

INFORMATION

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E-MOBILITY - On-site testing of AC and DC charging stations

The growing number of electric vehicles in the world also makes the expansion of the charging infrastructure increasingly important. The requirements for the charging process of electric vehicles with their different charging capacities and different types of connectors are high. The charging stations should work reliably and according to their specifications. Special test equipment and adapters are necessary to verify them.

With our test case EMOB200-10 and in combination with a portable reference meter of the new s2-series, the on-site testing of charging stations can easily succeed. Due to our MT3xOs2 including a battery pack, you are independent of the mains supply when measuring current and voltage on-site. A predefined test sequence in WinSAM guides you through the individual work steps up to the reporting of your measurement results. Testing can be so simple.



Test case up to 200 A (DC) / 80 A (AC)

EMOB200-10

- Test case for direct connection to charging stations for electric vehicle
- Reliable energy measurement during the charging process
- Optimal extension unit for the portable reference meter MT3xOs2
- Current measurement up to 200 A (DC) and 80 A (AC)
- Connector type 1 / CCS1 (USA)

Easy handling

- Direct connection via special charging cables
- Permanent connection of s2 device* and test case
- A comprehensive range of accessories for on-site testing in a separate case

High safety aspects

- Connections according to IEC 62196
- Battery pack¹ for mains supply of the reference meter on-site
- Safety check
- Charging cable detection
- Electromechanical locking mechanism
- Temperature monitoring of the high-current contacts
- Overcurrent detection

High accuracy

- Accuracy 0,1 % / 0,05 % (AC)²
- Charging cable with additional measuring line (sense) to avoid measuring uncertainties or losses due to cable length if there is no connection cable at the charging station is available.

Due to battery operation¹ independent of the mains



Software-controlled test sequence

¹ only valid in operation with MT3xOs2

² only valid in operation with MT320s2



Technical data in summary

Product name	Type	Max. current	Max. voltage	No. of phases	Type of current	Accuracy with MT310s2	Accuracy with MT320s2	Plug
EMOB200-10	Test case	80 A (AC) 200 A (DC)	300 V (AC) 1000 V (DC)	1 (AC) 1 (DC)	AC DC	< 0.1 % < 0.1 %	< 0.05 % < 0.1 %	Type 1 CCS1 (USA)

All special features at a glance

Efficient

- Short set-up time due to permanent connection

Plus

- On-site measurement out of the transport case (without uncasing)

Direct

- Combination plug CCS1 / type 1 for connection with the charging station
- Overcurrent detection
- Temperature monitoring

Direct

- Industrial plug connector for CCS1 connection with an electric vehicle or load
- Overcurrent detection
- Temperature monitoring

Direct

- Type 1 connection with an electric vehicle or load

Clear

- LED status indication
- Button and LED indication for a secured locking mechanism of the plug connection (safety check)

Accurate

- Voltage connection (measurement of the voltage on the current via return measurement (sense))

On-site testing – comfortable and fast

Further information
<https://www.zera.de/en/products/test-systems-e-mobility/>

