

Multifunction Tester for verification of electrical safety of installations according to DIN VDE 0100 and EN 61557. This is an all-in-one device with 3.5" TFT colour display, covering the measurements you need. It is fast, Saves time and safe.

FEATURES

It can check / Measure :

- Loop resistance
- Internal network resistance
- Measurement of short circuit current(Loop Impedance)
- Low resistance and continuity
- Insulation
- RCD / FI for types A, AC, B, B+, F.
- 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)

FUNCTION OVERVIEW :

- **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)** :
6/10/30/100/300/ 500/650/1000
- **Test current shape** : A, AC, B, B+, F
- **RCD Type** : G, S
Contact voltage
Trip-out time
Trip-out current
- **Fault loop impedance and prospective fault current**
Zloop L-PE, Ipfc
Zloop L-PE RCD, Ipfc,
non trip subfunction
Loop-Rs
- **Line impedance and prospective short-circuit current**
Voltage drop detection
- **Voltage** : 0 - 500V
- **Frequency** :10 - 499 Hz
- **Earth Resistance**
Re (3-wire and 4-wire)
Ro



Preliminary Data

- **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
API enabled (extra configuration service required)
- **Networks** : TT, TN, IT, LV (2 x 55 V)
- **Ready for external probe with button**
- **Standard accessories**
(included in scope) :
3 pcs test leads stackable (1 m), Schuko-plug test cable
Test probes (3 pcs), Alligator clips (3 pcs), Instruction manual,
shoulder strap, carrying bag & strap, USB cable,
power adapter for charging, rechargeable batteries (6 pcs).
- **Optional accessories** :
external probe with button, 40m extension test lead,
US-plug test cable UK-plug test cable, earth kit
(3 x cables 20m / 20m / 5m + 2 x earth stakes) EVSE adapter

All Specifications are subject to change without prior notice

TECHNICAL SPECIFICATIONS

Continuity (RLO)	Test current 7 mA (2-wire)	0,0 Ω - 1999 Ω
	Test current 200 mA (2-wire)	0,00 Ω - 1999 Ω
Insulation resistance (RISO)	Test voltage 50/100/250 V	0,000 MΩ - 199,9 MΩ
	Test voltage 500/1000 V	0,000 MΩ - 999 MΩ
RCD	Uc	0,0 V - 99,9 V
	t	0,0 ms - 500,0 ms
	I (Ramp)	0,2 x IΔN - 1,1 x IΔN (AC) 0,2 x IΔN - 1,5 x IΔN (A), (IΔN ≥ 30 mA) 0,2 x IΔN - 2,2 x IΔN (A), (IΔN < 30 mA) 0,2 x IΔN - 2,2 x IΔN (B)
Impedance (ZL)	Zline L-L, L-N, Ipsc	0,00 Ω - 9999 Ω
	Z _{loop} L-PE, Ipf	0,00 Ω - 9999 Ω
	Z _{loop} L-PE, Ipf, 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 (RE) (OPTIONAL)	3-wire, 4-wire	0,00 Ω - 9999 Ω
	Specific earth resistance	0,0 Ω - 9999 kΩ
General	Power supply	9 V DC (6 x 1.5 V battery or NiMH batteries, size AA)
	Over voltage category	600 V CAT III; 300 V CAT IV
	COM-Port (optional)	USB

MODEL AND FUNCTION OVERVIEW

MODEL	KM 5100-A (BASIC)	KM 5100-B (MID)	KM 5100-C (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, Ipf	●	●	●
Z _{loop} L-PE RCD, Ipf, 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

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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

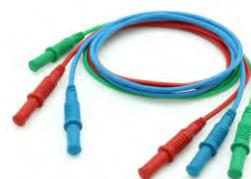
STANDARD ACCESSORIES FOR INSTALLATION TESTER KM-5100



Alligator clips



Test probes



Test leads, each 1 m



Shoulder strap for installation tester



Schuko-plug test cable



Batteries, 1.5 V / AA

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01-2024