

# ELECTRICAL INSTALLATIONS METERS

## WME-5

(MPI-502, MIC-10, CMP-400)



This set allows for performance of measurements in accordance with the HD 60364-6:2008 and EN 61557 standards:

- measurement of short-circuit loop parameters,
- testing of A and AC type residual current circuit breakers,
- measurement of continuity of protective connections,
- measurement of insulation resistance at voltage of 1 kV,
- measurement of voltage and frequency.

Wireless transmission of measurement results from the MPI-502 meter memory to a computer with the included OR-1 adapter.

The set, including all the accessories, is stored in a convenient and durable aluminum case.

Sonel S.A.  
ul. Wokulskiego 11  
58-100 Świdnica  
tel. +48 74 85 83 860  
fax +48 74 85 83 809

[export@sonel.pl](mailto:export@sonel.pl)  
[www.sonel.pl](http://www.sonel.pl)

### Standard accessories included in the WME-5 set:

- |  |              |  |             |
|--|--------------|--|-------------|
| - MPI-502 meter                            | WMPLMPI502   | - receiver - OR-1 USB interface for radio transmission                 | WAADAUSBOR1 |
| - MIC-10 meter                             | WMPLMIC10    | - meter harness (2 pcs.)   | WAPOZSZE4   |
| - CMP-400 meter                            | WMPLCMP400   | - meter bracket (2 pcs.)   | WAPOZUCH1   |
| - 1.2 m blue test lead with banana plugs   | WAPRZ1X2BUBB | - test leads (complete set)  | WAPRZCMP1   |
| - 1.2 m red test lead with banana plugs    | WAPRZ1X2REBB | - aluminum case for meters with accessories                            |             |
| - 1.2 m yellow test lead with banana plugs | WAPRZ1X2YEBB | - MPI-502, MIC-10, CMP-400 operating manuals                           |             |
| - yellow test probe with a banana socket   | WASONYEOGB1  | - MPI-502, MIC-10 calibration certificates                             |             |
| - red test probe with a banana socket      | WASONREOGB1  | - DVD with software:   |             |
| - blue test probe with a banana socket     | WASONBUOGB1  | including Sonel Reader (for reading data from the instrument's memory) |             |
| - "Crocodile" clip K01; black              | WAKROBL20K01 | - batteries  |             |
| - "Crocodile" clip K02; yellow             | WAKROYE20K02 |  |             |
| - WS-05 adapter with a UNI-Schuko plug     | WAADAWS05    |  |             |

## MPI-502



- **Measurement of short-circuit loop parameters (EN 61557):**
  - measurement of short-circuit loop impedance in systems of nominal voltages: 220/380 V, 230/400 V, 240/415 V, and frequency range of 45...65 Hz,
  - measurement of short-circuit loop impedance with 15 mA current without tripping residual current circuit breakers.
- **Testing of A and AC type residual current circuit breakers:**
  - testing instantaneous, short-time delay and selective residual current circuit breakers of nominal differential currents: 10, 30, 100, 300, 500 mA,
  - measurement of  $I_A$
  - measurement of  $R_e$  and  $U_B$  without tripping the RCD,
  - extended AUTO function for measuring RCD with the capability of  $Z_{L-PE}$  measurement with small current,
  - measurement of  $I_A$  and  $t_A$  with single RCD tripping.
- **Detection of the replacement L and N in the socket and automatic swap in the meter.**
- **Low-voltage measurement of resistance, protective connections and equipotential bonding:**
  - measurement of continuity of protective connections with current  $\pm 200$  mA,
  - automatic calibration of test leads - capability of using any test leads,
  - measurement of resistance with low current and acoustic signaling.
- **Quick verification of correctness of the PE wire connection with a touch probe.**
- **Measurement of AC voltage and frequency of power network.**
- **Powered by LR6 batteries or NiMH rechargeable batteries.**
- **The instrument meets the requirements of the EN 61557 standard.**

### Electrical safety:

- insulation type double, in acc. with EN 61010 and IEC 61557 IV 300V (III 600V) in acc. with EN 61010-1
- safety category

- enclosure protection rating in acc. with PN-EN 60529 IP67

### Other technical data:

- weight approx. 1 kg
- number of Z or RCD measurements (for rechargeable batteries) > 5000 (2 measurements per minute)

## MIC-10



- **Measurement of insulation resistance:**
  - selectable measurement voltage: 50, 100, 250, 500, 1000 V,
  - continuous indication of measured insulation resistance,
  - automatic discharge of measured object capacitive voltage after the completion of insulation resistance measurement,
  - acoustic signaling of 5 seconds intervals to facilitate capturing time characteristics,
  - indication of actual test voltage during measurement,
  - protection against measuring live objects,
  - three-lead measurement.
- **Measurement of continuity of protective connections and equipotential bonding in accordance with EN 61557-4 with current > 200 mA.**
- **Low-voltage measurement of circuit continuity and resistance:**
  - circuit resistance measurement ( $< 1999\Omega$ ) with current  $< 15$  mA,
  - quick acoustic signaling for a circuit of resistance lower than  $30\Omega$ .
- **Measurement of capacity during the measurement of  $R_{iso}$**
- **DC and AC voltage measurement in the range of 0...600 V.**
- **Powered by 4 AA rechargeable or alkaline batteries, power supply voltage is monitored by the meter.**
- **The instrument meets the requirements of the EN 61557 standard.**

### Electrical safety:

- insulation type double, in acc. with EN 61010-1 and IEC 61557 IV 600V (III 1000V) in acc. with EN 61010-1
- measurement category

- enclosure protection rating in acc. with EN 60529 IP67

### Other technical data:

- power supply 4 AA-size alkaline or Ni-Cd rechargeable batteries approx. 0.6 kg
- weight approx. 0.6 kg
- dimensions 220 x 100 x 60mm
- display LCD segment

## CMP-400



- **Measurement of AC current up to 400 A.**
- **Measurement of DC and AC voltages up to 600 V.**
- **Measurement of resistance and testing connection continuity:**
  - acoustic signaling of circuit continuity (for resistance value lower than  $50\Omega$ ).
- **Measurement of temperature (units in degrees Fahrenheit or Celsius).**
- **Measurement of frequency.**
- **Diode testing.**
- **Additionally:**
  - touchless neon light,
  - safe, insulated measurement jaws,
  - rugged, impact-resistant enclosure,
  - selectable automatic or manual selection of measurement ranges,
  - HOLD function allowing for freezing displayed results,
  - backlit LCD display,
  - relative measurement function,
  - over-range indication,
  - auto-OFF function.

### Electrical safety:

- measurement category CAT III 600 V in acc. with EN 61010-1:2004
- enclosure protection rating in acc. with EN 60529 IP40

### Other technical data:

- power supply 6LR61 type 9 V battery
- display 4000 readouts, backlit LCD
- continuity test  $I < 0.5$  mA, acoustic signal for  $R < 50\Omega$
- diode test  $I = 0.3$  mA,  $U_0 = 1.5$  V DC
- frequency of measurement 2 readouts per second
- input impedance  $10M\Omega$  (V DC and V AC)
- clamp size spread of approx. 30 mm (1.2")
- auto-OFF timeout approx. 30 minutes
- dimensions 197 x 70 x 40 mm
- weight 183g