

MULTI-4 ETH



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

Features

- 4 universal inputs - 8 channel
- 8 kHz sampling rate per channel
- galvanical isolation between all inputs
- online Ah calculation (optional)
- Dynamic sample rate
- Autor Range Function
- Galvanic isolation of all inputs
- Automatic Probe identification (similar to TEDS)
- 100 Mbit/s Ethernet Interface (100 BASE-TX)
- Automatic A2L generation
- XCP-on-Ethernet (XCP-on-TCP/IP or XCP-on-UDP/IP)

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



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-4 ETH
- Factory calibration certificate (DAkkS optional)
- A2L and Documentation

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	4 Measurement inputs (8 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 μ V, 0,9 μ V, 1,4 μ V, 7 μ V, 35 μ V Resolution
Accuracy	$\pm 0,1$ % reading ± 3 Bit of the actual measurement range at $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ± 1 % reading ± 3 Bit of the actual measurement range -40°C bis $+80^{\circ}\text{C}$ Measurement Modules + Klari-Probes
Ethernet	100 MBit/s (100 BASE-TX)
Configuration via	Ethernet
Voltage Supply Range	7 V to 60 V
Power Consumption	typ. 1,5 W
Temperature Range	-40°C to 85°C
Calibration	12 months