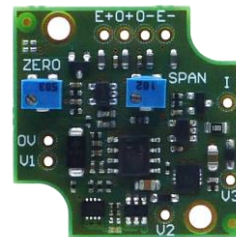


AS0100 3-Wire 0-20mA / 4-20mA Bridge Amplifier

The AS0100 is a miniature board for 3-wire systems providing a 0/4mA - 20mA current output, designed to fit either inside a load cell or within an in-line enclosure. The unit has individual multi-turn potentiometers for the precise setting of Zero and Span and is also available with **mid. zero output** (12mA for example) for compression / tension transducers. The inputs provide EMI-/RF-suppression. The unit also provides under-, over- and transient voltage protection for stable operation in harsh environments. Transducer wires can be easily soldered onto the board or using SIL sockets.

Features

- Very wide-range power supply 8-28V
- 5V stabilised bridge excitation
- Bridge resistance ≥ 350 Ohm
- Bridge sensitivity 0.3mV/V – 3mV/V
- Size (LxBxH): 29mm x 29mm x 7mm
- Fast calibration procedure
- Reverse-polarity protection
- Transient/Overvoltage protection



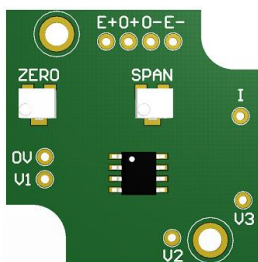
Applications

- Industrial Weighing
- Load Testing & Monitoring
- 12V Power Supply Systems

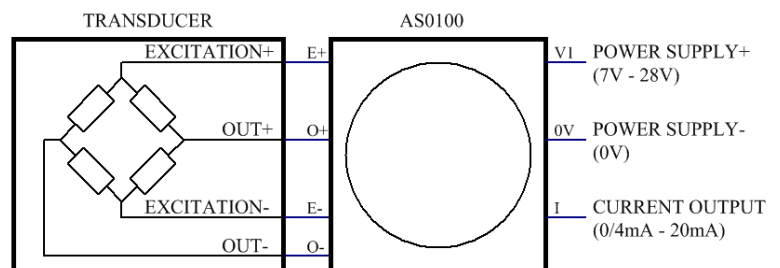
Ordering

Part number:	AS0100*
*Please specify required input range, between 0.3mV/V – 3mV/V and current output range 0-20mA or 4-20mA	
Customer specific electrical / mechanical changes are possible – please contact us with your individual requirements.	

Board Connections



6 Schematic Diagram



Specifications

Parameter	Min	Typical	Max	Unit
Supply Voltage	8	12	28	V
Under-/Overvoltage lock-out	<8		>28	V
Transient voltage protection		+/-30		V
Transient peak power dissipation ¹		400		W
Current Output – Zero (adjustable control)	0	4		mA
Current Output – Span (adjustable control)		20	23	mA
Bridge Sensitivity	0.3		3	mV/V
Bridge Resistance	350			Ohms



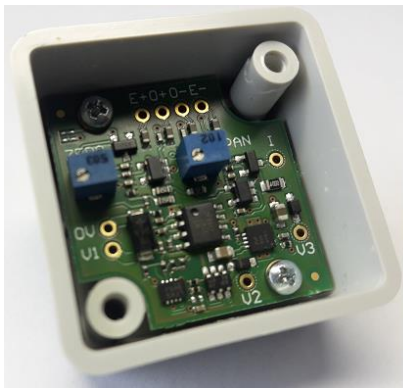
www.aieng.co.uk

Parameter	Min	Typical	Max	Unit
Bridge Excitation Voltage		5		V
Current Output Temp. Coefficient – Zero		0.001		uV/°C
Operating Temperature	-20		85	°C

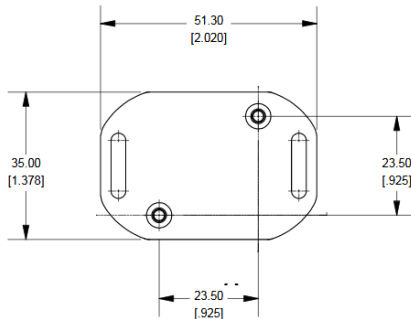
¹T_{Ambient}=25°C, non-repetitive 10/1000µs Waveform

Optional Extras

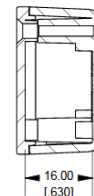
Part number:	AS0100-ENCL1	ABS Enclosure for AS0100 Amplifier including Lid with mounting flanges Three colours available: Black, Grey, Translucent Blue
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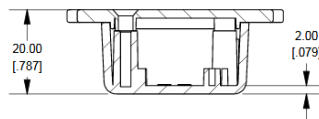
Top View Lid (with Flanges)



End View



Side View



Units: mm [inch]

Top View (inside box)

