

# PROFITEST H+E EASY CHECK

## Function Tester for AC Charging Points per IEC 61851-1, VDE 0122-1

3-447-124-03

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- Automatic function tester for AC charging points
- Also for AC charging points with permanently attached cable
- Easy to use – even for laypersons
- Automatic test sequence saves time and money
- Results appear in plain text at the display
- Error display with results for forwarding to service personnel
- USB interface for charging the battery



### Applications

The number of publicly accessible AC charging points made available by private operators is growing steadily. If the charging process can't be started at an AC charging point, it's usually assumed that the charging point itself has malfunctioned.

As a result, the operator immediately calls in an electrician, even if the AC charging point isn't the cause of malfunctioning.

The PROFITEST H+E EASY CHECK function tester for AC charging points makes it possible for laypersons such as system operators, service providers and facility managers to safely check the functionality of the AC charging point in such cases. Specialized personnel is only contacted in a targeted manner in the event of a diagnosed malfunction – i.e. when it's actually necessary. You save time and money.

The PROFITEST H+E EASY CHECK can be used to test AC charging points with charging mode 3 and a type 2 connector socket or permanently attached type 2 cable.

In addition to electrical testing in accordance with the standards, the tester also provides electricians with a full range of functional tests without the need for additional equipment such as a multimeter or an oscilloscope.

### Features

- Testing of AC charging points in charging mode 3
- Simulation of an electric vehicle charging socket
- Connection to the charging socket or the type 2 plug of an AC charging point
- Verification of values for 20 A and 32 A cables\*  
\* 32 A only if 20 A test fails
- Testing of vehicle statuses A, B and C, phases, tOFF (status E), rotating field and duty cycle

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## Technical Data

### Mechanical Design

Housing	110 × 70 × 210 mm
Weight	998 g
Protection	IP 21
Display	Monochrome

### Ambient Conditions

Operating temperature	-5 ... +45 °C
Storage temperature	-5 ... +60 °C
Relative humidity	Max. 75%, non-condensing, no condensation allowed
Elevation	Max. 2000 m

### Power Supply

Internal rechargeable battery  
(charging via USB port)

Type	18650H-2600
Nominal voltage	3.7 V
mAh	2600 mAh
Energy	9,62 Wh
Protective function	PCB/IC protection
Charging current	Max. 1 C
Discharge current	Max. 5.2 A (2 C)
Internal resistance	180 mΩ
Weight	48 g
Dimensions (dia. X L)	18 × 69 mm

### Electrical Safety

Measuring category	CAT III, 300 V
Pollution degree	2
Protection class	II



### Electromagnetic Compatibility

Interference emission	EN 55022, class A, for use in industrial environments
Interference immunity	DIN EN 61000-4-2 DIN EN 61000-4-3 DIN EN 61000-4-4 DIN EN 61000-4-5 DIN EN 61000-4-6

### Interface and Memory

Interface	Micro USB (for battery charging)
Internal memory	The latest measurement is saved automatically

### Characteristic Values

#### Test Analysis Standard

AC	DIN EN IEC 61851-1 VDE 0122-1 Electric vehicle conductive charging system – Part 1: General requirements
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Measurement of voltage values in all three phases and N

#### Test Parameters

Cable	20 A 32 A* * only if 20 A test fails
Vehicle states	State A, State B, State C Phase tOFF (Status E) Rotating field Duty Cycle

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### Product Standards

The tester has been manufactured and tested in accordance with the following safety regulations:

IEC 61010-1 EN 61010-1 VDE 0411-1	Safety requirements for electrical equipment for measurement, control and laboratory use – General requirements
EN 60529 VDE 0470, part 1	Test instruments and test procedures Degrees of protection provided by enclosures (IP code)
DIN EN 61326-1 VDE 0843-20-1	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements
EN 55022	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement
DIN EN 61000-4-2 VDE 0847-4-02	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test
DIN EN 61000-4-3 VDE 0847-4-03	Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio frequency, electromagnetic field immunity test
DIN EN 61000-4-4 VDE 0847-4-04	Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test
DIN EN 61000-4-5 VDE 0847-4-05	Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test

DIN EN 61000-4-6 VDE 0847-4-06	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio frequency fields
DIN EN IEC 61851-1 VDE 0122-1	Electric vehicle conductive charging system – Part 1: General requirements

### Scope of Delivery

1	PROFITEST H+E EASY CHECK (M525F)
1	Charging cable (micro USB plug)
1	Operating instructions

### Order Information

Description	Article number
PROFITEST H+E EASY CHECK	M525F

Further information regarding accessories can be found:

- in our Measuring Instruments and Testers catalog
- on the Internet at [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)

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 **GOSSEN METRAWATT**  
Gossen Metrawatt GmbH  
Südwestpark 15  
90449 Nürnberg • Germany

Phone: +49 911 8602-0  
Fax: +49 911 8602-669  
e-mail: [info@gossenmetrawatt.com](mailto:info@gossenmetrawatt.com)  
[www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)