

## KLARI-QUAD 2 1500V



HV measuring module for current, voltage, power and temperature measurements in vehicles or in the laboratory

### Features

- 4 universal inputs
- 8 channel
- 1.500 V galvanical isolation
- Autorange Function
- Automatic Probe identification (similar to TEDS)
- Automatic DBC/A2L generation
- Dynamic sample rate
- Online calculation of power data for DC and AC measurements
- 100 Mbit/s XCP-on-Ethernet or Klaric-Server
- 2 independent 1 MBaud CAN-Interfaces

### Probe-Variants with automatic identification

#### HV-Measurement Adapter

HVP800, HVA280, HVR90 or customer specific

#### Current/Voltage Measurement

I/U-COMBI-PROBE for simultaneous measurement of current and voltage at one connector

#### Current Measurement

Combi-Probes: BF1, BF2, LI

High current probes: BF1, BF2, BF3-Shunt

Low current probes: LI

HV-LEM-Probe

#### Voltage Measurement

200 V HVU-PROBE

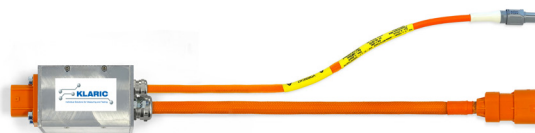
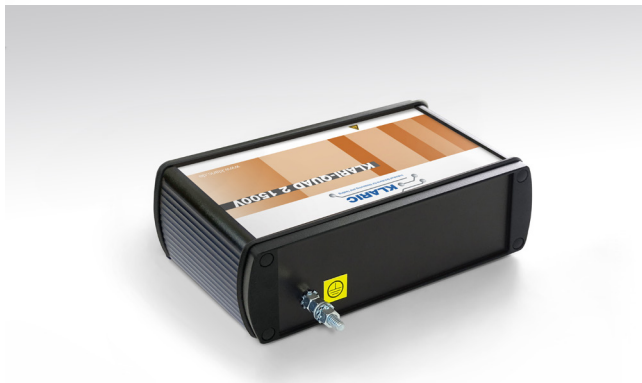
1000 V HVU-PROBE

#### Temperature Measurement

HV-Thermocouple Type K

HV-PT100/1000

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



## KLARI-QUAD 2 1500V

### Version

- Aluminium housing 96/170/54 mm (L/B/H)
- Protection class IP65
- Temperature Range -40...+85°C
- Supply Voltage 7..60 V DC

### Scope of delivery

- Measuring module
- Factory calibration certificate (DAkkS optional)
- HV test protocol
- A2L/DBC files and documentation

### Applications

- Power measurement of power electronics
- Voltage measurements in the HV electrical systems, HV batteries
- Temperature measurement in HV components or batteries with thermocouples or RTDs

### Accessories

- Klaric HV-Measurement Adapter
- Klaric HV-Probes
- CAN cable harness with power supply
- Ethernet cable harness with/without supply

### Technical data

<b>Inputs</b>	4 Inputs 8 Channel (2 x ADCs per Input)
<b>Capabilities</b>	Klaric HV-Probes with automatic detection and import of the calibration values Current Voltage 2xVoltage Combi-I/U HV Thermocouple Type K HV PT100/1000 Klaric HV-Measurement Adapter
<b>Resolution</b>	16 Bit ADC with 5 Measurement Ranges
<b>Sample Rate</b>	0,25 Hz to 8 kHz per channel configurable, dynamic sampling speed trigger
<b>Measurement Ranges</b>	±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
<b>Accuracy</b>	± 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 in a chain
<b>CAN</b>	125k, 250k, 500k, 1000k Baud configurable internal CAN termination via Software swichtable CAN Base ID configurable
<b>Ethernet</b>	100 MBit/s (XCP-on-Ethernet or KlaricServer)
<b>Configuration via</b>	Ethernet CAN USB (virtual COM Port)

## KLARI-QUAD 2 1500V

### Technical data

<b>Voltage Supply Range</b>	7-60 V
<b>Power Consumption</b>	typ. 2 W
<b>Temperature Range</b>	-40°C to 85°C
<b>HV insulation check</b>	at least every 12 months

### Measurement Ranges KLARI-QUAD 2

Gain	MEASUREMENT 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 Measurement Ranges with KLARI-QUAD 2 1500V

Gain	I-PROBE					
	1 mΩ		200µΩ		20µΩ	
	Measurement Range [A]	Resolution [mA/Bit]	Measurement Range [A]	Resolution [mA/Bit]	Measurement 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

Gain	U-PROBE			
	200 V		1000 V	
	Measurement Range [V]	Resolution [mV/Bit]	Measurement Range [V]	Resolution [mV/Bit]
100	± 6	0,2	± 45	1,5
40	± 18	0,6	± 135	4,5
25	± 28	0,9	± 210	7
5	± 140	5	± 1.000	35
1	-160/+700	24	-	-