

750 V

maximum
network
voltage

Z_{L-PE}
RCD

measurements
without tripping
RCDs

CAT III
1000 V
CAT IV
600 V

IP54

Lightweight and professional fault loop meter

Capabilities

- Fault loop impedance measurement with 0.01 Ω resolution.
- Low-current impedance measurement in circuits protected by RCD $\geq 30\text{mA}$ with 0.01 Ω resolution (range of 100...440 V).
- Operates in networks with voltages 110/190 V, 115/200 V, 127/220 V, 220/380 V, 230/400 V, 240/415 V, 290/500 V and 400/690 V (operating range 100...750 V).
- Operating frequency 45...65 Hz
- Calculation of I_k fault current.
- Automatic differentiation between phase and phase-to-phase voltage.
- Possibility of applying an adapter terminated by a power network plug or 1.2, 5, 10, 20 m test leads.
- Measurement with swapped L and N conductors.
- Measurement of resistance (R_s) and reactance (X_s) components.

Additional features

- Contact electrode - quick testing of proper connection of PE conductor.
- Voltage measurement 0...750 V AC (0...250 V with resolution of 0,1 V).
- Memory of 990 measurement results, ability to transfer the data to a PC via USB.
- Power supply: batteries (4 x LR14) or rechargeable batteries.

Application

This instrument is irreplaceable for all kind of electrical works, especially in situations where there is a need to check the **circuits under voltage of 400/690 V**. The meter is used for tests in homes, apartment blocks, public buildings, small workshops or factories and even at **wind farms**.

The meter is a perfect tool for testing systems, where fault currents may reach **5.3 kA** (measured according to EN 61557).



Technical specifications

Measurement functions	Measurement range	Display range	Resolution	Accuracy ±(% m.v. + digits)
Voltage	0 V...750 V	0 V...750 V	from 0.1 V	from ±(2% m.v. + 2 digits)
Short-circuit loop parameters				
2p method - standard current measurement maximum current 36.7 A	from 0.13 Ω...1999 Ω acc. to EN 61557	0.00 Ω...1999 Ω	from 0.01 Ω	from ±(4% m.v. + 3 digits)
2p method - measurements without tripping RCDs	from 0.43 Ω...1999 Ω acc. to EN 61557	0.00 Ω...1999 Ω	from 0.01 Ω	from ±(6% m.v. + 5 digits)
Short-circuit current readings				
2p method - standard current measurement	Calculated on the basis of test Z _s ranges and rated voltages	0.055 A...69.0 kA	from 0.001 A	Calculated on the basis of error for fault loop
2p method - measurements without tripping RCDs	Calculated on the basis of test Z _s ranges and rated voltages	0.055 A...40.0 kA	from 0.001 A	Calculated on the basis of error for fault loop
Safety and work conditions				
Measuring category according to EN 61010			IV 600 V, III 1000 V	
Ingress protection			IP54	
Type of insulation according to EN 61010-1 and EN 61557			double	
Power supply			NiMH 4.8 V 2.4 Ah rechargeable battery 4x LR14 1.5 V alkaline battery	
Dimensions			288 x 223 x 75 mm	
Weight			ca. 2 kg	
Operating temperature			0...+45°C	
Storage temperature			-20...+60°C	
Humidity			20...90%	
Nominal temperature			23 ± 2°C	
Reference humidity			40%...60%	
Memory and communication				
Memory of measurement results			990 results	
Data transmission			USB	
Other information				
Quality standard – development, design and production			ISO 9001	
The product meets the EMC (emission for industrial environment) requirements according to standards			EN 61326-1 EN 61326-2-2	

m.v. - measured value

Standard accessories



**WS-05 adapter
with UNI-SCHUKO
angular plug**

WAADWS05



**Pin probe 1 kV
(banana socket)
red / blue / yellow**

WASONRE0GB1
WASONBU0GB1
WASONYE0GB1



**Test lead 1.2 m
(banana plugs) red
/ blue / yellow**

WAPRZ1X2REBB
WAPRZ1X2BUBB
WAPRZ1X2YEBB



**Crocodile clip 1 kV
20 A red / blue**

WAKRORE20K02
WAKROBU20K02



USB cable

WAPRZUSB



Hanging straps

WAPOZSZEKPL



**NiMH battery
4.8 V 4.2 Ah**

WAAKU07



**Z-7 power supply +
230 V mains cable**

WAZASZ7



L4 carrying case

WAFUTL4



**Factory calibration
certificate**

Optional accessories



**Crocodile clip
1 kV 20 A
/ yellow**

WAKROYE20K02



**Foldable pin
probe, 1 kV, 2 m
(banana socket)**

WASONSP2M



**Test lead
5 / 10 / 20 m red
1 kV (banana plugs)**

WAPRZ005REBB
WAPRZ010REBB
WAPRZ020REBB



**WS-01 adapter with
START button with
UNI-Schuko plug**

WAADWS01



**Industrial socket
adapter 16A / 32A**

WAADAAGT16T
WAADAAGT32T



**Three-phase socket
adapter 16A / 32A**

WAADAAGT16C
WAADAAGT32C



Battery container

WAP0J1



**Three-phase socket
adapter 16A / 32A**

WAADAAGT16P
WAADAAGT32P



**Three-phase socket
adapter 63 A**

WAADAAGT63P



**Cable for battery
charging from car
cigarette lighter
socket (12 V)**

WAPRZLAD12SAM



**Calibration certificate
with accreditation**