



MACROEVTES MACROEVTES Safe Recharging stations: a new way to use electric energy.

MACROEVTEST, HT's new product for verification and checks on recharging stations for electric cars (EVSE) in compliance with standards IEC/EN 61851-1 and IEC/EN60364-7-722, and for safety tests in private and

industrial environments



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* other plugs available on demand



MACROEVTEST + EV-TEST100

ORANGE GREEN INSTRUMENTS CO., LTD. 02-019-3197, 083-231-4979 www.OGI-THAl.com

CHECKS ON RECHARGING STATIONS FOR ELECTRIC CARS

SIMPLIFIES

Connection is simple.

MacroEVtest is connected through the provided **C100EV** cable to **EV-Test100**, which is connected, through an in-built cable provided with type2 plug, to a recharging station.

SIMULATES

EV-Test100 can **simulate the presence of a car being recharged** and, at the same time, dialogues with **MacroEVtest** thanks to the new **display with touch screen system**, peculiar to HT's latest generation devices.

GUIDES

To correctly perform all tests, all you need to do is following the **GUIDED PROCEDURE** created by HT for this innovative instrument.

CONNECTS

Before each test, MacroEVtest indicates how the cables must precisely be connected and, at the end of measurement, further to the detected values, it provides evaluations of the tests' outcomes, if compatible or not for the recharging station's safety, indicated by a green or red thumb symbol.





TESTS

- > CONTINUITY test of the recharging station's protection conductor
- > INSULATION test of the recharging station
- > Verification of the **STATUSES** of the recharging station
- Measurement of **OVERALL EARTH RESISTANCE**
- > Verification of the RCD's tripping (test of RCDs type A, B and type B 6ma)

VERIFICATION TESTS AND

SIMULATIONS > Vehicle **not present**

- > Vehicle present but not being charged
- > Vehicle present and being charged
- > Events and anomalies which can be detected during the recharging phase
- > Simulation of a fault on the protection conductor
- Indication of the presence of voltages on the EVSE output connector through LED
- > Verification of the mechanical lock in the connection to the station: it is possible to check that the station, during the recharging phase, blocks the cable release (if the station is provided with this function)

STANDARDS





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SAFETY CHECKS ON PRIVATE AND INDUSTRIAL SYSTEMS

MEASURES

The **TFT colour display** with **touch-screen** allows for a new and more versatile use of the instrument.

MacroEVtest offers on its display all possible alternatives for the performance of a perfect measurement.

PREPARES

The new system adopted by HT allows optimally preparing the instrument, before performing a test, by suggesting the most suitable connections to certify correct and reliable tests.

The AUTO function, in the system menu, allows performing the tests very quickly.

VALIDATES

At the end of each test, further to the measured value, **MacroEVtest** provides an **evaluation of the result**, indicating whether it complies or not with standards.

All tests can be saved and, in order to create a printable report, data can be transferred via WiFi to a PC, smart phone or tablet.



TESTS

- Test of RCDs type A, type AC also up to 1000 mA and type B. By using the accessory RCDX10, provided with the instrument, it is also possible to test RCDs with external jaws up to 10 A.
- Insulation tests up to 1000V
- Continuity tests
- Tests of overall earth resistance and voltammetric resistance (further than with the provided rods, this latter test can also be performed by means of the optional clamp T2100).
- With the appropriate programming guided by the touch-screen system, this device can test the interruption power, tripping currents, I2t relevant to magneto-thermal switches (MCB) with curves B, C, D, K and fuses type gG and aM
- > Loop/Line impedance measurements and calculation of the assumed short-circuit current with high resolution (0.1mOhm) in TN systems with the use of the optional accessory IMP57

STANDARDS

IEC/EN 60364



Accessories provided

C2033X

Three wire cable with Schuko plug

> UNIVERSALKITG3

Set of 4 cables + 4 alligator clips + 3 test leads

KITTERRNE

Set of 4 cables + 4 earth probes + carrying bag

> PT400

Touchscreen stylus (included inside meter)

> PR400

Remote START/STOP switch probe

> ZEROLOOP

Loop zero adapter

> EV-TEST100

EVSE test adapter

> RCDX10

Accessory to test earth leakage relay

> SP-5100

Carrying straps

> TOPVIEW2006

PC Windows software + optical/USB connection cable (order code: C2006)

> VA507

Hard carrying case

> YABAT0003000

Rechargeable battery NiMH, 1.2V, type AA 6 pcs

> YABAT0004001

External charger

> YAMUM0058HT0

Quick reference guide

> YAMUMO057HTO

User's manual on CD-ROM

> ISO calibration report



Optional accessories

HT4005K

Standard clamp with 200A/1V AC full scale

> HT96U

Standard clamp with 1/100/1000A full scale

→ IMP57

Accessory for Loop impedance measurement with high resolution

> T2100

Clamp for earth probe resistance measurement

> HT52/05

Temperature/Humidity probe

> HT53/05

Illuminance (lux) probe

> BORSA2051

Carrying bag

→ 606-IECN

Connector with magnetic tip

> 1066-IECN

Connector for extension of banana cables 4mm

By using external probes (optional), **MacroEVtest** can measure environmental parameters such as **air temperature/humidity**, **illuminance** (Lux).

By using the optional **amperometric transducer** provided by HT, it is also possible to perform **measurements of LEAKAGE CURRENTS**, **COSPHI**, **POWER** and **HARMONICS**.



WATCH THE VIDEO TUTORIAL



SEE THE TECHNICAL DATA SHEET







