

# 4-channel analogue acquisition

## μCAN.4.ai-BOX

### 4-channel analogue acquisition for current or voltage signals

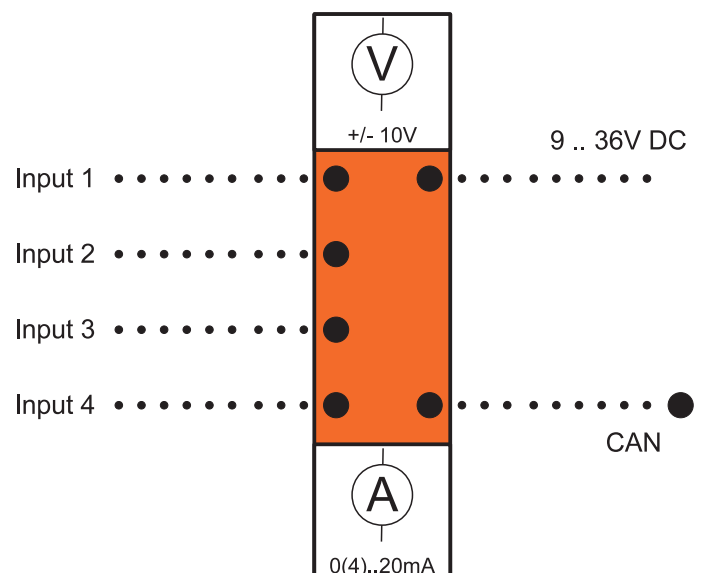
The μCAN.4.ai-BOX is the extended universal instrument for the acquisition of standard analogue signals. The unit is designed to measure +/-10 V and 0(4) ... 20 mA signals with an 800 Hz overall sampling rate.

The sensor signals are evaluated and linearized in a rugged die-cast aluminium casing. The data is transmitted to the central evaluation unit via CAN bus.



### Features

- Acquisition of up to four analogue inputs at a resolution of up to 24-bits for standard  $\pm 10$  V, 0-20 mA and 4-20 mA signals
- Standard protocol: CANopen CiA 404
- Die-cast aluminium casing in protection class IP66, ideally suitable for heavy-duty industrial applications
- Indication of device status by two bi-colour LEDs
- Anti-aliasing filter
- Module monitored by heartbeat function
- Automatic startup



Technical Data	Analogue acquisition $\mu$ CAN.4.ai-BOX
Number of channels	4
Power supply voltage	9...36 V DC, reverse polarity protected
Power consumption	2 W (84 mA @ 24 V DC)
Electrical isolation	channels/control voltage: 500Veff, fieldbus/control voltage: 500Veff
Operating temperature	-40°C...+85°C (others on request)
Transfer rate	50 kBit/sec to 1 MBit/sec
Protocol	CANopen CiA 404 / Custom CAN / CAN 2.0A and 2.0B
Number of PDOs (CANopen)	2 transmit PDOs
Configuration	Bit rate and module address via DIP switches or via LSS
Status display	2 bi-colour LED for module status information
Protection class	IP66
Casing	Die-cast aluminium 125x57x80mm (LxWxD)
EMC	complies with EN 50082
Signal type / Measurement error @ 23°C ambient temperature	+ /-10 V DC accuracy 0.01% FS, input resistance 500 kOhms 0-20 mA accuracy 0.01% FS, input impedance 50 Ohms 4-20 mA accuracy 0.01% FS, input impedance 50 Ohms
Resolution	Ausgabewert $\Delta U = 1 \text{ mV} / \Delta I = 1 \mu\text{A}$

Order No.	Description
12.44.003	$\mu$ CAN.4.ai-BOX / Voltage / 16-bit 4-channel analogue signal acquisition module with CANopen, signal type +/- <b>10 V DC</b> , 16-bit resolution, designed for metric cable glands, connection via screw terminals.
12.45.003	$\mu$ CAN.4.ai-BOX / Current / 16-bit 4-channel analogue acquisition module with CANopen, signal type <b>0(4)..20mA</b> , 16-bit resolution, designed for metric cable glands, connection via screw terminals.
12.46.004	$\mu$ CAN.4.ai-BOX / Voltage / 24-bit 4-channel analogue signal acquisition module with CANopen, signal type +/- <b>10 V DC</b> , 24-bit resolution designed for metric cable glands, connection via screw terminals.
12.47.001	$\mu$ CAN.4.ai-BOX / Current / 24-bit 4-channel analogue acquisition module with CANopen, signal type <b>0(4)..20mA</b> , 24-bit resolution, designed for metric cable glands, connection via screw terminals
90.01.114	Metric cable installation kit for 4-channel modules.