

# 4-channel strain gauge measurement

## μCAN.4.sg-BOX

### 4-channel strain gauge measurement with 24-bit resolution

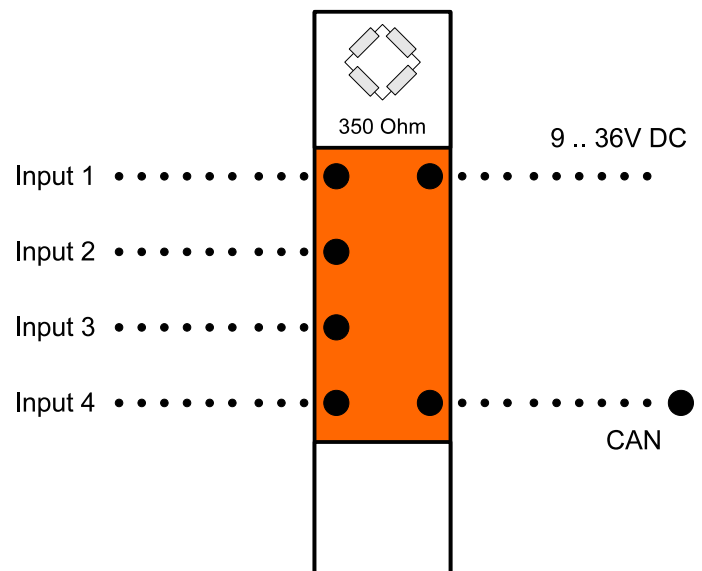
The decentralized data acquisition unit **μCAN.4.sg-BOX** is configured for the acquisition of data of four strain gauges or other types of resistance bridges. The data is acquired at a total sampling rate of 400 Hz.

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



### Features

- Acquisition of forces, torques, sequences and voltages
- Internal power supply of strain gauge bridge
- Protocol: CANopen CiA 404
- Aluminium die-cast casing in protection class IP66, designed for harsh industrial environments
- 2 bi-color LEDs for system status and error indication
- Implementation of customer-specific protocols possible



Technical data	Strain gauge data acquisition $\mu$ CAN.4.sg-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	Field bus/ control voltage: 500 Veff)
Operating temperature	-40°C...+85°C (others upon request)
Transfer rate	20 kBit/sec up to 1 MBit/sec
Protocol	CANopen CiA 301 and CiA 404 (CAN 2.0A and 2.0B)
Number of PDOs (CANopen)	2 transmit PDOs
Configuration	Sensor type via field bus Bit rate and module address via DIP-switches
Status display	2 bi-color LEDs for module status information
Protection class	IP66
Casing	Die-cast aluminium 125x80x57mm (LxWxH)
EMC	EN 50082 compliant
Resolution/conversion time	24-bit / 10 ms
Signal type / Input error @ 23°C ambient temperature	Strain gauge full bridge, four-conductor 0-100 mV 3.3 mV/V 2.0 mV/V 0.1% v.E.

Order number	Description
12.48.003	$\mu$ CAN.4.sg-BOX / <b>24-bit</b> 4-channel strain gauge data acquisition module with CANopen, 4.096V DC internal power supply, <b>24-bit resolution</b> , designed for metric cable glands, connection via screw terminals, full bridges $\geq$ 350 Ohms
90.01.114	Metric cable installation kit for 4-channel field modules