

LOW VOLTAGE MODULES WITH CAN

MULTI-8



CAN measuring module for measuring quiescent, operating and peak currents as well as voltage and temperature with KLARI-PROBES

Features

- 8 universal inputs - 16 channel
- 8 kHz sampling rate per channel
- galvanical isolation between all inputs
- Ah calculation (optional)
- Dynamic sample rate
- Autorange Function
- Automatic Probe identification (similar to TEDS)
- Automatic DBC generation
- CAN 2.0 A/B-Interface

Options configurable via software

- Basic:
simplest application
- Dynamic Sampling Rate:
Module supports measurement speed switching for quiescent current measurement
- Charge balance:
Current measurements can be integrated to Ah and output on CAN

Version

- Aluminum housing 62 x 120 x 40 mm (l/w/h)
- Stackable housing optional (CLICK Version)
- Protection class IP65
- Temperature range -40°C to +85°C
- Supply 7 V to 60 V DC

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Applications

- Power measurement of power electronics in the vehicle or on test benches
- Measurement of quiescent and operating currents
- Temperature measurements

Scope of delivery

- Measuring module MULTI-8
- Factory calibration certificate (DAkkS optional)
- DBC or A2L

Accessories

- Wiring harness with supply for CAN
- KLARI-PROBES

Suitable sensors

Current measurement

FUSE-Probe (Micro/ Mini/ ATO/ MAXI/ MCASE/ JCASE)
HI-Probe (BF1/ BF2/ BF3)
LI-Probe

Voltage measurement

U-Probe (80V)

Power measurement (optional)

HP-Probe
LP Probe

Temperature

T-Probe (PT100/PT1000)

For detailed technical information please refer to the data sheet „KLARI-PROBES“

Technical data

Inputs	8 Measurement inputs (16 channel)
Capabilities	Klaric Probes with automatic recognition and acceptance of calibration values Current, voltage, temperature an optional power
Resolution	16 bit ADC with 5 measuring ranges
Sample Rate	0,25 Hz bis 8 kHz configurable per channel
Measurement Ranges	±9 mV, ±27 mV, ±42 mV, ±210 mV, +1050 / -240 mV 0,3 µV, 0,9 µV, 1,4 µV, 7 µV, 35 µV Resolution
Accuracy	± 0,1 % reading ± 3 Bit of the actual measurement range at 23°C ± 5°C ± 1 % reading ± 3 Bit of the actual measurement range -40°C bis +80°C Measurement Modules + Klari-Probes
CAN	125k, 250k, 500k, 1000k Baud configurable Internal CAN termination can be activated via software CAN base ID configurable
Configuration via	CAN
Voltage Supply Range	7 V to 60 V
Power Consumption	typ. 1 W
Temperature Range	-40°C to 85°C

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Measuring ranges of MULTI-8

Gain	Measuring range	Resolution
100	± 9 mV	300 nV/Bit
40	± 27 mV	900 nV/Bit
25	± 42 mV	1,4 µV/Bit
5	± 210 mV	7 µV/Bit
1	+1.050/-240 mV	35 µV/Bit

Klari-Probe measuring ranges

Gain	I-Probe					
	1 mΩ		200µΩ		20µΩ	
	Measuring range [A]	Resolution [mA/Bit]	Measuring range [A]	Resolution [mA/Bit]	Measuring range [A]	Resolution [mA/Bit]
100	± 9	0,3	± 45	1,5	± 450	15
40	± 27	0,9	± 135	4,5	± 1.350	45
25	± 42	1,4	± 210	7	± 2.100	70
5	± 210	7	± 1.050	35	± 10.500	350
1	+ 1.050/-240	35	+ 5.250/-1.200	175	+ 52.500/-12.000	1.750