

Technical description

(Mobile Charging Station Tester EV-Dummy)

This mobile testing device affords an on-site inspection of charging stations, using the CHAdeMO protocol. Being a current sink, the dummy emulates the behaviour of an electric vehicle and communicates with the charging station. Current profiles can be requested, error scenarios can be created and the correct operation can be checked. The dummy can be upgraded to fulfil every other norm.

Electrical data

system performance	Testing of charging stations with CHAdeMO-Standards
power supply	AC 230V 50Hz (only for charging of the internal battery, not necessary during operation)
operating-range	DC 50 – 500V, DC 0 – 30A
power drain	S1 2000W S3 (10%) 5000 W
communication	CAN2.0B, ISO11898 Transmission rate: 500kbps Cycle: 100ms±10% Digital I/O (Charge start and stop 1, Charge start and stop 2, verification of connector connection, charge permission and prohibition)

Electrical design according to CHAdeMO-Standard

General Information

design	customized
dimension	customized
Temperature range	-20 to +105°C
adjustment	different operation modes / faults

Contact and further information:

Prof. Dr.-Ing. C. Sourkounis
Ruhr-University Bochum, Power Systems Technology and Power Mechatronics
Universitaetsstrasse 150 – 44780 Bochum – Germany
mail: office@enesys.rub.de, web: <http://www.enesys.rub.de>