



## FEATURES

- Bipolar Output, Differential Input
- $\pm 5$  or  $\pm 10$  VDC Outputs
- Bridge Excitation: 5 or 10 VDC (DIP Switch)
- Ranges: 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 10.0 mV/V (DIP Switch)
- 256 Selectable Shunt Combinations: 30k $\Omega$ , 43.7k $\Omega$ , 60.4k $\Omega$ , 87.6k $\Omega$ , 100k $\Omega$ , 150k $\Omega$ , 300k $\Omega$ , 432k $\Omega$  (DIP Switch)
- Externally Accessible Shunt Cal Activation Button
- Digitally Controlled Remote Shunt
- Internal Span and Offset Potentiometers
- Sensor Polarity Reversal DIP Switch
- Zero Shift DIP Switch
- Class 1 Certification for Aerospace and Medical Grade Devices

**IMPORTANT NOTE: DO NOT CONNECT DEVICE TO POWER SUPPLY WHEN POWER SUPPLY IS ALREADY ON**



## SPECIFICATIONS

PARAMETER	MIN.	TYP.	MAX.	UNIT
Power Supply	12.5		26	VDC
Current Consumption		30 <sup>1</sup>	100	mA
Output Impedance		1		Ohms
Sensor Impedance	350/75 <sup>4</sup>		5000	Ohms
Bandwidth (Setting 1)		1000		Hz
Bandwidth (Setting 2)		10000 <sup>2</sup>		Hz
Bandwidth (Setting 3)		25000 <sup>3</sup>		Hz
Common Mode Rejection Ratio	120			dB
Noise		10		mVp-p
Output Span range	-10		10	% of FSR
Output Zero range	-10		10	% of FSR
Gain Drift with Temperature	-25		25	PPM of FSR
Non-Linearity	-0.005		0.005	% of FSR
Zero Drift with Temperature	-25		25	PPM of FSR
Operating Temperature	32 [0]		158 [70]	°F [°C]
Storage Temperature	-40 [-40]		185 [85]	°F [°C]
Relative Humidity		95% at 100 [39]		°F [°C]

## PHYSICAL FEATURES

Material	Stainless steel cover with aluminum body fastened by magnets
Protection	IP50
Weight (approx.)	0.23 lb (104 g)
Power	LED Indicated

## CONFORMITY

RoHS	2011/65/EU
CE	EN61326-1:2013; EN55011:2009 (Amended by A1:2010) Class 1 Certification for Aerospace and Medical Grade Devices

<sup>1</sup> Stand-alone current consumption. Adding the strain gauge and output current will increase current consumption

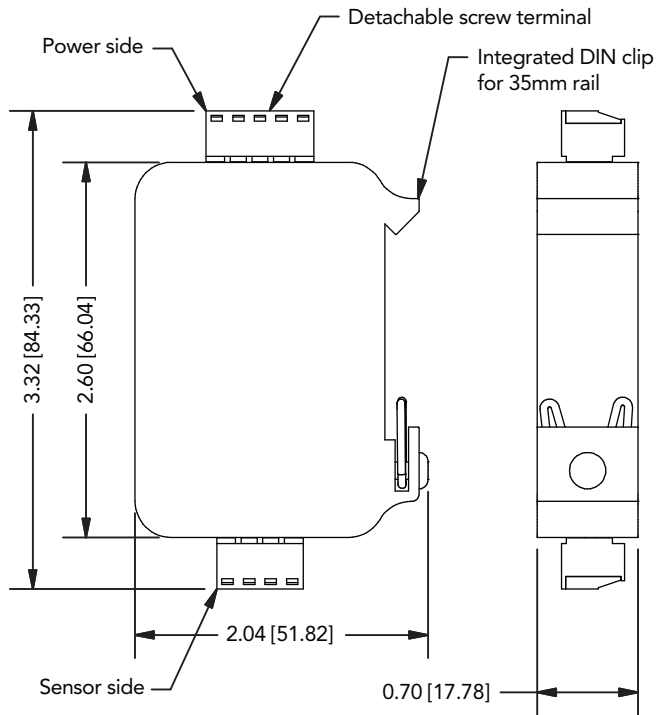
<sup>2</sup> Only for Sensitivity of 1.0 mV/V or Greater

<sup>3</sup> Only for Sensitivity of 1.5 mV/V or Greater

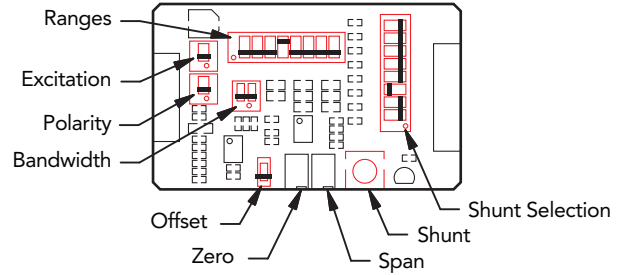
<sup>4</sup> 350 Ohms for 5V excitation and 75 Ohms for 10 V excitation

# Model IAA100

## DIMENSIONS inches [mm]



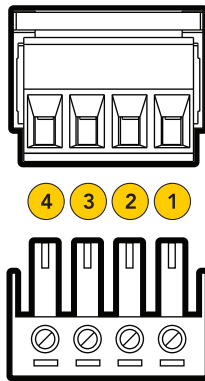
## DIP SWITCHES CONFIGURATION



### SENSOR SIDE

#### PIN # WIRING CODE

1	+ EXCITATION
2	+ SIGNAL
3	- SIGNAL
4	- EXCITATION/SHIELD <sup>4</sup>



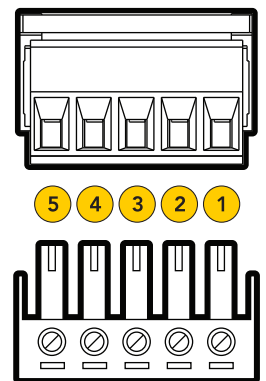
<sup>4</sup> For 6 wire sensors, connect +SENSE to +EXCITATION and -SENSE to -EXCITATION.

**Note:** Sensor cable shield connections should be grounded on one end, either the sensor side or the IAA sensor input side, to avoid potential ground loops.

### POWER SIDE

#### PIN # WIRING CODE

1	+Vin (Power Supply) Red
2	Gnd (Power Ground/Shield) Black
3	Shunt (Remote Connection) Orange
4	Gnd (Output Ground/Shield) Blue
5	Vout/Iout (Output Signal) Green



Power is 12.5VDC to 26VDC.

**Note:** IAA100 minimum power supply is 14VDC for Output load <1500 Ohms. All grounds are connected together and pass through. Power and instrument cable shield connections should be grounded on one end, either at the power and instrument side, or the IAA side, to avoid potential ground loops.

Drawing Number: FI1363-E

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RoHS



U.S. Manufacturer