

**750 V**

 maximum  
network  
voltage

**Z<sub>L-PE</sub>  
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 ≥ 30mA 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.

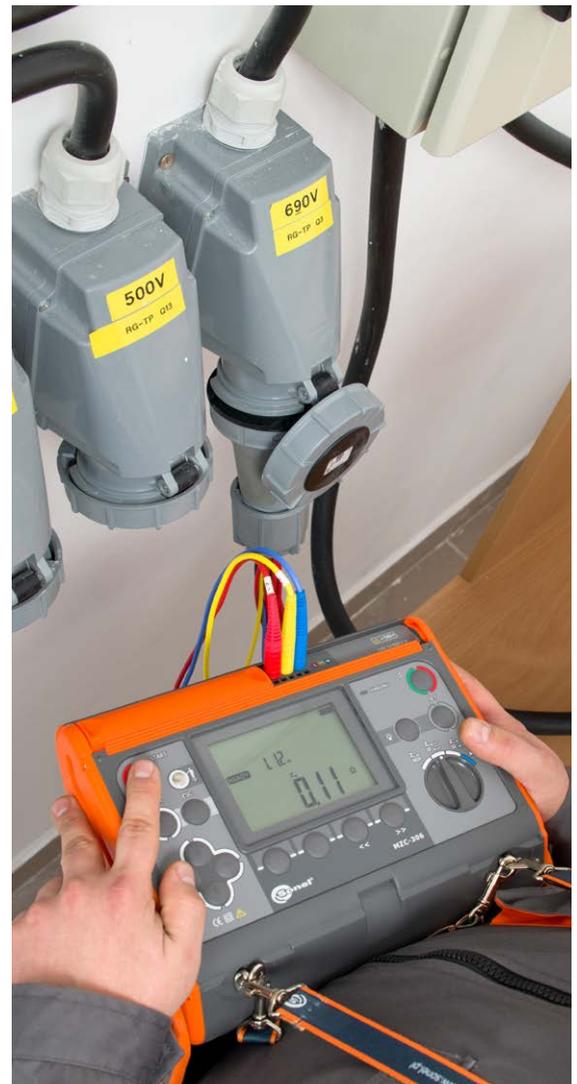
### Additional features

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

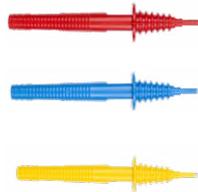
m.v. - measured value

## Standard accessories



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

WAADAWS05



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

WASONREOGB1  
WASONBUOGB1  
WASONYEOGB1



**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



**Mains power cable Euro 2-pin plug / IEC C7 plug**

WAPRZLAD230



**Z7 Power supply adapter**

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**

WAADAWS01



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

WAADAAGT16T  
WAADAAGT32T



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

WAADAAGT16C  
WAADAAGT32C



**Battery container**

WAPOJ1



**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**