

# Series AP50XX

Signal Conditioner, Strain Gage Amplifier



## Description

The Series AP50XX is a reliable, rugged signal conditioner with a variety of acceptable inputs and available outputs. The unit is enclosed in a stainless steel housing and is protected against environmental conditions including vibration. Options include a variety of electrical terminations, EMI filtering, voltage clipping, surge protection, shunting and scaling.

The brief specifications listed on the back are but a few of the more important parameters of interest; make sure to contact the sales office closest to you for further definition. In most cases, independent data sheets support these applications and provide additional information.

## Standard Features

- Stainless Steel Construction
- PT1H-10-6P
- Environmentally Protected
- Vibration Protected

## Optional Features

- EMI / RFI / Surge Protection
- Customer Specified Electrical Termination
- Hermetic Sealed
- 1" Diameter Body
- Mounting Bracket
- Dual Pressure & Temperature Circuits
- Certifications:  
CSA / UL, ATEX, Intrinsically Safe
- Zero / Span Capabilities

AP50XX

# Series AP50XX Specifications

Baseline Configuration Specs Represented.  
Modifications Encouraged - See Below  
Custom Designs Available

## Performance

### Non-Linearity

± 0.01% of FSO maximum.

### Insulation/Isolation

100 megaohms at 50Vdc at 70°F.

### Zero Balance Pot

± 10.0% FSO.

### Span Pot

± 10.0% FSO.

### Coarse Zero Pot

Optional. Consult factory.

### Coarse Span Pot

Optional. Consult factory.

### Sensor Impedance

300 to 5000 ohms.

Consult factory for other options.

## Mechanical Characteristics

### Enclosure

Body of stainless steel. Electrical connectors are environmentally sealed.

### Adjustment Covers

4-40 self sealing-seal screw, if applicable.

### Weight

1.5 inch O.D. is approx. 8 ounces

1.0 inch O.D. is approx. 5 ounces

### Sensor Electrical Connector

MS3102-14S-2S style (standard).

Options available.

### System Electrical Connector

MS3102-14S-2P style (standard).

Options available.

## Electrical Characteristics

### ANALOG OUTPUTS

#### Excitation

4-20mA Current Loop:

2-wire 9-36 Vdc unregulated.

3-wire 14-40 Vdc unregulated.

Isolated Voltage Output:

8-18 Vdc or 14-32 Vdc unregulated.

Non-Isolated Voltage Output:

8-40 Vdc unregulated.

3 or 4 wire available.

### DIGITAL OUTPUTS

#### Excitation

RS-232, RS-485, CANbus

8-30 Vdc unregulated.

#### Programming

PC.

### COMMON

#### Electrical Termination

PTIH-10-6P stainless steel connector or equivalent.

#### Shunts

Available.

#### Zero Balance

± 0.5% FSO (without pot).

#### Span

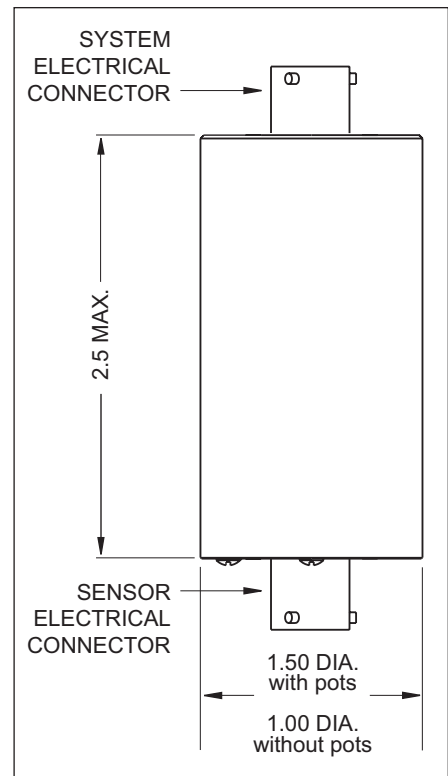
± 0.1% FSO (without pot).

## Environmental Characteristics

### Operating Temperature Range

-40°F to +185°F.

## Dimensions (inches)



## MODEL IDENTIFICATION

A	P	5	0	X	X
	SERIES	ANALOG OUTPUT	DIGITAL OUTPUT		
		0 = Volts	0 = none		
		5 = 2-wire Loop	1 = RS-485		
		6 = 3-wire Loop	2 = RS-232		
		1 = None	4 = CANBUS		



MODIFICATIONS: We realize transducer applications vary greatly and as such our designs are flexible. Choice of pressure port, electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.  
WARRANTY: Stellar Technology warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Stellar Technology's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Stellar Technology. This warranty is in lieu of all other warranties expressed or implied.

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Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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