

1-channel analogue acquisition

μCAN.1.ai-BOX

1-channel analogue acquisition for current or voltage input with 16-bit resolution

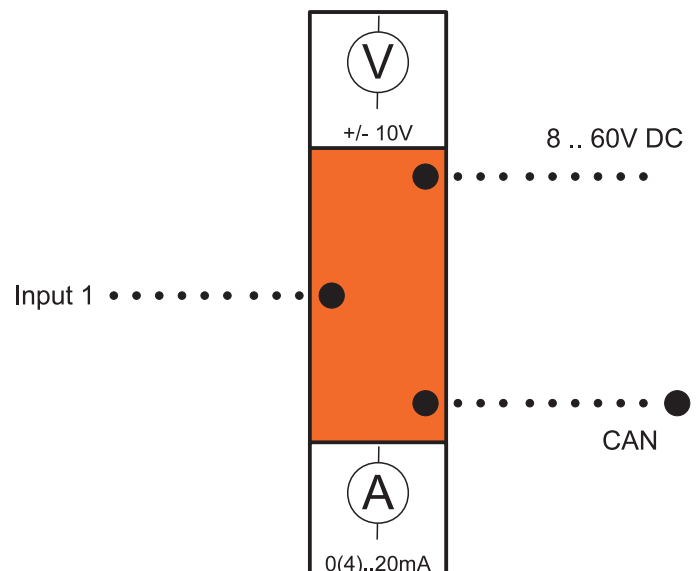
The decentralized data acquisition unit **μCAN.1.ai-BOX** is designed for acquisition of a single analogue signal. The unit is in protection class IP66.

The **μCAN.1.ai-BOX** is to be installed near the respective signal sources. The analogue signals are transmitted via short lines to the **μCAN.1.ai-BOX** where they are digitalized and transmitted by CAN bus to an evaluation point.



Features

- Acquisition of a single analogue input with 16-bit resolution for ± 10 V, 0-20 mA, 4-20 mA signals
- Standard protocol: CANopen CiA 404
- Indication of measurement over-range or sensor failure
- Extended ambient temperature range of -40°C .. $+85^{\circ}\text{C}$
- Mechanically shock resistant up to 40 G (optional)
- Vibration resistant from 3 .. 800 Hz @ 4.5 Grms (optional)



Technical Data	Analogue data acquisition μ CAN.1.ai-BOX
I/O per module	1
Power supply voltage	8...60 V DC, reverse polarity protected
Power consumption	1 W (42 mA @ 24 V DC)
Electrical isolation	Channels/control voltage: 500 Veff, fieldbus/control voltage: 500 Veff
Operating temperature	-40°C...+85°C (others on request)
Transfer rate	10 kBit/sec to 1 MBit/sec
Protocol	CANopen CiA 404 / CAN 2.0A and 2.0B / others on request
Number of PDOs (CANopen)	2 transmit PDOs
Configuration	Input sensor type via fieldbus Bit rate and module address via DIP switches
Status display	1 bi-color LED flashing indicator for module status information
Protection class	IP66
Housing	Die-cast aluminum, 98x64x34mm (LxWxH)
EMC	Complies with EN 50082
Vibration resistance	3...800Hz @ 4.5Grms / optional
Shock resistance	Mechanically shock resistant up to 40G / optional
Resolution / conversion time	16-bit / 20ms
Signal type / Input error @ 23°C ambient temperature	+/-10V DC Accuracy 0.01% fsd , Input impedance 500 kOhms 0-20mA Accuracy 0.01% fsd , Input impedance 120 Ohms 4-20mA Accuracy 0.01% fsd , Input impedance 120 Ohms

Order No.	Description
12.11.003	μ CAN.1.ai-BOX 1-channel analogue acquisition module with CANopen, signal type +/-10 V DC, designed for metric cable glands, connection via screw terminals.
12.11.023	μ CAN.1.ai-BOX 1-channel analogue signal acquisition module with CANopen, signal type 0(4)-20 mA, designed for metric cable glands, connection via screw terminals.
90.01.113	Metric cable installation kit for 1-channel field modules.