

KLARI-ONE PLUS 1000V

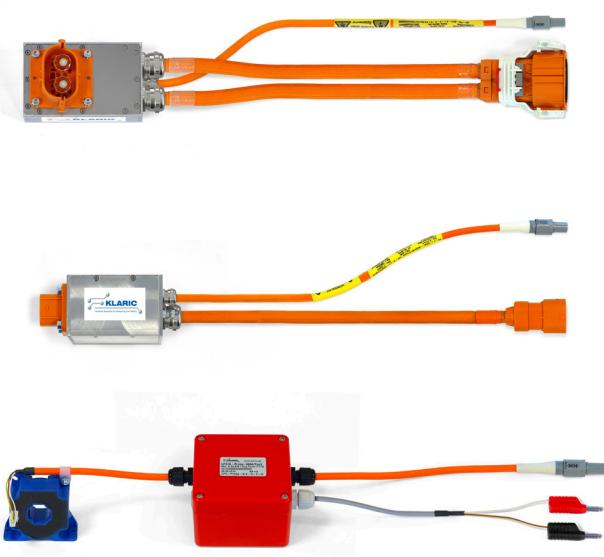


HV measuring module for current, voltage, power and temperature measurements in vehicles or in the laboratory



Features

- 1 universal inputs
- 2 channel
- 1.000 V galvanical isolation
- Autorange Function
- Automatic Probe identification (similar to TEDS)
- Online calculation of power data for DC and AC measurements
- 2 independend 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-ONE PLUS 1000V

Version

- potted 108/58/36 (L/W/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
- DBC files and documentation

Technical data

Inputs	1 Inputs 2 Channel (2 x ADCs per Input)
Capabilities	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
Resolution	16 Bit ADC with 5 Measurement Ranges
Sample Rate	0,25 Hz to 8 kHz per channel configurable, dynamic sampling speed trigger
Measurement Ranges	±7,5 mV, ±15 mV, ±30 mV, ±120 mV, +720 / -300 mV 0,25 µV, 0,9 µV, 1 µV, 4 µV, 24 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 in a chain
CAN	125k, 250k, 500k, 1000k Baud configurable internal CAN termination via Software switchable CAN Base ID configurable
Configuration via	CAN USB (virtual COM Port)

KLARI-QUAD 2 TB8 1500V

Technical data

Voltage Supply Range	6-50 V
Power Consumption	typ. 2 W
Temperature Range	-40°C to 85°C
HV insulation check	at least every 12 months

Measurement Ranges KLARI-ONE PLUS 1000V

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-ONE PLUS 1000V

Gain	I-PROBE			
	1 mΩ		200µΩ	
Measurement Range [A]	Resolution [mA/Bit]	Measurement Range [A]	Resolution [mA/Bit]	
100	± 7,5	0,25	± 37,5	1,25
50	± 15	0,5	± 75	2,5
24	± 30	1	± 150	5
6	± 120	4	± 600	20
1	+ 700 / -300	24	+ 3.600 / -1.500	120

Gain	U-PROBE			
	200 V		1000 V	
Measurement Range [V]	Resolution [mV/Bit]	Measurement Range [V]	Resolution [mV/Bit]	
100	± 6	0,170	± 37,5	1,25
40	± 18	0,340	± 75	2,5
25	± 28	0,680	± 150	5
5	± 140	2,720	± 600	20
1	-160/+700	16,320	± 1000	120