# **ME** mantracourt

ATEX 4-20mA Load Cell Amplifiers



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The high performance amplifier provides 2-wire 4-20 mA current loop output and connects in-line for a range of signal conditioning for strain gauges, load cells, pressure and torque transducers. Intrinsically safe to EN60079-11 (previously EN 50020) standards.

Designed for fitting in-line to strain gauge sensors such as load cells, the amplifier is housed within a stainless steel IP67 NEMA 4 EMC protected enclosure and is supplied with 1m strain gauge cable and 5m output cable.

An OEM ICA5ATEX, option is available for customers wishing to embed the ATEX amplifier within the sensor. Please note: the ICA5ATEX is approved for incorporation into load cells and other enclosures.

- Provides 2-wire 4-20mA current loop output
- Input range up to 5 mV/V
- Bridge impedance min 350 Ohms max 5000 Ohms
- Fast calibration via gain and offset trim
- Wide temperature range -40°C to + 85°C
- Supply voltage range min 9 V max 28 V
- Supplied with 1 m strain gauge cable and 5 m output cable & stainless steel enclosure 96 x 28 mm diameter
- Environmentally sealed to IP67



🕒 ALA5 & ICA5A

# User Benefits

## Ideal Applications



ALA5 Product Sheet

ΠE



ICA5 ATEX ATEX Intrinsically Safe, OEM strain gauge converter, 4-20mA 2 wire

### The Application:

A paint manufacturer required a remote display showing the weight of a storage tank located in a hazardous area. The weight of the tank was already displayed within the hazardous zone which was connected to ATEX approved strain gauges and indicator, but there was no display in the safe working zone where a display was required

### The Solution:

Using the existing strain gauges connected to an ATEX 4-20mA Load Cell Amplifier (ALA5), a 4 to 20mA current loop



was established via a barrier network to one of Mantracourt's panel display instruments which was fitted with a current input module. In addition, a relay module within the panel instrument provided a pair of volt-free change-over

contacts operating at two user defined set-points which acted as a tank level alarm for the operator.

Storage temperature	- 40 to +85°C
Operating temperature	- 40 to +85°C
Relative humidity	95% maximum non condensing
IP Rating	IP67

**CE Environmental Approvals** European EMC Directive

2004/108/EC

Please Note: ICA5ATEX is approved for incorporation into load cells and other enclosures, however installers must comply to ATEX & QAN (Quality Assurance Notification). Please contact us to discuss your requirements.



