



## 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		Ohm
Sensor Impedance	350/75 <sup>4</sup>		5000	Ohm
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
Nonlinearity	0.01		0.01	% 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

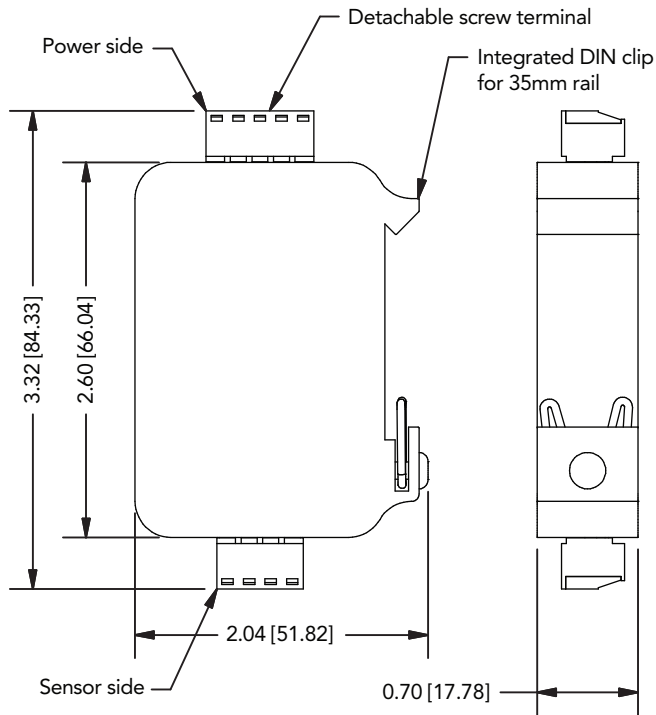
<sup>2</sup> Only for Sensitivity of 1.0 mV/V or Greater

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

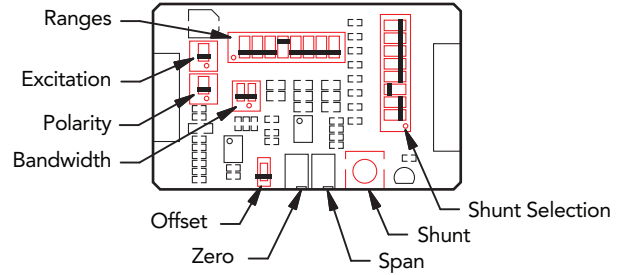
<sup>4</sup> 350 Ohms for 5 V excitation and 75 Ohms for 10 V excitation

# Model IAA100

## DIMENSIONS inches [mm]

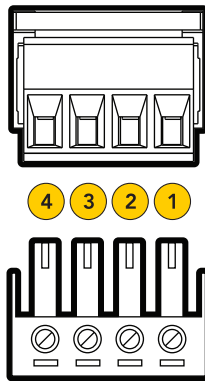


## DIP SWITCHES CONFIGURATION



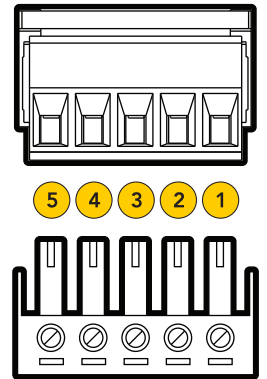
### SENSOR SIDE

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



### POWER SIDE

PIN	WIRING CODE	COLOR	
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



<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.

Drawing Number: FI1363-F

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RoHS



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