

Miniature Universal Amplifier

Features

- Miniature digitally configured strain gauge conditioner/load cell amplifier.
- PCB format for easy fitting inside sensors or an inline housing.
- Analogue output configurable between 0.5-4.5V, $\pm 10V$, 4-20mA or 0-10V.
- 3-Wire measurement connections for stable output.
- "Universal" functionality allows easy set-up and calibration via OWI communication protocol.
- 2-point or 3-point linearization available.
- Configuration can be saved and restored for security of setup.
- Optional inline stainless-steel housing to hold up to 2 IUAs.



Description

The IUA miniature universal amplifier is a high-performance load cell amplifier in miniature OEM format. Designed for fitting within load cells, the IUA converts the mV/V signal to either volts or mA based on its configuration. OWI communication over an additional wire enables adjustment of the amplifier without needing to access it directly.

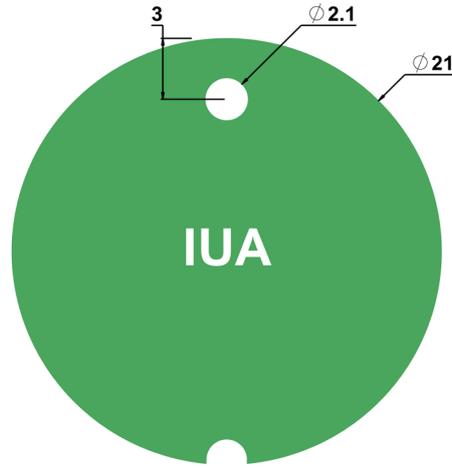
Typical Specification

PARAMETER	VALUE
Supply Voltage Range	12 to 30VDC or ± 12 to ± 30 VDC.
Supply Current	25mA.
Bridge Excitation	1.75VDC.
Minimum Bridge Resistance	350 Ω .
Bridge Sensitivity	1 to 500mV/V.
Input Resolution	1:16,700,000 (24 bits)
Analogue Outputs	4-20mA or 0.5-4.5V or 0-10V or $\pm 10V$.
Analogue Output Resolution	1:65,000 (16 bits)
Bandwidth	2.9kHz.
Storage Temperature	-40 to +125°C.
Operating Temperature	-40 to +150°C.

Approvals

PARAMETER	VALUE
EMC Directive	2014/30/EU
Low Voltage Directive	2014/35/EU
RoHS directive	2011/65/EU
EMC Standards	BSEN 61326-1:2013, BS EN 61326-2-3:2013
Low Voltage Standard	BSEN 61010-1-2010

Outline Dimensions in millimetres



Ordering Codes

CODE	DESCRIPTION
IUA	IUA Amplifier
IUA-ENC	Stainless Steel IUA Amplifier Enclosure – see Page 3 .

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Dual Amplifier Inline Stainless-Steel Enclosure

Features

- Inline housing for up to 2 IUA amplifiers.
- Compact design, 60xØ38mm excluding glands.
- Machined from solid stainless-steel.
- Optional M12 connector variant available.



Description

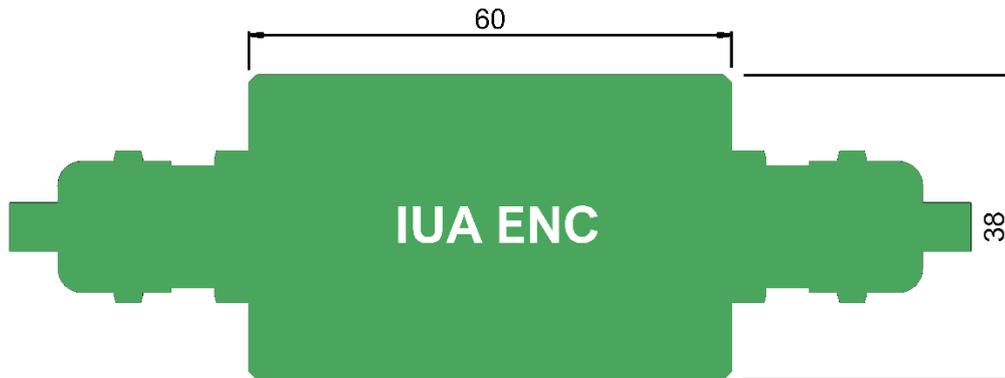
The IUA-ENC is an inline stainless-steel enclosure capable of holding up to 2 IUA amplifiers. The IUA-ENC enables users to quickly convert any standard load cell output.

Offering robust IP67 protection, the IUA-ENC is an ideal way to upgrade an existing load cell to include signal conditioning in your application.

Typical Specification

PARAMETER	VALUE
Cover and Body Material	Type 304 or 17-4 Stainless-Steel
Threaded Ends	PG9/18TPI
Cable Entries	Nickel Plated Brass PG9 Glands
Environmental Protection	IP67

Outline Dimensions in millimetres



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