

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

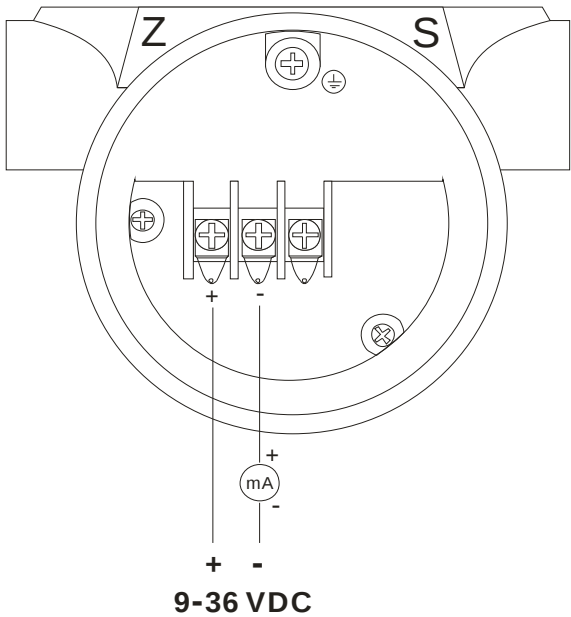
● Process Fluid	: Liquid, Gas, Vapor	● Display	: 5 Digits programmable & 0-100% Bargraph
● Application	: Absolute Pressure, Gauge Pressure, Vacuum	● Display Unit	: Standard 22 different engineering unit : 5 Digits programmable for special unit
● Measuring Range	: 0-10 kPa~0-30 kPa (Minimum) : 0-32 MPa~0-70 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	: -25~95 °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" BSPP	● 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 20-1000 MHz and for field strengths up to 30 V/m		



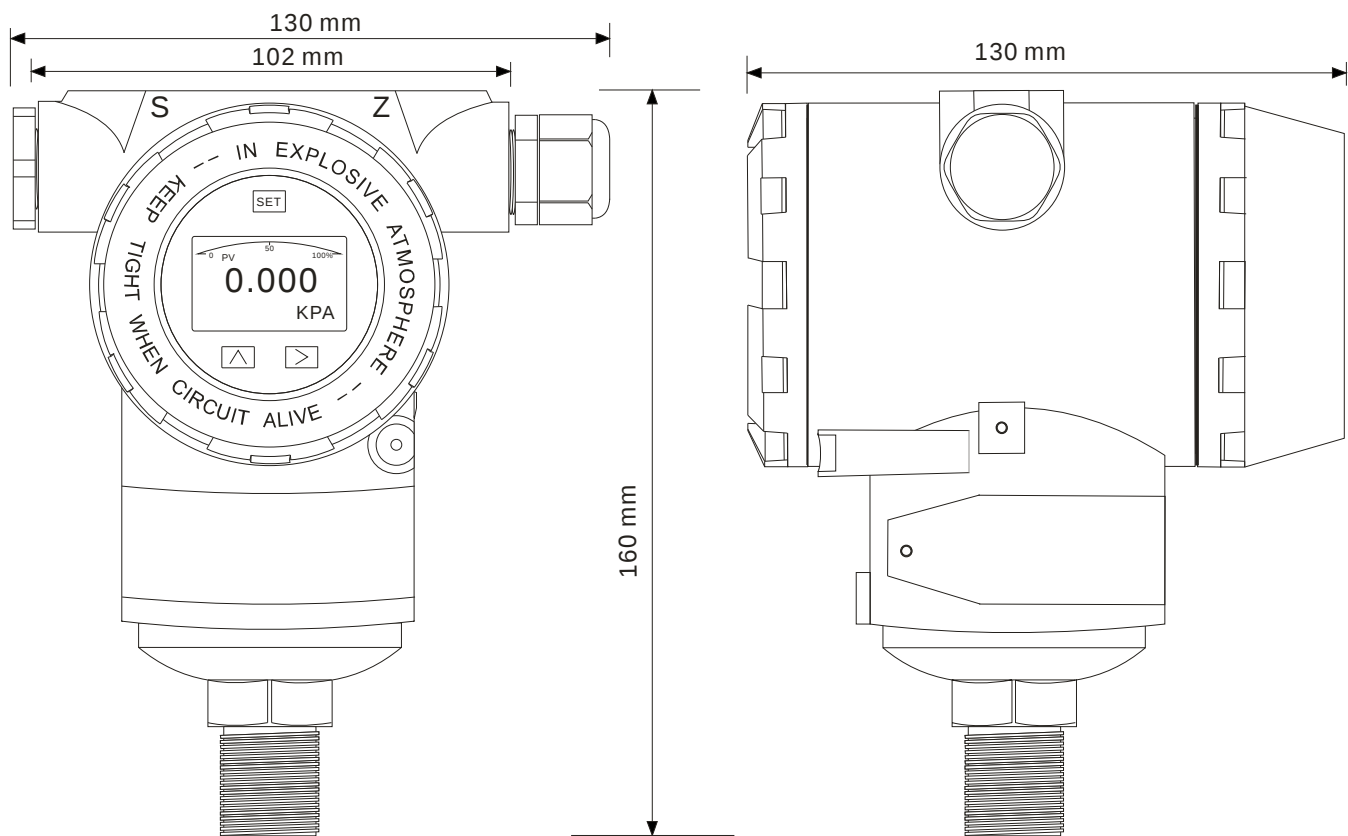
MEASURING RANGE

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

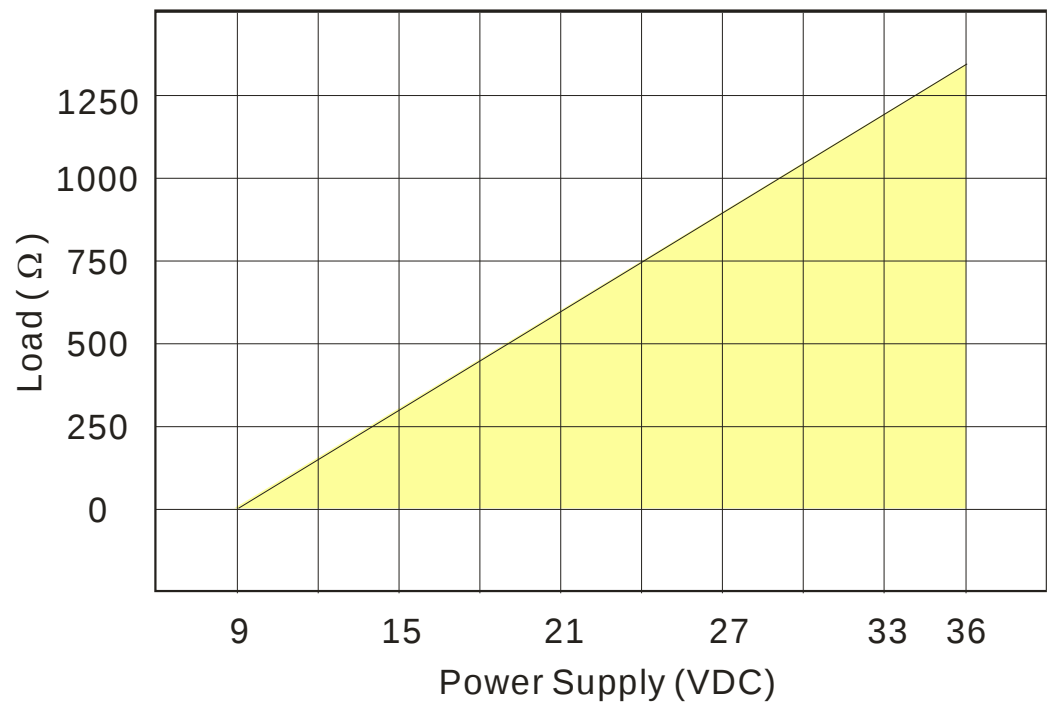
WIRING DIAGRAM



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" BSPP
		-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