

GENERAL

ALIAPT APT800NT series is a digital pressure transmitter designed for industrial pressure measurement applications. The APT800NT 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
- Application : Absolute Pressure, Gauge Pressure, Vacuum
- Measuring Range : 0 - 10 Kpa ~ 0 - 30 Kpa (Minimum)
: 0 - 32 Mpa ~ 0 - 70 Mpa (Maximum)
- Turndown Ratio : 100 : 1
- Accuracy : +/- 0.075% of span
- Stability : +/-0.15% of URL for 2 years
- Working Temperature : -25 to +95 °C
- Max. Pressure : 70 Mpa
- Material
 - Connection : SUS 304 / SUS 316
 - Diaphragm : SUS 316L / Tantalum
 - Housing : Low copper cast aluminum alloy with polyurethane, light blue paint
- Name / Tag Plate : Stainless Steel 304 / Stainless Steel 316
- Cable Entry : M20 Conduit Threads / 1/2" NPT(Female)
- Process Connection : 1/2" NPT, 1/2" BSP
- Temperature Effect : +/-0.18% of span per 20 °C
- 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

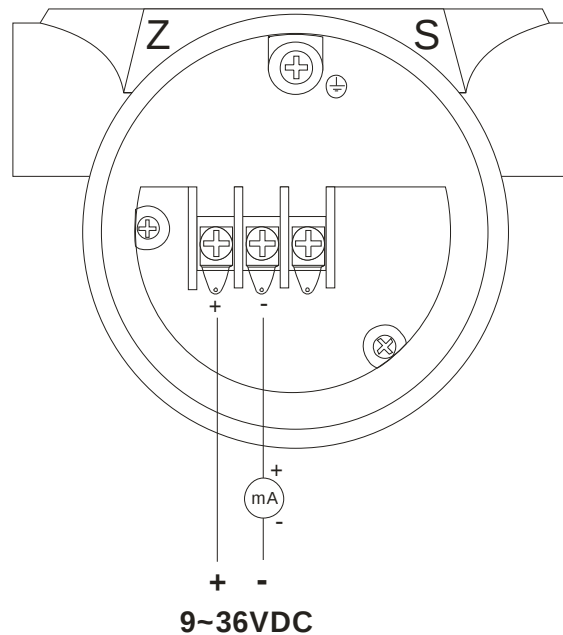


- Display : 5 Digits programmable & 0-100% Bargraph
- Display Unit : Standard 22 different engineering unit
: 5 Digits programmable for special unit
- Keypad : 3 internal keys for Programming and output setting
- Current Output : 4 - 20 mA 2 wires with Hart Signal (Compatible)
Load : Rohm=(Vdc-9)*50
- Power Supply : 9 ~ 36 VDC
- Digital Communication : Hart Protocol
- Damping : 0 - 32 seconds
- Response Time : 90 mS
- Mounting : Direct installation or bracket on 2" Pipe
- Humidity Limit : 0 to 100% Relative Humidity
- Turn on Time : 2 Seconds with minimum damping
- Zero Calibration : Automatic zero calibration by push-button
- Ambient Temperature : -25 to +85 °C
- Dimensions : 102 mm (W) * 160 mm (H) * 130 mm (D)
- Weight : 1.3 Kg
- Protection Class : IP67 (Standard)
: Intrinsically Safe EEx ia IIC T5 (Standard)
: Explosion proof Ex D IIB T5

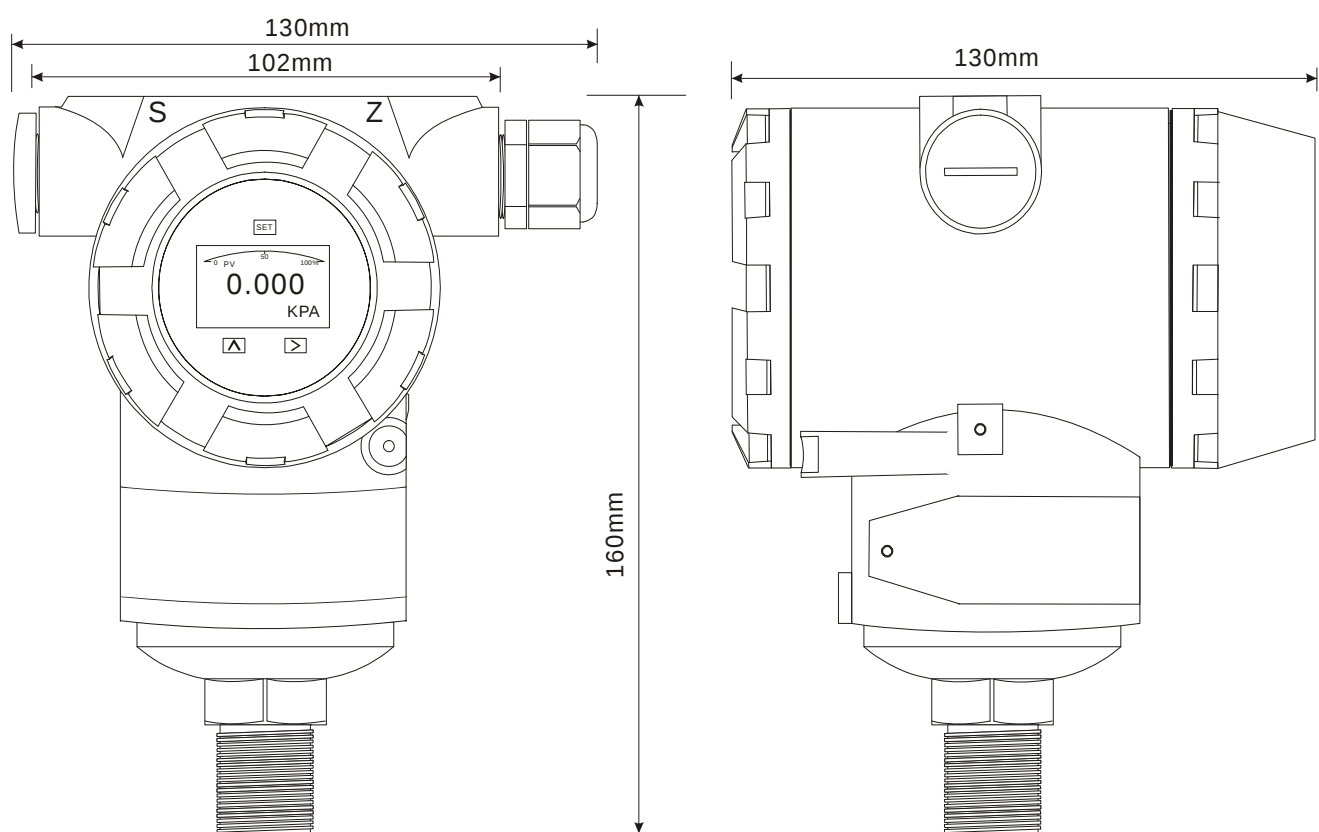
MEASURING RANGE

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		

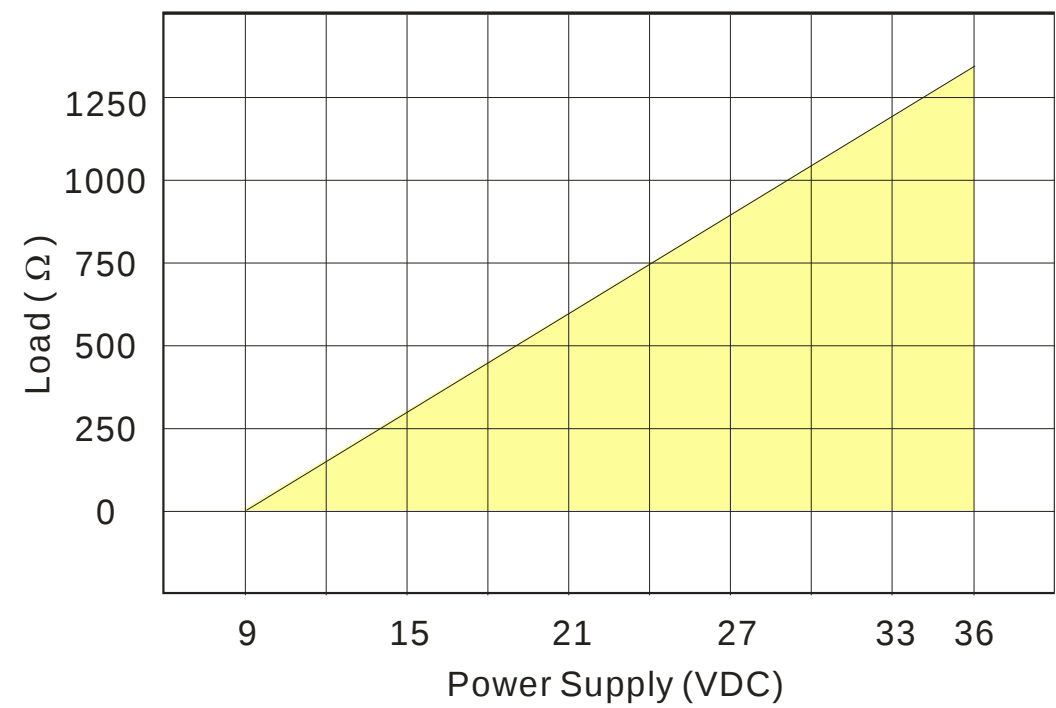
WIRING DIAGRAM



DIMENSIONS



Supply Voltage VS Loop Load



MODEL SELECTION GUIDE

APT800NT Series											
Example: APT800NT-G36N-N6NN-NN											
APT800NT-	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