

BENNING**Installation tester, Type: IT200****Order data**

Order number	473422 IT200
GTIN	4014651441064
Item class	47A

Description**Version:****BENNING IT 200 Auto Sequence® installation tester**

For efficiently testing and documenting electrical systems and EV charging stations (wallboxes) in charging mode 3.

Innovative operating concept:

- Operated via 4.5 inch colour touchscreen and buttons.
- Order manager for processing and managing test jobs.
- Create multi-layered system structures including planned measurements directly at the location of the test and on the PC.
- Device administrator and user account management.
- All measuring functions with help function and PASS/FAIL display via stored validation characteristic lines for LOOP/LINE measurements.
- Connection for barcode scanners to identify the measuring point.

Measurement functions:

- RLOW measurement with 200 mA DC test current and automatic polarity reversal.
- PE resistance measurement under mains voltage (3-conductor method).
- Insulation resistance with test voltage of 50 V - 1000 V DC.
- RISO ALL, autotest between all conductors (L-N, L-PE and N-PE).
- RISO pre-test, protects connected devices against test-related damage.

- **Loop impedance (LOOP) and line impedance (LINE) with 20 A test current incl. short-circuit current/voltage drop calculation for precise measuring results.**
- **Testing of various RCD types:**
 - general, selective
 - AC, A, F, B, B+
 - EV RCD, EV RCM (RDC-DD)
 - MI RCD
 - PRCDs
- **RCD test with RCD Auto, RCD t, RCD I and U_c measurement.**
- **TRMS voltage and frequency measurement, rotational field and varistor test.**
- **First-fault leakage current in the IT network (ISFL).**

Special features:

- **Individual tests and pre-programmed Auto Sequence[®] measurements for TN/TT networks and EV charging stations (wallboxes).**
- **Automatic tests at the touch of a button.**
- **Z Auto (U, Z_{ln}, Z_{lpe}, I_{psc}, U_c) and RCD Auto (RCD t, RCD I, U_c).**
- **Auto TN rcd (U, Z_{ln}, Z_{lpe}, R_{pe}, ΔU), Auto TN, TT and Auto IT.**
- **Voltage monitor for monitoring the test connections online.**
- **Powerful 4400 mAh Li-ion battery pack for long operating times (can optionally be expanded to 8800 mAh (044170)).**
- **Large measurement memory on 8 GB SD card.**
- **USB, RS 232 and wireless interface (cordless link) for data transmission.**
- **Free firmware updates via PC software.**
- **Supplied with calibration certificate.**

Testing EV charging stations (EVSE Mode 3) (wallboxes):

- **Specially coordinated Auto Sequences[®] for 1 and 3-phase wallboxes incl. functional testing/testing of the charging process via optional BENNING EV 3-2 (044169) measuring adapter.**
- **Testing of EV-RCD and 6 mA DC residual direct current monitoring devices (RDC-DD) according to IEC 62955 with measurement of tripping time and tripping current.**
- **Information documented in pre-prepared EVSE test logs.**

BENNING PC-Win IT 130-200 logging software:

- **For professionally managing and documenting test jobs for initial and repeat testing.**
- **Create comprehensive system structures including planned measurements (individual tests and Auto Sequences[®]) and transfer data to the BENNING IT 200.**
- **Information documented in pre-prepared test logs for electrical systems and EV charging stations (wallboxes) as well as simple test reports.**
- **Supports data imports (EUL file) and the existing range of functions provided by the BENNING IT 130.**
- **Test data can be exported to MS Excel[®] and XML format.**
- **Can be installed multiple times at no additional cost.**
- **Free download and future software updates.**

Feature:

Display: 4.3 inch capacitive colour touchscreen

Low ohmic resistance / continuity: 0.01 Ω – 2 k Ω / 7 mA

Test current: 200 mA DC

Insulation resistance: 10 k Ω – 1,000 M Ω

Test voltage: 50 V / 100 V / 250 V / 500 V / 1000 V

Line impedance (LINE) / voltage drop: 0.01 Ω – 10 k Ω / 0.1% - 100%

Loop impedance (LOOP): 0.01 Ω – 10 k Ω

Short-circuit current: 0.01 A – 200 kA

FI / RCD test: AC / A / F / B / B+ / EV-RCD / MI-RCD / EV-RCM / PRCDs

Rotational field: YES

Voltage (TRUE RMS), frequency: 1 V – 550 V, 14 Hz – 500 Hz

Earth resistance (3-conductor method): 0.01 Ω – 1,999 Ω (via earthing kit (044113)) (non-selective)

Earth loop resistance (2-clamp method): 0.01 Ω – 40 Ω (via BENNING CC 4-1 (044166) CC 4-2 (044167) current clamp adapter (selective)

Current (TRUE RMS): 0.1 mA - 300 A AC/DC via BENNING CC 3 current clamp adapter (044038); 0.1 mA / 0.02 A - 20 A AC via BENNING CC 4-1 current clamp adapter (044166)

Power (P, S, Q) / harmonics (THD): 0.01 W - 100 kW (via BENNING CC 3 (044038), CC 4-1 (044166) current clamp adapter)

Illumination intensity: 0.01 lux – 20 klux (via type B lux meter (044111))

Measurement memory: SD card (8 GB)

Interfaces: USB, RS 232, wireless interface (cordless link)

Incl. software: YES

Supplied with:

- **Padded carrying case**
- **BENNING PC-Win IT 130-200 logging software (download link)**
- **USB port cable**
- **Commander test plug (incl. batteries)**
- **Universal 3-conductor test lead**
- **Set of test probes and crocodile clips**
- **Carrying strap (device)**
- **Rechargeable Li-ion battery pack (4400 mAh), charger**
- **8 GB SD card**
- **Calibration certificate**

Optional extras:

- **Testing of 1 and 3-phase EV charging stations (wallboxes) incl. functional testing/testing of the charging process via optional BENNING EV 3-2 (044169) test adapter.**
- **Two methods for earth resistance measurement via optional earthing kit (044113) (non-selective) and BENNING CC 4-1/CC 4-2 current clamp adapter (044166/044167) (selective).**
- **TRMS current, power and harmonic measurement (THD) via optional BENNING CC 4-1 current clamp (044166).**
- **TRMS load currents up to 300 A AC/DC via BENNING CC 3 AC/DC current clamp adapter (044038).**

- **Testing of 5-pin, 16 A CEE sockets via optional BENNING TA 6 CEE measuring adapter (044168).**
- **Illumination intensity measurement via optional BENNING type B lux meter (044111).**

Technical description

Power supply	Mains operated
Number of batteries contained	1
Type of product	Multimeter