH <sub>2</sub> O		
	0-1015 psi	0-4641.2 psi	0-71.38 kgf/cm <sup>2</sup>	0-326.3 kgf/cm <sup>2</sup>		
<b>A</b>	0-32 MPa	0-70 MPa	0-3263 mH <sub>2</sub> O	0-7137.9 mH <sub>2</sub> O	◆	◆
	0-320 bar	0-700.0 bar	0-128468 inH <sub>2</sub> O	0-281024 inH <sub>2</sub> O		
	0-4641.2 psi	0-10152.6 psi	0-326.3 kgf/cm <sup>2</sup>	0-713.8 kgf/cm <sup>2</sup>		

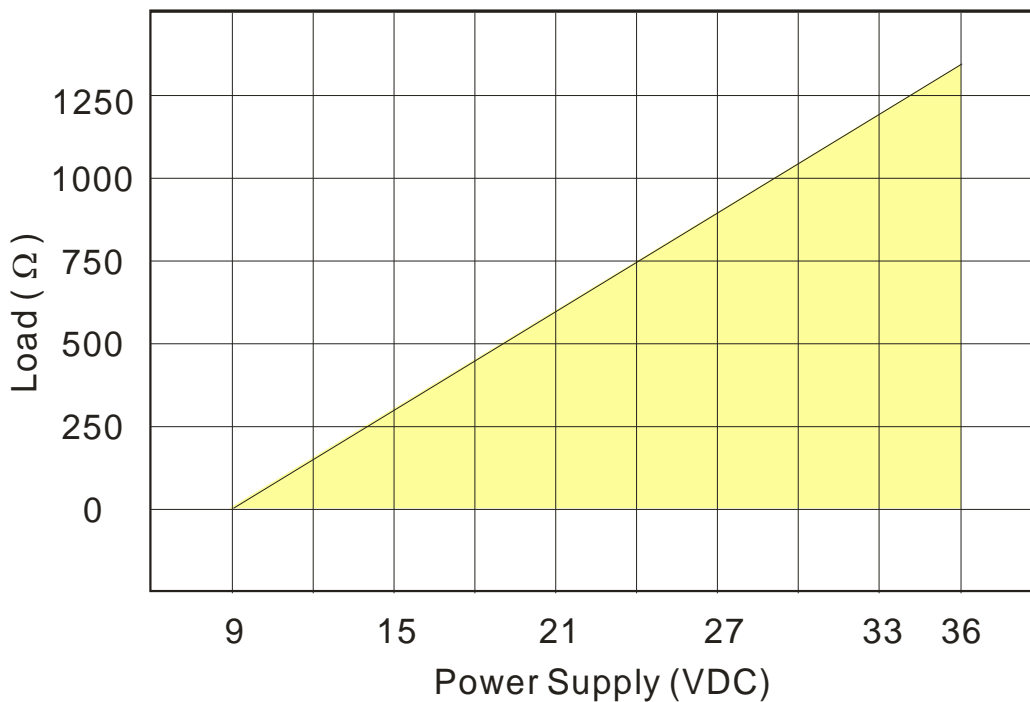
**WIRING DIAGRAM**



**➤ 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)
	-RS									Customized range setting
	-RC									Customized range calibration
	-ZZ									Others