

INSTALLATION TESTER 5100



FEATURES

Multifunction Tester for verification of electrical safety of installations according to DIN VDE 0100 and EN 61557. All-in-one device with 3.5 TFT colour display, covering the measurements you need. Fast. Safe.

Measurement of:

- Loop resistance
- Internal network resistance
- Measurement of short circuit current
- Low resistance and continuity
- Insulation
- RCD/FI for types A, AC, B, B+, F (refer to model overview)
- RCD/FI for electric vehicles charging stations (6 mA DC)
- TRMS Voltage, Rotary field and frequency
- Earth Resistance (optional)
- Memory for 1000 measurement readings and PC software to create a test certificate (optional)
- Charging of batteries inside tester (optional)

Model overview and accessories on the following pages

TECHNICAL DATA

Modell	INSTALLATION TESTER 5100	
Continuity (R_{LO})	Test current 7 mA (2-wire)	0,0 Ω ... 1999 Ω
	Test current 200 mA (2-wire)	0,00 Ω ... 1999 Ω
Insulation resistance (R_{ISO})	Test voltage 50/100/250 V	0,000 M Ω ... 199,9 M Ω
	Test voltage 500/1000 V	0,000 M Ω ... 999 M Ω
RCD	Uc	0,0 V ... 99,9 V
	t	0,0 ms ... 500,0 ms
	I (Ramp)	0,2xI $_{\Delta N}$... 1,1xI $_{\Delta N}$ (AC) 0,2xI $_{\Delta N}$... 1,5xI $_{\Delta N}$ (A), (I $_{\Delta N}$ \geq 30 mA) 0,2xI $_{\Delta N}$... 2,2xI $_{\Delta N}$ (A), (I $_{\Delta N}$ < 30 mA) 0,2xI $_{\Delta N}$... 2,2xI $_{\Delta N}$ (B)
Impedance (Z_I)	Z $_{line}$ L-L, L-N, Ip $_{sc}$	0,00 Ω ... 9999 Ω
	Z $_{loop}$ L-PE, Ip $_{fc}$	0,00 Ω ... 9999 Ω
	Z $_{loop}$ L-PE, Ip $_{fc}$, non trip	0,00 Ω ... 9999 Ω
Voltage (V)	TRMS	0 ... 550 V
	Frequency	10,0 Hz ... 499,9 Hz
Phase rotation	TRMS	50 ... 550 V AC 45 Hz ... 400 Hz
Earth resistance (R_E) (OPTIONAL)	3-wire, 4-wire	0,00 Ω ... 9999 Ω
	Specific earth resistance	0,0 Ω ... 9999 k Ω
General	Power supply	9 V DC (6 x 1.5 V battery or NiMH batteries, size AA)
	Overvoltage category	600 V CAT III; 300 V CAT IV
	COM-Port (optional)	USB

MODEL AND FUNCTION OVERVIEW

Model	510X BASIC	510X MID	510X HIGH
Insulation resistance			
nominal voltages 50, 100, 250, 500 and 1.000 V DC	■	■	■
Continuity resistance			
Low R (200mA)	■	■	■
Continuity (low current)	–	■	■
RCD testing			
Nominal residual currents (mA)	10/30/100/300/500	6/10/30/100/300/ 500/650/1000	6/10/30/100/300/ 500/650/1000
Test current shape	A, AC	A, AC, B, B+, F	A, AC, B, B+, F
RCD Type	G, S	G, S	G, S
Contact voltage	■	■	■
Trip-out time	■	■	■
Trip-out current	■	■	■
Fault loop impedance and prospective fault current			
Z _{loop} L-PE, Ipfc	■	■	■
Z _{loop} L-PE RCD, Ipfc, non trip subfunction	■	■	■
Loop-Rs	–	■	■
Line impedance and prospective short-circuit current			
Voltage drop detection	–	■	■
Voltage	0...500V	0...500V	0...500V
Frequency	10...499 Hz	10...499 Hz	10...499 Hz
Earth Resistance			
Re (3-wire and 4-wire)	–	–	■
Ro	–	–	■
Memory and Reporting (Excel-Export)	–	–	■
Rechargeable batteries & charging "on-board"	–	–	■
Special functions			
automatic polarity change	–	■	■
calibration date reminder (hidden function Cal-Lab)	–	–	■
FW update per USB (available Q4 2021)	–	–	■
API enabled (extra configuration service required)	–	–	■
Networks	TN, TT	TT, TN, IT, LV (2 x 55 V)	TT, TN, IT, LV (2 x 55 V)
ready for external probe with button	–	■	■
Standard accessories (included in scope)	3 pcs test leads (1m) 1 pc Schuko-plug test cable 3 pcs Test probes 3 pcs Alligator clips 1 pc Instruction manual 1 pc shoulder strap 6 pcs Batteries 1.5 V / AA	3 pcs test leads stackable (1 m) 1 pc Schuko-plug test cable 3 pcs Test probes 3 pcs Alligator clips 1 pc Instruction manual 1 pc shoulder strap 6 pcs Batteries 1.5 V / AA 1 pc carrying bag & strap	3 pcs test leads stackable (1 m) 1 pc Schuko-plug test cable 3 pcs Test probes 3 pcs Alligator clips 1 pc Instruction manual 1 pc shoulder strap 1 pc carrying bag & strap 1 pc USB cable 1 pc power adapter for charging 6 pcs rechargeable batteries
Optional accessories	–	1 pc external probe with button 1 pc 40m extension test lead 1 pc US-plug test cable 1 pc UK-plug test cable 1 pc EVSE adapter	1 pc external probe with button 1 pc 40m extension test lead 1 pc US-plug test cable 1 pc UK-plug test cable 1 pc earth kit (3 x cables 20m/20m/5m + 2 x earth stakes) 1 pc EVSE adapter

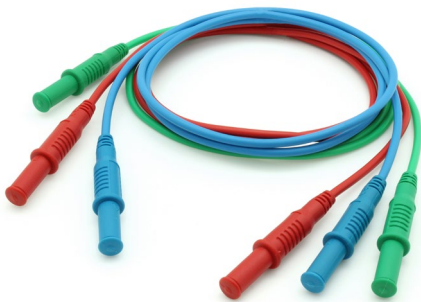
STANDARD ACCESSORIES FOR INSTALLATION TESTER 5100



Alligator clips,
Order No. ACC00008



Test probes,
Order No. ACC00016



Test leads, each 1 m,
Order No. ACC00015



Shoulder strap for installation tester,
Order No. MS050007



Schuko-plug test cable,
Order No. ACC00007



Batteries, 1,5V / AA,
Order No. ACC00018

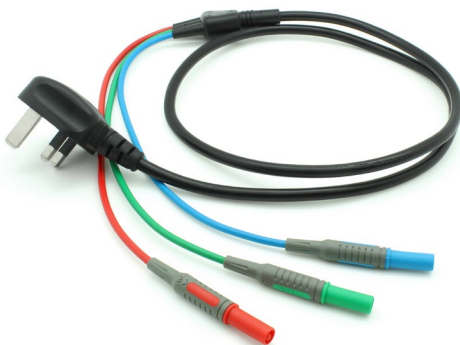
OPTIONAL ACCESSORIES FOR INSTALLATION TESTER 5100



External probe with TEST button,
Order No. ACC00003



40m extension test lead,
Order No. ACC00010



UK-plug test cable,
Order No. ACC00005



UK-plug test cable,
Order No. ACC00006



USB cable,
Order No. ACC00013



Test lead with plug-in option, 1m each,
Order No. ACC00014

OPTIONAL ACCESSORIES FOR INSTALLATION TESTER 5100



Rechargeable batteries (6 pcs.),
Order No. ACC00019



1 pc power adapter for charging &
6 pcs rechargeable batteries,
Order No. ACC00009



earth kit (3 x cables 20m/20m/5m + 2 x earth stakes),
Order No. ACC00004



EVSE Adapter (Accessory for installation testers to test
charging stations (charging mode 3) for electric cars),
Order No. 1930



Carrying bag with shoulder strap,
Order No. ACC00011



Professional bag with shoulder strap,
Order No. ACC00012