



4-channel analogue input

µCAN.4.ai-F1

4-channel data acquisition module for analogue signals with CAN interface

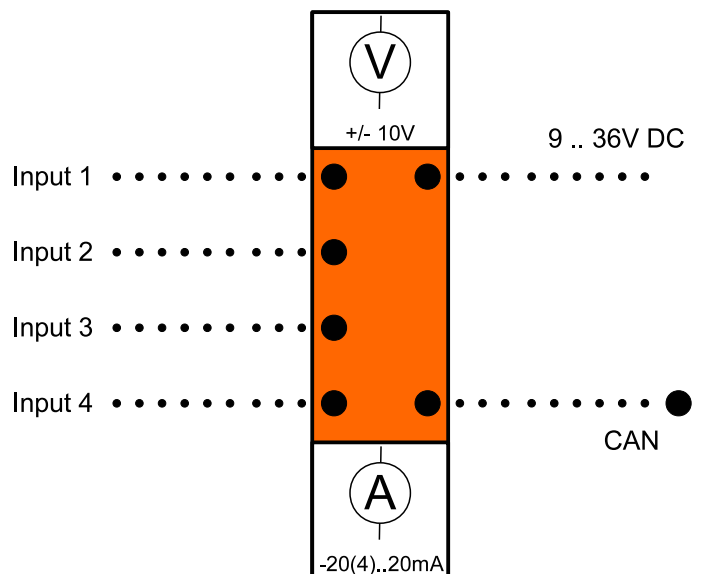
The µCAN.4.ai-F1 is the ultimate data acquisition module for your mobile test bench. The module can handle voltages up to +/-40V or -20..20mA with an **overall sample rate of 30kHz**.

Linearisation and monitoring of signals is done inside the robust alu die-cast housing. Data is sent over the CANbus interface to the distributed logging station or laptop computer.



Features

- analogue input +/-40V
- analogue input -20..20mA
- Sample rate max. 3kHz per input
- working ambient temperature -40°C to +85°C
- CAN 2.0A and CAN 2.0B / RawCAN
- free software configuration tool
- protection class IP65
- status monitoring with dual-colour LED



Technical Data	μCAN.4.ai-F1
Channels	4
Supply Voltage	9...36 V DC, reverse current protected
Power Consumption	2W (84mA @ 24V DC)
Isolation	Input/Supply.: 500Veff, Fieldbus/Supply.: 500Veff
Working Temperature	-40°C...+85°C
Baudrate	20kBit/sec ... 1MBit/sec
Protocol	RawCAN / CAN 2.0A and 2.0B
Configuration	free configuration software
Status Indicator	1 dual-colour LED
Protection Class	IP65
Housing	Aluminium, 120x110x48mm (LxBxT)
EMC	according to EN 50082
Accuracy @ 23°C ambient temperature	+/-40V DC accuracy 0,01% fsd., input impedance 220 kOhm -20..20mA accuracy 0,01% fsd., input impedance 50 Ohm
Sample Rates [Hz]	2 ... 3750
Resolution	2Hz / 24-bit (output value $\Delta U = 0,00001 \text{ V} = 10 \mu\text{V} /)$ 3kHz / 18-bit (output value $\Delta U = 0,001 \text{ V} = 1 \text{ mV} /)$
Filter	Software filter / selectable time base
Configuration of analogue inputs	SYNC driven sending ADC-Interrupt driven sending Timer driven sending

Order Number	Description
17.10.003	μCAN.4.ai-F1 / voltage 4-channel analogue acquisition module with CAN interface, signal input +/-40V DC, signal connector Lemo K series receptacle (female contacts), Power and CAN signal with Lemo B series receptacle (female contacts), inclusive 1 connection element
17.20.003	μCAN.4.ai-F1 / current 4-channel analogue acquisition module with CAN interface, signal input -20..20mA DC, signal connector Lemo K series receptacle (female contacts), Power and CAN signal with Lemo B series receptacle (female contacts), inclusive 1 connection element
90.15.001	F1/F1 connector (CAN + Power) length 140mm, Lemo B series connectors (male)
90.15.100	F1 external connector F1 cable connector 2mtrs. with Lemo B Series connector (to F1) and open wire (to interface of any other system)
90.15.300	Sensor Connector F1 Straight Plug, FGG.0K.306.CLAC50, 6-pole, solder contacts