

# Brochure Temes certified DC Meter



Product	Article Number	Technical Key Data
Certified DC Meter	TEMP500088 - 1	V DC Range: $\pm 200 \dots 1.000$ V DC I DC Range: $\pm 5 \dots + 500$ A DC P: $\pm 500$ kW Pmin: $\pm 200$ W $-25^\circ$ C ... $+60^\circ$ C

- Fully microprocessor controlled

- User friendly LC Display

- Wide input voltage range of  $\pm 200 \dots 1.000$  V DC

Extended voltage range of  $\pm 200 \dots 1.000$  V DC with external power supply

- Wide current range of  $\pm 5 \dots + 500$  A DC

- meter readings are stored even in the event of a power failure

- High protection against loss and manipulation

- All operating parameters can be set via ModBus

- Calculation of Power, energy, active power, active energy

- Low power consumption  $< 15$  W

<b>Voltage Supply</b>	
External Voltage Supply (Option)	24V +/- 10% / 20 W Galvanically isolated. Note: DC Charging Stations must be supplied externaly
Internal Voltage Supply	200 V ... 1200 V DC
Power Consumption Meter	< 15W
<b>Measuring Ranges</b>	
DC Voltage	+/- 1.000 V DC (+/-200 ... 1.000 V DC with internal Voltage Supply
DC Current	+/- 500 A, Minimal Current +/- 5 A Note: Measured currents below +/-5A are hidden. No counting then takes place.
<b>Measurement</b>	
Accuracy Class	A
Voltage Tolerance	+/-2% of the nominal value across the measuring range
Strom	± 2% of the nominal value across the measuring range
Power	± 1% FS ± 1 Digit
Sampling Rate	40 kHz
Maximal Pulse Frequency	< 2,5 kHz

<b>Dimensions and weight</b>	
Dimensions (W x D x H)	160 x 190 x 60 mm
Weight	920 g
<b>Environmental Conditions</b>	
Operating Temperature	- 25° C ... + 55° C
Storage Temperature	- 25° C ... +70° C
Humidity	5% RH ~ 95%RH (condensing)
Atmospheric pressure	80 KPa ... 110 KPa
Overvoltage Category	III
Altitude above Sea Level	2000 m
Mechanical Protection	IP20 / IP51
Contamination Grade	Grade 3
Shock	20J (5Kg, 0.4m) IK10

## Standards and Directives

VDE-AR-E 2418-3

VDE 0570-2-20

DIN EN 61000-4-2

DIN EN 61000-4-3

DIN EN 61000-4-4

DIN EN 61000-4-5

DIN EN 61000-4

DIN EN 61000-4-8

DIN EN 61000-4-11

DIN EN 61000-4-19

DIN EN 55032

## **Applications:**

- Commercial charging stations
- Photovoltaic systems
- Charging stations for private vehicles of employees in a company
- Infrastructure, workshops and service stations (electric vehicles)
- Car dealerships and car dealers (electric vehicles)
- Car / bus OEM or laboratory operation

## Data interfaces

The DC meter provides the following electrical interfaces:

- MOD bus, galvanically isolated
- CAN bus (transmission only), galvanically isolated, activated via MOD bus
- Ethernet (pin header)
- Metrological LED
- Interface for LCD display & operating keys
- S0 interface for reference (galvanic isolation)
- S0 interface for output (galvanic isolation)

## Option:

- External power supply (24 V DC, 48 V DC) galvanically isolated



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