CHARGE-MONITOR

Features
- Measuring unit for measuring currents and voltages of AC- or DC-signals.
- The CHARGE-MONITOR is installed between charge station and vehicle or between the mains and the charging station.
- The CHARGE-MONITOR disposes about the following connection options which could be configured individually:

- CEE32	für 1- oder 3- phase-measurements (32 A)
- Mennekes	Europa
- CEE125	for 1- oder 3-phase-measurements (125 A)
- CCS/Combo1	USA
- CCS/Combo 2	Europe
- GB/T AC	China AC
- GB/T DC	China DC
- CHAdeMO	Japan DC

- Measuring speed is configurable individually. Current and voltage can be measured simultaneously up to 16 kHz.
- Output of measuring values on a 7-inch-display and/or via CAN-interfaces.
- Following measuring modes are available:
  - DC-measurement: $I\_instantaneous$, $U\_instantaneous$, I_charge, $I\_discharge$, I_total,
  - AC-measurement: $I\_instantaneous$, $U\_instantaneous$.
- The measured values may be used for calculating the following values:
  - U_eff,
  - I_eff,
  - $\cos \varphi$ and P_active power,
  - electric work.
    These values can be pictured on the display or transmitted via CAN-interfaces.

Version
- plastic-housing,   480/300/480 mm (l/w/h)
- protection class IP54,
- temperature range -20...+50°C
- supply 230 V AC, current consumption approx. 2 A

A detailed technical description is contained in our user manual

KLARIC
Individual Solutions for Measuring and Testing

Delivery
- Measuring unit
- PC software for configuration via CAN or USB-2.0 interface
- CAN database and documentation on CD ROM
- USB 2.0 connection cable
- **Using KlariViewer-software logged data can be displayed and processed further.**
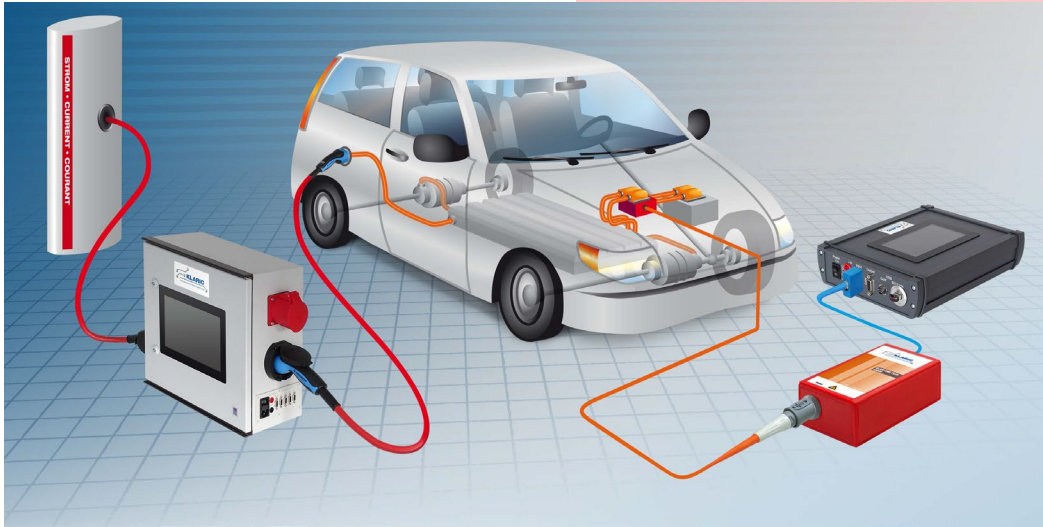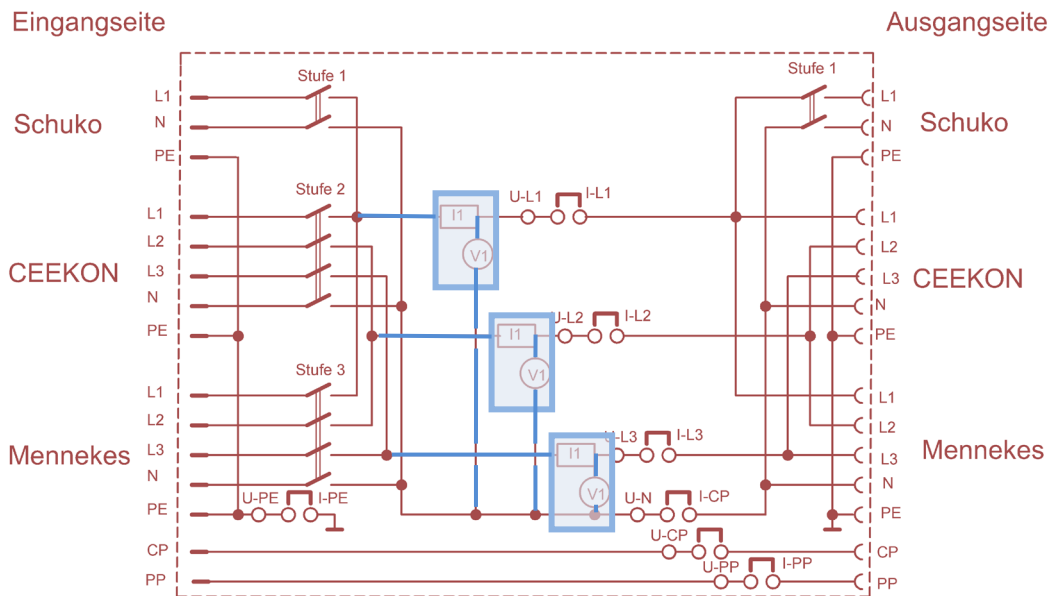
Accessories:
- USB 2.0 connection cable

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TECHNICAL DATA

Input	• 3 x KLARI-ONE-PLUS modules using 1 I/U-Combi-PROBE each, 1mOhm, 1000 V • parallel measurement of current and voltage
Resolution	• 5 measurement ranges and autorange function selectable • ± 15 bit/range

Gain	I-PROBE		U-PROBE	
	1 mΩ		1000 V	
	range [A]	resolution [mA/bit]	range [V DC]	resolution [mV/bit]
100	+/- 7,5	0,25	0...+/- 37,5	1,25
50	+/- 15	0,5	0...+/- 75	2,5
24	+/- 30	1	0...+/- 150	5
6	+/- 120	4	0...+/- 600	20
1	- 300/+ 720	24	0...+/- 1000	120

Accuracy	• ± 1% of measurement value ± 3 bit of range • valid for temperature range of - 40 .. + 85°C
Sample rate	• internal up to 16 kHz,
Features	• selectable data output (CAN2.0B and/or USB-2.0 interface) • data output via CAN 1 and CAN 2 configurable (baudrate, identifier etc.) • internal CAN-termination, switchable via software • automatic PROBE-identification with calibration value processing
Output	• 2 x CAN 2.0 A/B, (High-Speed CAN, ISO 11898) from 125 kbit/s up to max. 1 Mbit/s, per CAN with up to 8.000 frames/s • USB-2.0 interface
Timestamp	• 6.4 µs resolution (is included in CAN frame)

Housing
  - Protection
  - Weight
  - Dimension
	• plastic-housing,
	• IP54
	• 20 kg
	• 480/300/480 mm (L/W/H)

Supply	• 230 V, 50 Hz
Current consumption	• ca. 2 A
Configuration	• via PC using CAN or USB-2.0 interface. Configurations could be created, archived and loaded into the module. • speed CAN: 125 kB…1 MB • measurement type, measuring speed, channels
Modes	• DC-measurement • AC-measurement, 1- or 3-phase • RMS calculation for AC signals • Selectable sample speed for the channels
Temperature range	• -20…+ 50°C
Isolation	• 1000 V

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- Example PROBE placement:

Eingangseite   Ausgangseite