IPSSAT series



Intrinsically Safe, Semi-Flush Mount Pressure Transmitter



Approvals:-ATEX / IECEx ⓒ II 1G Ex ia IIC T4 Ga (Ta -see schedule)



- Piezo-resistive sensor, Ceramic or Silicon
- Accuracy <±0.25% FS BFSL
- Pressure ranges from 100mbar to 100 bar
- Pressure reference, Gauge or Absolute

The intrinsically safe, semi-flush mount pressure transmitter, IPSSAT, has a piezoresistive silicon or ceramic pressure sensor. The sensor is semi-flush to the housing making this product ideal for viscous or paste like media. The sensor and housing are made from stainless steel to ensure the product is suitable for a wide range of applications.

The electronics incorporate a microprocessor-based amplifier, requiring no adjusting and giving stable electronics - especially in high vibration or shock applications.

Every device is temperature compensated, calibrated and supplied with a traceable serial number and calibration data.

Cynergy3 Components Ltd. 7 Cobham Road Ferndown Industrial Estate Wimborne, Dorset BH21 7PE *Telephone +44 (0) 1202 897969 Email:sales@cynergy3.com*

IPSSAT 2017



Performance

Accuracy (Non-Linearity & Hysteresis) Setting Errors (offsets) <±0.25% / FS (BFSL) Zero & Full Scale, <±0.5% / FS

Material Specifications	
Housing	316 Stainless Steel
"O" ring seals	Viton
Diaphragm	316L Stainless Steel or Ceramic
Media wetted parts	Housing & process connection, "O" ring
	seal, diaphragm
Miscellaneous	
Weight	Approx 100g
Installation position	Any, small zero shift when tilted through 90°
	for silicon
Operational Life	$> 100 \times 10^{\circ}$ cycles
Insulation resistance	> 50MOhms at 50Vdc

Electrical Protection					
Supply reverse polarity	No damage but also no function				
Electromagnetic compatibility	CE Compliant				
Mechanical Stability					
Shock	100g / 11s				
Vibration	10g RMS (20 - 2000Hz)				
Environment & Thermal Effects					
Ambient Temperature Range	-20°C to +75°C				
Storage temperature	-40°C to +80°C				
Compensated temperature	+20°C to +80°C				
Thermal Zero Shift (TZS)	<±0.04% /FS/°C				
Thermal Span Shift (TSS)	<-0.015% /°C				
Permissible environment	Zone 0				

IS09001certified

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Intrinsically Safe, Semi-Flush Mount Pressure Transmitter

Input Pressure Ranges											
Nominal pressure, Gauge,	Bar 0.1	0.5	1	2	5 1	.0 2	0 50	100			
Nominal pressure*, Absolute	e Bar -	-	1	2	5 1	.0 2	- 0	-			
Nominal pressure*, Compou	nd Bar -1 to +	-1 to +5	-1 to+9	-1 to +19							
Permissible Overpressure	Bar 2	2	5	5	10 2	20 5	0 100	200			
* Ceramic sensor only											
Output Signal and Supply V	Output Signal and Supply Voltage Wiring Designation										
Wire system Output	Supply Volt	S	Connection		Pin No.						
2-wire 4-20mA	10-28Vdc		+ve Supply		Pin 1						
			-ve Supply		Pin 2						
			Ground		Pin 3						
	Part No	Sensor type		Pressure Ra	ange	٦ T					
	IPSSAT-G0100-5S	Silicon	0-100mb	ar G (0-1.4r	nsi)	-					
	IPSSAT-G0500-5S	Silicon	0-500mb	ar G (0-7.25	insi)	_					
	IPSSAT-G1000-55	Silicon	0-1000ml	r = (0.14)	5nsi)	_					
	IPSSAT-G2000-5C	Ceramic	0-2 Bar G	(0-29nsi)	.50317						
	IPSSAT-G5000-5C	Ceramic	0-5 Bar G	(0.23psi)		_					
	IPSSAT-G1002-5C	Ceramic	0-10 Bar ((0-145nsi		_					
	IPSSAT-G2002-5C	Ceramic	0-20 Bar (G (0-290nsi)	_					
	IPSSAT-G5002-5C	Ceramic	0-50 Bar (G (0-725nsi	/	_					
	IPSSAT-G1003-5C	Ceramic	0-100 Bar	G(1450nsi)	_					
	IPSSAT-GM1P1-5C	Ceramic	-1 to +1 B	ar G (-14 5	/ to + 14 5ns	1					
	IPSSAT-GM1P5-5C	Ceramic	-1 to +5 B	ar G (-14 5	$t_0 + 73$ nsi)	/					
	IPSSAT-GM1P9-5C	Ceramic	-1 to +9 B	ar G (-14 5	$\frac{10}{10} + 131$ msi)	_					
	IPSSAT-C0072-5C	Ceramic	-1 to $+19$	Bar G (-14	$5 t_0 + 276 n_s$	1					
	IPSSAT-A1000-5C	Ceramic	0-1 Bar A	bar G (14 hs (0-14 5n	siA)	/					
	IPSSAT-A2000-5C	Ceramic	0-2 Bar A	hs (0-29nsi	Δ)						
	IPSSAT-A5000-5C	Ceramic	0-5 Bar A	bs (0-73nsi	Δ)	_					
	IPSSAT-A1002-5C	Ceramic	0-10 Bar	Abs (0-134ª	5nsiA)	_					
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Mouser Electronics

Authorized Distributor

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Sensata:

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 IPSSAT-A5000-5C
 IPSSAT-C0072-5C
 IPSSAT-G2002-5C

 5C
 IPSSAT-G5000-5C
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 IPSSAT-GM1P1-5C
 IPSSAT-GM1P9-5C
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 IPSSAT-G000-5C

 G0100-5S
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