# Other instruments / adapters / accessories A 1732 DC EVSE Adapter



The A 1732 DC EVSE Adapter is a specialized tool designed for electrical safety and functional testing of Electric Vehicle Supply Equipment in both Mode 4 (DC EVSE) and Mode 3 (AC EVSE) configurations. It supports a range of connector types, including CCS2 CHAdeMO, and Type 2 AC plugs, making it highly versatile. The A 1732 adapter enables initiation when paired with MI 3155 of communication protocols, such as ISO 15118, DIN 70121, CHAdeMO, and Low-level PWM, and it can also simulate errors on the Control Pilot (CP) signal and Protective Earth (PE) connections to assess EVSE response. When paired with the MI 3155 EurotestXD installation tester, the A 1732 DC EVSE Adapter can be used to log the charging protocol, perform measurements and testing required for EVSE commissioning and for periodic safety testing.

#### **KEY FEATURES**

- Support for CCS2, CHAdeMO and AC EVSE;
- Functional test protocol for measuring voltages and current on the terminals;
- Fault simulation on CCS2 and Type 2 for CP open, PE open and CP short;
- Fault simulation on CHAdeMO for CP3 open,
  PE open and CAN stop;
- Banana test points for DC, AC and PE terminals;
- Double PE test terminals (PE(C) and PE(P)) for a **true 4-wire Rlow measurement**;
- Bluetooth communication with MI 3155 EurotestXD:
- Overvoltage category CAT III / 300 V;
- CCS ISO 15118-1 or DIN 70121 communication support:
- CHAdeMO version 0.9.1 and higher communication support;
- AC EN 61851-1 communication support;
- Simulated EV Battery of 300 V and 5 A.

## **USED TOGETHER WITH MI 3155**

• Communication with A 1732 DC EVSE Adapter via Bluetooth:

- **Predefined test protocol for DC EVSE** in the memory structure;
- All measurement can be started and viewed on MI 3155 EurotestXD;
- Performing accurate 4-wire measurements with 200 mA measuring current;
- Insulation resistance with DC voltage up to 2500 V;
- Functional test with a live view of charge protocol and voltages and currents on the test terminals;
- Remote faults triggering and reaction time measuring;
- DC impedance measurement;
- Discharge time measurement;
- Asymmetric **IMD test** with a setupable fault resistance between 20 k $\Omega$  and 640 k $\Omega$  at 5 k $\Omega$  intervals:
- Programmable AUTO SEQUENCEs\* for customizing the test protocol;
- PC SW Metrel ES Manager for measurement pre and post processing: preparation of the test structure, result download, tree-view, table view and graphical view, storing and printing the reports.

## **APPLICATION**

- EVSE production for functional and electric tests;
- EVSE installation and commissioning;
- Periodic testing of EVSE;
- Troubleshooting problematic EVSE;

# **STANDARDS**

#### **Functionality**

- EN 61851 1
- EN 61851 23
- ISO 15118-1
- DIN SPEC 70121
- CHAdeMO

## **Electromagnetic compatibility**

• EN 61326 - 1

#### Safety

- EN 61010 1
- EN 61010 2 030
- EN 61010 031



## **GENERAL DATA**

Mains supply		
Supply voltage, frequency	205 254 V AC, 50 Hz / 60 Hz	
Max. power consumption	2000 VA	
Mains supply overvoltage category	CAT II / 300 V	
Altitude	≤ 2000 m	
Measuring category		
Measuring category	CAT III / 300 V	
Protection classifications		
Power supply	Class I	
Pollution degree	2	
Degree of protection	IP40	
Case	Shock proof plastic / portable	
Communication		
USB 2.0	Standard USB Type B	
Bluetooth	v4.2 BR/EDR and BLE specification	
EMC	· · · · · · · · · · · · · · · · · · ·	
Emission	Class B (Group 1)	
Immunity	Industrial environment	
Reference conditions		
Reference temperature range	15 °C 35 °C	
Reference humidity range	35 % 65 % RH	
Operation conditions		
Operation	Outdoor use	
Working temperature range	-10 °C +40 °C	
Maximum relative humidity	85 % RH (0 °C 40 °C), non-condensing	
Storage conditions		
Temperature range	-20 °C +60 °C	
Maximum relative humidity	90 % RH (-10 °C +40 °C)	
•	80 % RH (40 °C 60 °C	
General	,	
Dimensions (w×h×d)	50 cm x 25 cm x 41 cm	
Weight	16.2 kg	
Communication standards		
CHAdeMO	Versions 0.9.1 and higher	
CCS (DC)	ISO 15118-1or DIN SPEC 70121	
ISO by default, DIN otherwise		
CCS (AC)	EN 61851-1 low level	
Simulated EV battery		
Voltage	280 V to 310 V	
Load (charging) current	Cca 4.9 A at 300 V	
Input resistance		
DC+/DC-	24 ΜΩ	
DC+/PE, DC-/PE	> 200 MΩ	
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# ORDERING INFORMATION



### Standard set A 1732

- A 1732 DC EVSE Adapter
- A 1781 Test cable, GRY/GRN/BRN, 1.5m, 0.75mm2, CAT IV
- A 1493 Power cable, 2m, 3x1.5mm2
- A 1727 USB cable TypeA/B

# CAN BE USED TOGETHER WITH

Photo	Order No.	Description
(I)	MI 3155	EurotestXD

## MEMORY STRUCTURE EXAMPLE







→ Memory 3/10	): DC EVSE Fund	ti 📹	11:59
Authentication Parameter Isolation PreCharge	Standard Attenuation Umax (Iso)	DIN SP 17.0 dB 482 V	♣
Charge StopCharge SessionStop ShutOff Default	Umax (charge) Imax (charge) PP res. range	301 V 4.9 A 1500 Ω	
System toharge	CCS 10 s	18.Sep.2024 12:55:37	444







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