



Accessories for  
Insulation Resistance Meters

## A MICttitude of applications



measurements



test leads



installation



communication



software



power supply



transportation

**Sonel**® we measure globally



# measurements



## WS-04 adapter

index: WAADAWS04

WS adapters are highly valued and practical accessories. They enable user a quick and easy measurement in a UNI-Schuko socket without the use of probes or test leads. Interaction with the measuring device is possible through a multi-plug connector. WS-04 is equipped with an angled plug.

**Accessory dedicated for:**

MIC-30



## Measurements of multicore cables

Depending on the measurement facility and the established standards (each conductor to each or conductor to other shorted and grounded conductors), the measurement of the insulation resistance of wires or multi-core cables requires several connections. In order to shorten the measurement time and eliminate the inevitable connection errors, Sonel recommends an adapter that switches between individual pairs of conductors for the operator.



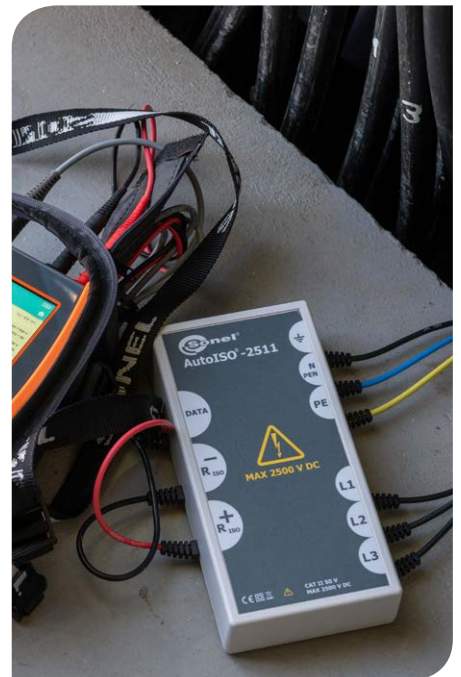
## AutoISO-2511 adapter

index: WAADAAISO2511

Designed to measure the insulation resistance of cables and multi-core wires with a measuring voltage of up to 2500 V. The use of the adapter eliminates the possibility of making a mistake, and significantly reduces the time needed to measure the insulation resistance between pairs of conductors. For instance, for 4-core cables, the user will perform only one connection operation (i.e. connect the adapter to the facility), while AutoISO-2511 will perform crossing for six consecutive connections.

**Accessory dedicated for:**

MIC-2511



## AutoISO-5000 adapter

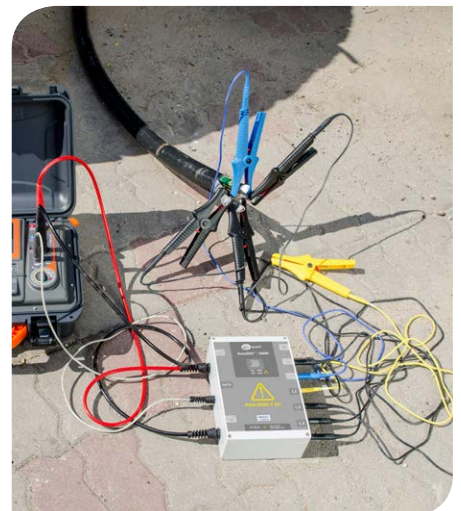
index: WAADAAISO50

Designed to measure the insulation resistance of cables and multi-core wires with a measuring voltage of up to 5000 V. The use of the adapter eliminates the possibility of making a mistake, and significantly reduces the time needed to measure the insulation resistance between pairs of conductors. For instance, for 4-core cables, the user will perform only one connection operation (i.e. connect the adapter to the facility), while AutoISO-5000 will perform crossing for six consecutive connections.

**Accessory dedicated for:**

MIC-10k1

MIC-5050







AGT-16T adapter



AGT-32P adapter



AGT-63P adapter

## Industrial socket adapters

Adapters enabling the connection of instruments to single-phase or three-phase sockets in industry environments. Offered in three current load versions – 16 A, 32 A and 63 A – as well as variants with 4 and 5 pins for the 3-phase outlets.

| Name    | Intended use                  | Index       |
|---------|-------------------------------|-------------|
| AGT-16T | 16 A, 1-phase, 3-pole sockets | WAADAAGT16T |
| AGT-16C | 16 A, 3-phase, 4-pole sockets | WAADAAGT16C |
| AGT-16P | 16 A, 3-phase, 5-pole sockets | WAADAAGT16P |
| AGT-32T | 32 A, 1-phase, 3-pole sockets | WAADAAGT32T |
| AGT-32C | 32 A, 3-phase, 4-pole sockets | WAADAAGT32C |
| AGT-32P | 32 A, 3-phase, 5-pole sockets | WAADAAGT32P |
| AGT-63P | 63 A, 3-phase, 5-pole sockets | WAADAAGT63P |

### Accessories dedicated for:

MIC-30

MIC-10



## ST-1 probe

index: WASONT1

An important aspect of the process of determining insulation resistance is the reference temperature at which manufacturer of the tested facility conducted tests. The measurement result shall be corrected with the correction coefficient for the actual facility temperature. This parameter is measured by the ST-1 probe.

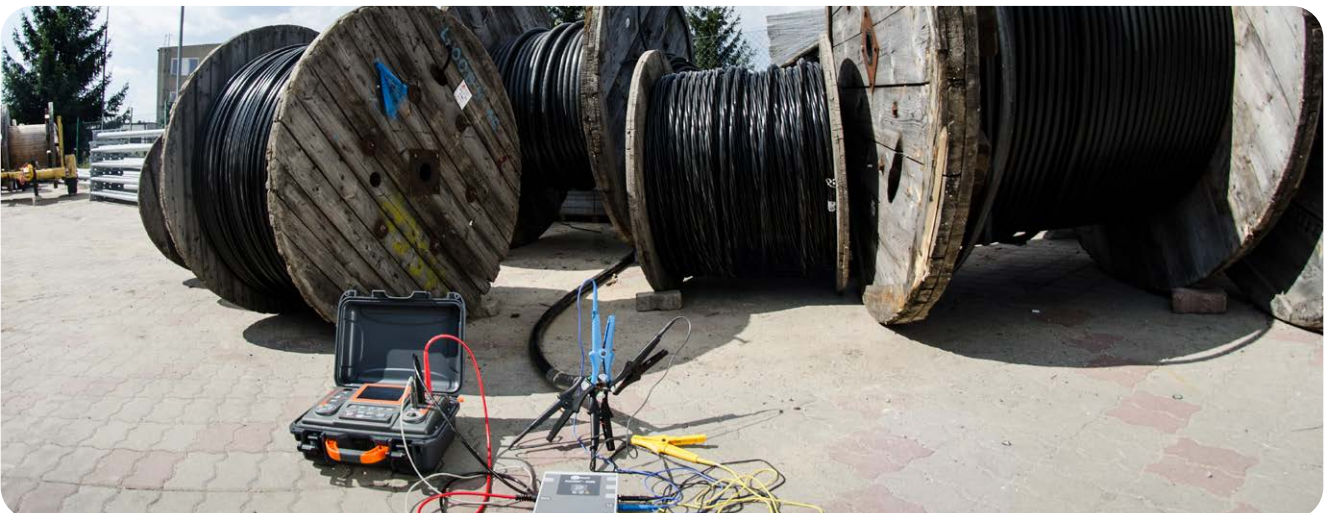
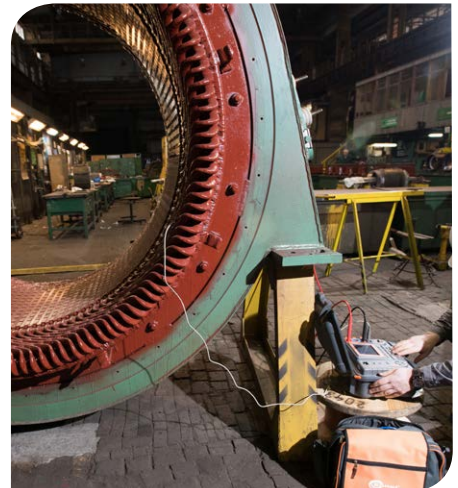
For example, if the reference temperature of the facility is 20°C, and the measurement was carried out in other conditions, the obtained result shall be calculated to the reference temperature by using the proper temperature correction coefficient.

### Accessory dedicated for:

MIC-10k1

MIC-5050

MIC-2511





# measurements

## Tools for measurements in EPA zones and beyond



### PRS-1 probe

index: WASONPRS1

If the site insulation is used as a means of protection against electric shock, the insulation resistance of floors and walls should be checked with an appropriate measuring instrument using a probe dedicated for this purpose.

PRS-1 has the shape of an equilateral triangle and has been made according to the guidelines provided in for in the HD 60364-6 and EN 1081 standards. Legs of the probe were made with a special rubber mix – volume resistance of a single leg does not exceed 5 kΩ, and the hardness is in the range between 50 to 70 IRHD. With appropriate pressure on the probe, such a design solution will ensure approx. 900 mm<sup>2</sup> contact surface area with the tested plane.

#### Accessory dedicated for:

- MIC-15k1
- MIC-10k1
- MIC-5050
- MIC-5010
- MIC-5005
- MIC-5001
- MIC-2511
- MIC-2501
- MIC-30
- MIC-10



PRS-2 probe

### PRS-2 probe

The probes in the **PRS-2** kit are used to measure surface and material resistance values. They are precisely manufactured, in accordance with the guidelines of international standards, incl. IEC 61340-5-1, IEC 61340-5-2 and ANSI/ESD S20.20.

The PRS-2 stands for:

- 2x double-sized ring-shape measurement probe (counter-electrode),
- circular probe (counter-electrode),
- 2x pressure weight,
- insulating plate,
- 3x test lead 1.2 m,
- test lead 10 m on a reel,
- distance line 25 cm.



PRS-2 KIT probe

| Set       | Contents                        | Index        |
|-----------|---------------------------------|--------------|
| PRS-2     | PRS-2 probe                     | WASONPRS2    |
| PRS-2 KIT | PRS-2 probe + L-7 carrying case | WASONPRS2KIT |

#### Accessory dedicated for:

- MIC-2511



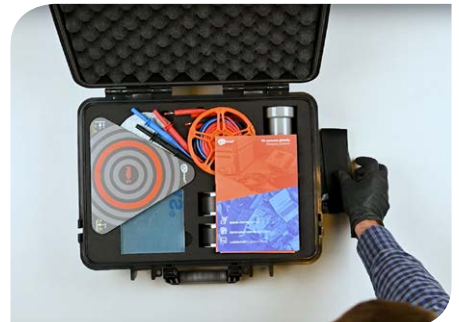
### PRZ-2 set

The **PRZ-2** kit has been designed for coordinators and measurement specialists who supervise and regularly control in zones protected against the effects of electrostatic discharge (EPA).

| Set   | Contents                                      | Index     |
|-------|---|-----------|
| PRZ-2 | PRS-1 probe + PRS-2 probe + L-7 carrying case | WASONPRZ2 |

#### Accessory dedicated for:

- MIC-2511



## Pin probes



Secure pin probes with  $\varnothing$  4 mm socket, intended for test leads with plugs and a guard. The probe insulated tips with a length of 4 mm, ensure safe measurements on a various objects. The probes have a guard ring and a grooved surface, providing stable and secure hand grip - also with dielectric gloves.

### Pin probes 1 kV

|                             |                 |
|-----------------------------|-----------------|
| <b>Plug</b>                 | banana, 4 mm    |
| <b>Measurement category</b> | 1000 V, CAT III |
| <b>Maximum current</b>      | 20 A            |

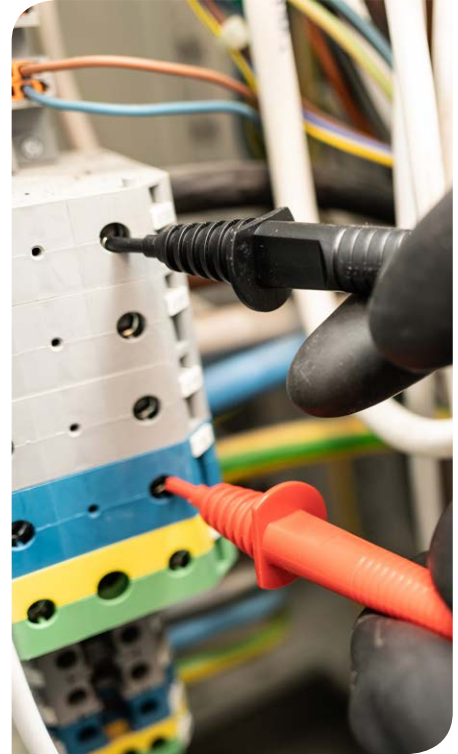
| Color | Index       |
|-------|-------------|
| Black | WASONBLOGB1 |
| Red   | WASONREOGB1 |
| Blue  | WASONBUOGB1 |

#### Accessories dedicated for:

MIC-2501

MIC-30

MIC-10



### Pin probes 5 kV

|                             |                |
|-----------------------------|----------------|
| <b>Plug</b>                 | banana, 4 mm   |
| <b>Measurement category</b> | 5000 V, CAT IV |
| <b>Maximum current</b>      | 32 A           |

| Color | Index       |
|-------|-------------|
| Black | WASONBLOGB2 |
| Red   | WASONREOGB2 |

#### Accessories dedicated for:

MIC-5001

MIC-2511

MIC-2501



### Pin probes 11 kV

|                             |                 |
|-----------------------------|-----------------|
| <b>Plug</b>                 | banana, 4 mm    |
| <b>Measurement category</b> | 11000 V, CAT IV |
| <b>Maximum current</b>      | 32 A            |

| Color | Index        |
|-------|--------------|
| Black | WASONBLOGB11 |
| Red   | WASONREOGB11 |

#### Accessories dedicated for:

MIC-5010

MIC-5005





# measurements



## Crocodile clips 1 kV

Secure, insulated crocodile clips with Ø 4 mm socket, intended for connecting test leads with plugs and a guard. Their jaws have a wide range of opening that enables them to be attached to conductors with a diameter of 16 mm. In addition to the serrated jaw surface, the clips have flat surfaces for grasping small objects. They are available in many colors.

|                             |                 |
|-----------------------------|-----------------|
| <b>Plug</b>                 | banana, 4 mm    |
| <b>Spread range</b>         | 25 mm           |
| <b>Measurement category</b> | 1000 V, CAT III |
| <b>Maximum current</b>      | 20 A            |

| Color | Index        |
|-------|--------------|
| Black | WAKROBL20K01 |
| Red   | WAKRORE20K02 |

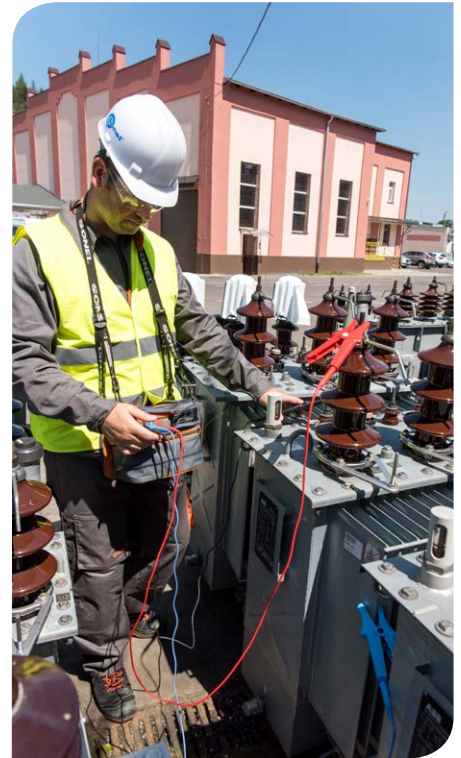
### Accessories dedicated for:

- MIC-30
- MIC-10
- MIC-5

| Color | Index        |
|-------|--------------|
| Blue  | WAKROBU20K02 |

### Accessories dedicated for:

- MIC-30
- MIC-10



## Crocodile clips 11 kV

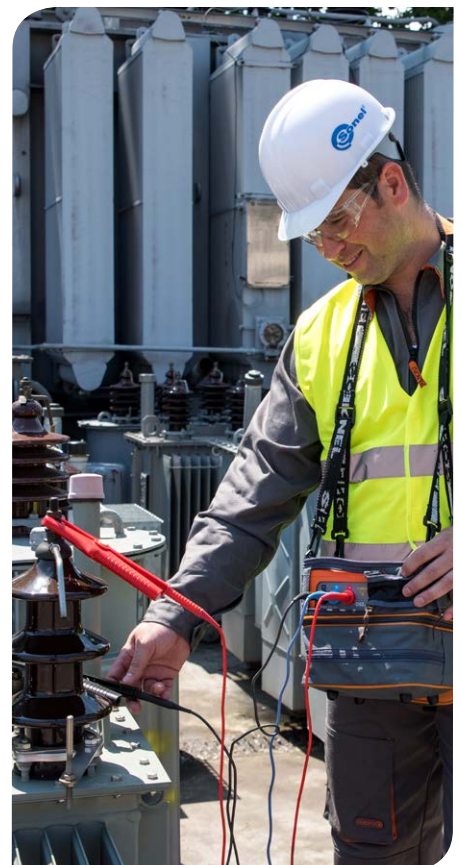
Secure, insulated crocodile clips with Ø 4 mm socket, intended for connecting test leads with plugs and a guard. Their jaws have a wide range of opening that enables them to be attached to conductors with a diameter of 43 mm. In addition to the serrated jaw surface, the clips have flat surfaces for grasping small objects. They are available in many colors.

|                             |                 |
|-----------------------------|-----------------|
| <b>Plug</b>                 | banana, 4 mm    |
| <b>Spread range</b>         | 43 mm           |
| <b>Measurement category</b> | 11000 V, CAT IV |
| <b>Maximum current</b>      | 32 A            |

| Color | Index        |
|-------|--------------|
| Black | WAKROBL32K09 |
| Red   | WAKRORE32K09 |
| Blue  | WAKROBU32K09 |

### Accessories dedicated for:

- MIC-15k1
- MIC-10k1
- MIC-5050
- MIC-5010
- MIC-5005
- MIC-5001
- MIC-2511
- MIC-2501





## CS-1 cable simulator

index: WAADACS1

Designed for insulation resistance simulation of power cables. Equipped with highly accurate resistors. Intended for training, presentation and auxiliary purposes – for instance in a situation, where general estimation of the measurement correctness is needed.

CS-1 enables the measurement of four resistance values and their combination. The device utilizes 4 mm banana plugs. Its casing is characterized by high resistance to mechanical damage.

### Accessory dedicated for:

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005

MIC-5001

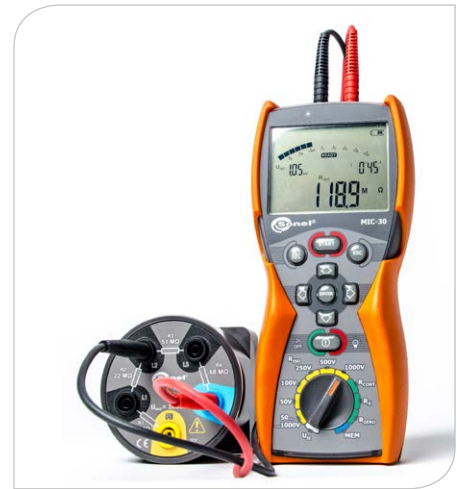
MIC-2511

MIC-2501

MIC-30

MIC-10

MIC-5



## CS-5kV calibration box

index: WAADACS5KV

The calibration box has been designed to verify indications of insulation resistance meters. The use of high-quality resistors with a very high degree of accuracy makes the CS-5kV an ideal tool for cooperation with devices with a test voltage of up to 5 kV DC.

The box enables the measurement of four resistance values and their combination. The device utilizes 4 mm banana plugs.

### Accessory dedicated for:

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005

MIC-5001

MIC-2511

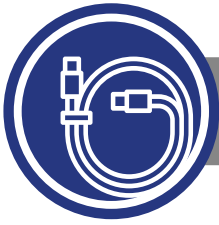
MIC-2501

MIC-30

MIC-10

MIC-5





# test leads



## Test leads 1 kV

Universal test leads, which are safe and resistant to damage. They can be used with a wide range of measuring accessories, such as crocodile clips, probes or cramps. The plug of the test lead is shielded ensuring safe operation.

|                                       |   |
|---------------------------------------|---|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |
| <b>Measurement category</b>           | CAT III 1000 V / CAT IV 600 V               |
| <b>Insulation material</b>            | silicon                                     |
| <b>Insulation type</b>                | double                                      |
| <b>Cross-section area of the wire</b> | 1 mm <sup>2</sup>                           |



| Color | Length | Index        |
|-------|--------|--------------|
| Black | 1.2 m  | WAPRZ1X2BLBB |

### Accessory dedicated for:

MIC-10

| Color | Length | Index        |
|-------|--------|--------------|
| Red   | 1.2 m  | WAPRZ1X2REBB |
| Blue  |        | WAPRZ1X2BUBB |
| Red   | 5 m    | WAPRZ005REBB |
| Blue  |        | WAPRZ005BUBB |

### Accessories dedicated for:

MIC-30

MIC-10



The leads are also available in a shielded variant. One of the ends of the cable consists of two leads – one for the working core and one for the shield.

|                                       |   |
|---------------------------------------|---|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |
| <b>Measurement category</b>           | CAT III 1000 V / CAT IV 600 V               |
| <b>Insulation material</b>            | silicon                                     |
| <b>Insulation type</b>                | double                                      |
| <b>Cross-section area of the wire</b> | 1 mm <sup>2</sup>                           |

| Color | Length | Index         |
|-------|--------|---------------|
| Black | 1.2 m  | WAPRZ1X2BLBBE |
| Black | 5 m    | WAPRZ005BLBBE |

### Accessory dedicated for:

MIC-30

MIC-10







## Test leads 5 kV

Universal test leads, which are safe and resistant to damage. They can be used with a wide range of measuring accessories, such as crocodile clips, probes or cramps. The plug of the test lead is shielded ensuring safe operation.

|                                       |   |
|---------------------------------------|---|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |
| <b>Measurement category</b>           | CAT III 1000 V / CAT IV 600 V               |
| <b>Insulation material</b>            | silicon                                     |
| <b>Insulation type</b>                | double                                      |
| <b>Cross-section area of the wire</b> | 1 mm <sup>2</sup>                           |

| Color | Length | Index          |
|-------|--------|----------------|
| Red   | 1.8 m  | WAPRZ1X8REBB   |
| Blue  |        | WAPRZ1X8BUBB   |
| Red   | 3 m    | WAPRZ003REBB5K |
| Blue  |        | WAPRZ003BUBB5K |
| Red   | 5 m    | WAPRZ005REBB5K |
| Blue  |        | WAPRZ005BUBB5K |
| Red   | 10 m   | WAPRZ010REBB5K |
| Blue  |        | WAPRZ010BUBB5K |

### Accessories dedicated for:

MIC-5001

MIC-2511

MIC-2501

The leads are also available in a shielded variant. One of the ends of the cable consists of two leads – one for the working core and one for the shield.



|                                       |   |
|---------------------------------------|---|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |
| <b>Measurement category</b>           | CAT III 1000 V / CAT IV 600 V               |
| <b>Insulation material</b>            | silicon                                     |
| <b>Insulation type</b>                | double                                      |
| <b>Cross-section area of the wire</b> | 1 mm <sup>2</sup>                           |

| Color | Length | Index           |
|-------|--------|-----------------|
| Black | 1.8 m  | WAPRZ1X8BLBB    |
| Black | 3 m    | WAPRZ003BLBBE5K |
| Black | 5 m    | WAPRZ005BLBBE5K |
| Black | 10 m   | WAPRZ010BLBBE5K |

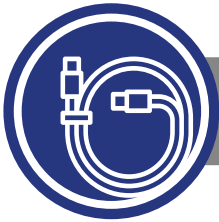
### Accessories dedicated for:

MIC-5001

MIC-2511

MIC-2501





# test leads



## Test leads 11 kV

Universal test leads, which are safe and resistant to damage. They can be used with a wide range of measuring accessories, such as crocodile clips, probes or cramps. The plug of the test lead is shielded ensuring safe operation.

|                                       |   |
|---------------------------------------|---|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |
| <b>Measurement category</b>           | CAT III 1000 V / CAT IV 600 V               |
| <b>Insulation material</b>            | silicon                                     |
| <b>Insulation type</b>                | double                                      |
| <b>Cross-section area of the wire</b> | 1 mm <sup>2</sup>                           |

| Color | Length | Index           |
|-------|--------|-----------------|
| Red   | 1.8 m  | WAPRZ1X8REBB10K |
| Blue  |        | WAPRZ1X8BUBB10K |
| Red   | 3 m    | WAPRZ003REBB10K |
| Blue  |        | WAPRZ003BUBB10K |
| Red   | 5 m    | WAPRZ005REBB10K |
| Blue  |        | WAPRZ005BUBB10K |
| Red   | 10 m   | WAPRZ010REBB10K |
| Blue  |        | WAPRZ010BUBB10K |
| Red   | 20 m   | WAPRZ020REBB10K |
| Blue  |        | WAPRZ020BUBB10K |

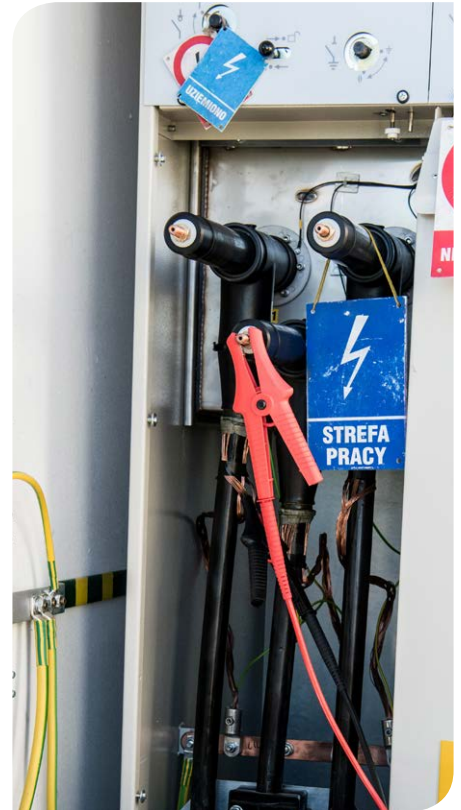
### Accessories dedicated for:

MIC-10k1

MIC-5050

MIC-5010

MIC-5005



The leads are also available in a shielded variant. One of the ends of the cable consists of two leads – one for the working core and one for the shield.

|                                       |   |
|---------------------------------------|---|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |
| <b>Measurement category</b>           | CAT III 1000 V / CAT IV 600 V               |
| <b>Insulation material</b>            | silicon                                     |
| <b>Insulation type</b>                | double                                      |
| <b>Cross-section area of the wire</b> | 1 mm <sup>2</sup>                           |

| Color | Length | Index            |
|-------|--------|------------------|
| Black | 1.8 m  | WAPRZ1X8BLBBE10K |
| Black | 3 m    | WAPRZ003BLBBE10K |
| Black | 5 m    | WAPRZ005BLBBE5K  |
| Black | 10 m   | WAPRZ010BLBBE10K |
| Black | 20 m   | WAPRZ020BLBBE10K |

### Accessories dedicated for:

MIC-10k1

MIC-5050

MIC-5010

MIC-5005





## Test leads 15 kV

Universal test leads, which are safe and resistant to damage. The lead is terminated with a crocodile clip. The plug of the test lead is shielded ensuring safe operation.

|                                       |   |  |
|---------------------------------------|---|--|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |  |
| <b>Spread range</b>                   | 44 mm                                       |  |
| <b>Measurement category</b>           | CAT IV 1000 V                               |  |
| <b>Insulation material</b>            | silicon                                     |  |
| <b>Insulation type</b>                | double                                      |  |
| <b>Maximum current</b>                | 10 A  |  |
| <b>Cross-section area of the wire</b> | 1 mm <sup>2</sup>                           |  |

| Color | Length | Index             |
|-------|--------|-------------------|
| Red   | 1.8 m  | WAPRZ1X8REKRO15KV |
| Blue  |        | WAPRZ1X8BUKRO15KV |
| Red   | 3 m    | WAPRZ003REKRO15KV |
| Blue  |        | WAPRZ003BUKRO15KV |
| Red   | 5 m    | WAPRZ005REKRO15KV |
| Blue  |        | WAPRZ005BUKRO15KV |
| Red   | 10 m   | WAPRZ010REKRO15KV |
| Blue  |        | WAPRZ010BUKRO15KV |
| Red   | 20 m   | WAPRZ020REKRO15KV |
| Blue  |        | WAPRZ020BUKRO15KV |

### Accessories dedicated for:

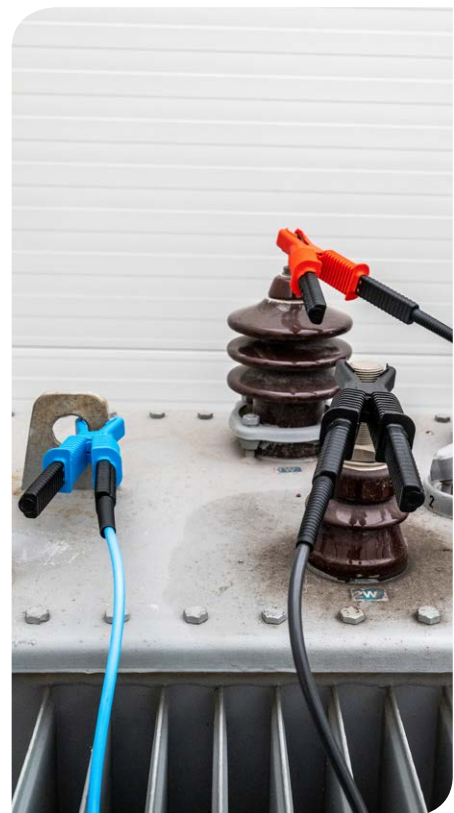
MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005



The leads are also available in a shielded variant. One of the ends of the cable consists of two leads – one for the working core and one for the shield.

|                                       |   |  |
|---------------------------------------|---|--|
| <b>Plug</b>                           | banana, 4 mm, safe, straight, nickel plated |  |
| <b>Spread range</b>                   | 44 mm                                       |  |
| <b>Measurement category</b>           | CAT IV 1000 V                               |  |
| <b>Insulation material</b>            | silicon                                     |  |
| <b>Insulation type</b>                | double                                      |  |
| <b>Maximum current</b>                | 10 A  |  |
| <b>Cross-section area of the wire</b> | 0.75 mm <sup>2</sup>                        |  |

| Color | Length | Index              |
|-------|--------|--------------------|
| Black | 1.8 m  | WAPRZ1X8BLKROE15KV |
| Black | 3 m    | WAPRZ003BLKROE15KV |
| Black | 5 m    | WAPRZ005BLKROE15KV |
| Black | 10 m   | WAPRZ010BLKROE15KV |
| Black | 20 m   | WAPRZ020BLKROE15KV |

### Accessories dedicated for:

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005







# installation



## Hanging hook straps

index: WAPOZUCH1

The straps are designed for hanging the meters in safe locations to free the operator's hands. Their one end is provided with a hook, while the other with a Velcro strap used to attach the device.

**Accessory dedicated for:**

MIC-30

MIC-10



## Universal magnetic hanging strap

index: WAPOZUCH6

Universal magnetic holder for mounting the meter to metal surfaces, e.g. switchgear doors, etc.

**Accessory dedicated for:**

MIC-30

MIC-10





# communication



## USB cable

index: WAPRZUSB

The cable with connectors of A and B type, compatible with USB 1.1 and 2.0. It is intended to connect the computer to Sonel devices equipped with USB sockets of B type. The cable is used to transfer the measurement results, configurations and updating the firmware of many meters.

Accessory dedicated for:

MIC-15k1

MIC-10k1

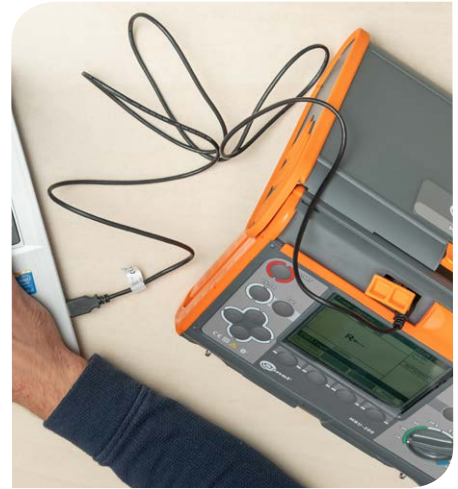
MIC-5050

MIC-5010

MIC-5005

MIC-5001

MIC-2501



## USB cable type C

index: WAPRZUSBC

Cable for data transmission between the device and the computer, terminated on one side with a type A USB plug and on the other side with a type C USB plug.

Accessory dedicated for:

MIC-2511



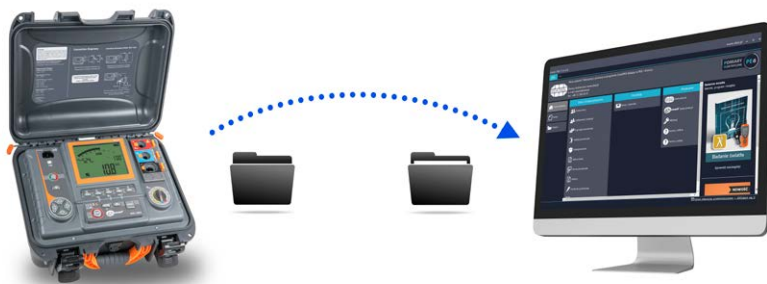


# software

## Manage your data!

**USB B**  
UNIVERSAL SERIAL BUS

|          |          |
|----------|----------|
| MIC-15k1 | MIC-10k1 |
| MIC-5050 | MIC-5010 |
| MIC-5005 | MIC-5001 |
| MIC-2511 | MIC-2501 |



### Sonel Reports PLUS

Download data from memory of test instruments and create necessary documentation.



### Sonel Reader

Read the measurement data and save them on your computer.



- MIC-15k1
- MIC-10k1
- MIC-5050
- MIC-5010
- MIC-5005



### Sonel MIC Mobile

Read the measurement data. Add photographs, comments and voice memo - and share it.





## Sonel Reports PLUS

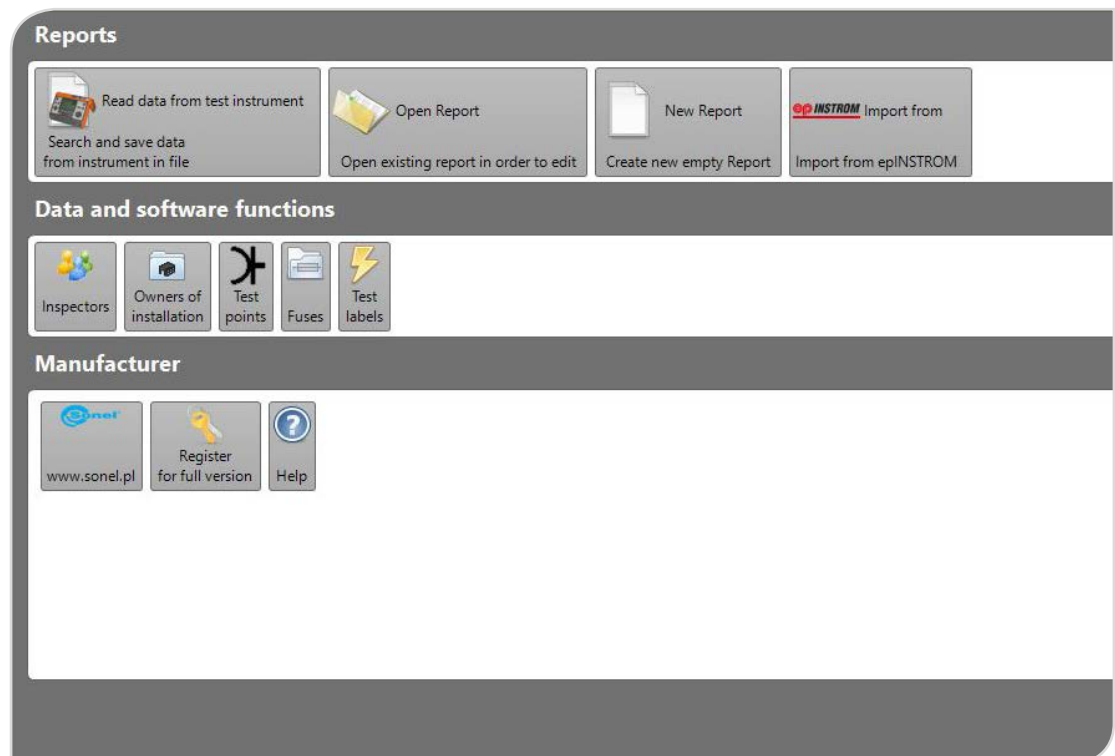
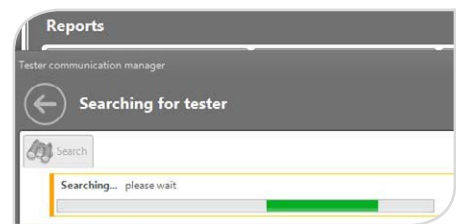
index: WAPROREPORTSPPLUS

Sonel Reports Plus supports creation of documentation after testing of electrical installation. The software communicates with Sonel test instruments, downloads data from memory of the devices and creates necessary documentation. Many useful functions are included in order to help creating documentation of the measurements. Sonel Reports Plus supports the meter by reading, downloading and uploading test structure from/to test instrument.

### Features:

- every report can contain description page,
- tree structure presents a clear picture of the tested building and its rooms. Test structure can be uploaded to the meter and downloaded from it together with test results,
- user can print labels for test points,
- for every room user can add picture or scheme of electrical installation,
- software contains library of fuses,
- for every room user can create separate table with test results.

### Software dedicated for:





# software



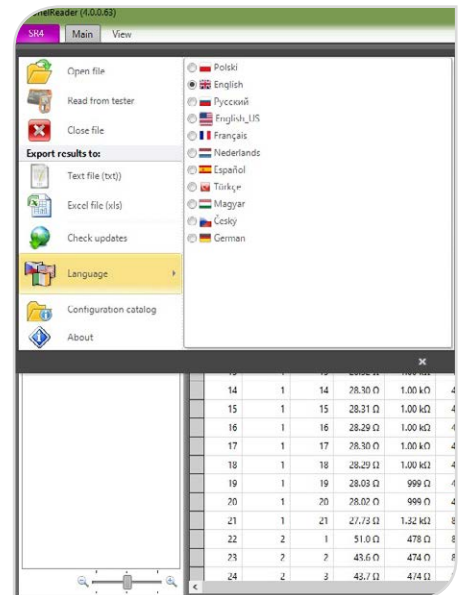
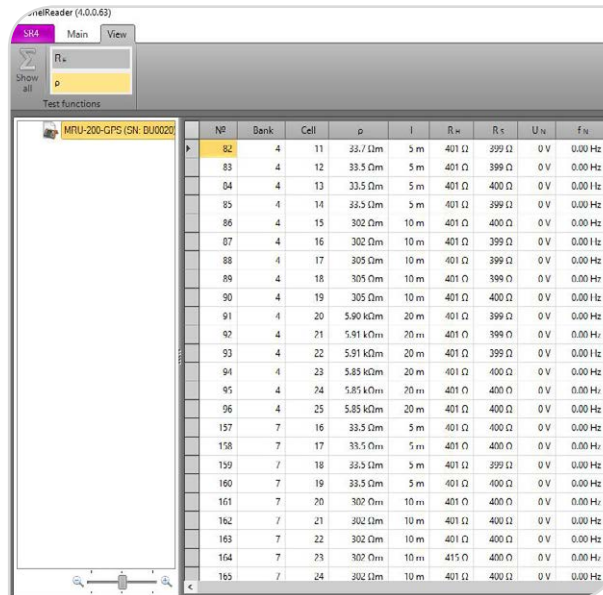
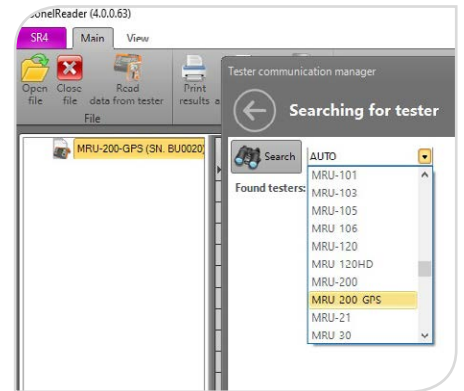
## Sonel Reader

index: WAPROREADER

This software is designed for downloading data from the meters. It enables data transfer to the PC, data saving in popular formats and printing.

Software dedicated for:

- MIC-15k1
- MIC-10k1
- MIC-5050
- MIC-5010
- MIC-5005
- MIC-5001
- MIC-2511
- MIC-2501
- MIC-30

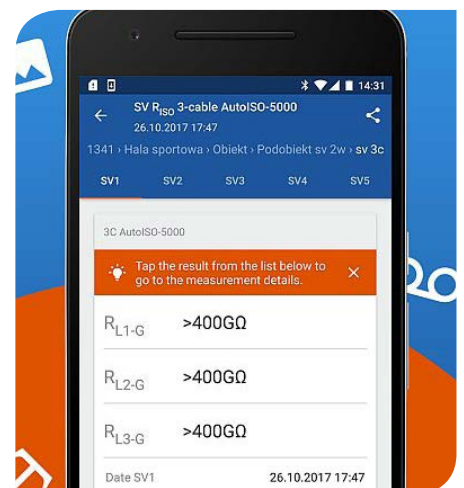


## Sonel MIC Mobile

With the application, you can **connect directly to the device** via Bluetooth and download measurement data from the meter. After reading the measurements from the device, they can be easily and quickly **viewed**, and also **sent from the place of measurement** to the person who can help in the interpretation of data or make a measurement report. Additional functionalities will be useful: assigning a photo, text or voice note to a given measurement.

Software dedicated for:

- MIC-15k1
- MIC-10k1
- MIC-5050
- MIC-5010
- MIC-5005





# power supply

## Power supply

It is designed to power a number of Soneil measuring devices. It is equipped with IEC C8 male connector for connecting the power cord.

| Name              | Features                      | Index          |
|-------------------|-------------------------------|----------------|
| Z-7 power supply  | <b>Input voltage</b>          | 100...240 V AC |
|                   | <b>Output voltage</b>         | 12 V DC        |
|                   | <b>Maximum output power</b>   | 30 W           |
| Z-32 power supply | <b>Input voltage</b>          | 100...240 V AC |
|                   | <b>Output voltage (USB C)</b> | 5...20 V DC    |
|                   | <b>Maximum output power</b>   | 65 W           |

Accessory dedicated for:



Z-7 power supply

MIC-5001

MIC-2501



Z-32 power supply

MIC-2511



## 230 V mains cable (IEC C7 plug)

index: WAPRZLAD230

It is designed to power a number of Soneil measuring devices. One of its ends is terminated with C7 plug, while the other with the mains plug of CEE 7/16 type („Europlug“).

|                                       |                          |
|---------------------------------------|--------------------------|
| <b>Cross-section area of the wire</b> | 2 x 0.75 mm <sup>2</sup> |
| <b>Nominal voltage</b>                | 250 V AC/DC              |

Accessory dedicated for:

MIC-5001

MIC-2501



## 230 V mains cable (IEC C13 plug)

index: WAPRZ1X8BLIEC

It is designed to power a number of Soneil measuring devices. One of its ends is terminated with C13 plug, while the other with the mains plug of CEE 7/16 type („Europlug“).

|                                       |                          |
|---------------------------------------|--------------------------|
| <b>Cross-section area of the wire</b> | 2 x 0.75 mm <sup>2</sup> |
| <b>Nominal voltage</b>                | 250 V AC                 |

Accessory dedicated for:

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005







# power supply



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

index: WAPRZLAD12SAM

It is connected directly to the meter. It allows user to charge the battery when the only power source is the car cigarette lighter socket. Discharged battery? No outlet? With this accessory you will complete your measurements without interruptions. The cable may be also used for other devices offered by SONEL S.A.

Accessory dedicated for:

MIC-5001

MIC-2501



## Power supply adapter AZ-3

index: WAADAAZ3

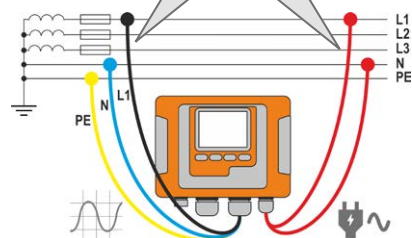
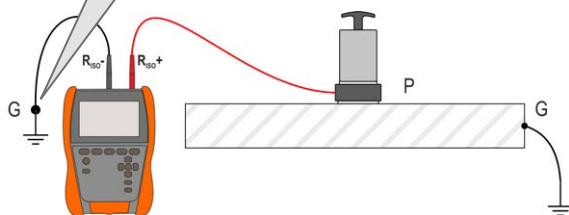
Mains plug with banana sockets. It enabling the charging of the analyzer batteries from the power supply socket, while eliminating the need to connect the instrument to the measured object. It is particularly useful when copying data, analyzing results or transferring the configuration: there is no risk of the device battery unexpectedly discharging when performing such operations. The product can also be used for measuring voltage signals. In addition, it will facilitate the work of taking measurements in EPA areas: when measuring point-to-ground resistance ( $R_{p-g}$ ), it will enable the insulation resistance meter leads to be quickly connected to the nearest ground point and to the ring-shape probe.

Accessories dedicated to the following instruments:

MIC-2511



### EPA: $R_{p-g}$





## power supply



### Rechargeable battery

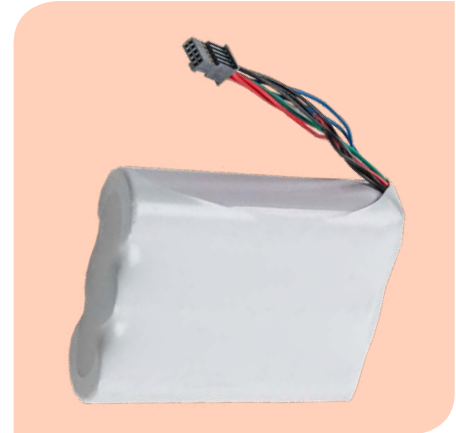
index: WAAKU29

The rechargeable Li-Ion (lithium-ion) battery for Sonel measuring devices. Its advantages include high capacity, no memory effect and high energy density. The battery may be charged even when it is not completely discharged.

| Name                        | Features      |
|-----------------------------|---------------|
| Li-Ion rechargeable battery | 10.8 V 3.5 Ah |

**Accessory dedicated for:**

MIC-2511



## transportation



### S2 case

index: WAFUTS2

This case is designed for storage and transport of the meter. It protects the contents against dirt and damage. The case is made of a specially selected fabric, which is extremely durable and resistant to damage.

**Accessories dedicated for:**

MIC-5



### S4 case

index: WAFUTS4

A mini keyboard enabling more comfortable data entry during measurement performance. Communication with the test instrument is wireless via Bluetooth. Protective case is equipped with hand fastening.

**Accessories dedicated for:**

MIC-10k1

MIC-5050





# transportation



## M6 carrying case

index: WAFUTM6

This case is designed for storage and transport of the meter and its accessories. It has one main compartments closed with a zipper and one pocket on the flap. The main compartment is provided with an insert dividing it into smaller parts. It also has additional elastic bands for fixing the accessories. The case is provided with a strap for hanging it on the user's shoulder. Its bottom part is protected against contact with the ground by two feet.

**Accessory dedicated for:**

MIC-2511

MIC-30

MIC-10



## M8 carrying case

index: WAFUTM8

Intended for storage and transport of the test instrument with accessories. Includes a removable pouch for accessories. The pouch can be attached to a belt, for example.

The main chamber is equipped with velcro straps, protecting the device from falling out. The case has zippered inspection holes, making it easy to connect the wires without removing the test instrument from the case. The bottom is protected from contact with the ground by means of plastic legs.

**Accessory dedicated for:**

MIC-5001

MIC-2501



## M15 carrying case

index: WAFUTM15

Intended for storage and transport of the test instrument. The case has zippered inspection hole, making it easy to connect the wires without removing the test instrument from the case.

**Accessory dedicated for:**

MIC-2511



## L4 carrying case

index: WAFUTL4

This case is designed for storage and transport of the meter and its accessories. It has three main compartments closed with a zipper and one pocket on the flap. The compartments are equipped with elastic bands for fixing the accessories. The case is provided with a strap for hanging it on the user's shoulder. Its bottom part is protected against contact with the ground by two feet.

**Accessory dedicated for:**

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005







## L7 backpack

index: WAFUTL7

The backpack designed especially for comfortable carrying the meter with accessories. It is particularly useful when you want to have your hands free when moving with the equipment, e.g. when climbing a ladder.

### Accessory dedicated for:

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005



## L14 carrying case

index: WAFUTL14

This case is designed for storage and transport of the meter and its accessories. It protects the contents against dirt and damage. When there is a lot of gear to carry, a sturdy carrying case is the best solution. The case is made of a specially selected fabric, which is extremely durable and resistant to damage.

### Accessory dedicated for:

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005



## L7 hard carrying case

index: WAWALL7

The case is designed for storage and transport. It protect the contents against dirt and damage. The case is made of a specially selected fabric, which is extremely durable and resistant to damage.

### Accessory dedicated for:

MIC-2511

WASONPRS1

WASONPRS2





# transportation



## Strap

index: WAPOZPAS6

It is designed for carrying Sonel meters.

**Accessory dedicated for:**

MIC-2511



## M1 hanging straps

index: WAPOZSZE4

The hanging straps are designed for carrying and hanging Sonel meters. Their length is adjustable. The straps may be used to hang the meter around the neck or on the shoulder.

**Accessory dedicated for:**

MIC-30

MIC-10



## W1 hanging straps

index: WAPOZSZE5

Intended for transporting and hanging Sonel test instruments. The suspenders feature length adjustment. They enable hanging the device both on the neck and on the shoulder.

**Accessory dedicated for:**

MIC-15k1

MIC-10k1

MIC-5050

MIC-5010

MIC-5005

MIC-2511




















| Photo | Name   | Index  | MIC-15k1 | MIC-10k1 | MIC-5050 | MIC-5010 | MIC-5005 | MIC-5001 | MIC-2511 | MIC-2501 | MIC-30 | MIC-10 | MIC-5 | Photo | Name  | Index  | MIC-15k1 | MIC-10k1 | MIC-5050 | MIC-5010 | MIC-5005 | MIC-5001 | MIC-2511 | MIC-2501 | MIC-30 | MIC-10 | MIC-5 |
|-------|--|--|----------|----------|----------|----------|----------|----------|----------|----------|--------|--------|-------|-------|---|--|----------|----------|----------|----------|----------|----------|----------|----------|--------|--------|-------|
|       |  |  |          |          |          |          |          |          |          |          |        |        |       |       |   |  |          |          |          |          |          |          |          |          |        |        |       |
|       | Test lead 5 kV (banana plugs, shielded) black 1.8 m              | WAPRZ1X8BLBB   |          |          |          |          |          | 1        | 1        | 1        |        |        |       |       | Test lead 15 kV with crocodile clip, shielded, black 1.8 m                    | WAPRZ1X8BLKROE15KV   | •        | •        | •        | •        |          |          |          |          |        |        |       |
|       | Test lead 5 kV (banana plugs, shielded) black 3 / 5 / 10 m       | WAPRZ003BLBBE5K<br>WAPRZ005BLBBE5K<br>WAPRZ010BLBBE5K                        |          |          |          |          |          | •        | •        | •        |        |        |       |       | Test lead 15 kV with crocodile clip, shielded, black 3 m                      | WAPRZ003BLKROE15KV   | 1        | 1        | 1        | •        | •        |          |          |          |        |        |       |
|       | Test lead 5 kV (banana plugs) red 1.8 m                          | WAPRZ1X8REBB   |          |          |          |          |          | 1        | 1        | 1        |        |        |       |       | Test lead 15 kV with crocodile clip, shielded, black 5 / 10 / 20 m            | WAPRZ005BLKROE15KV<br>WAPRZ010BLKROE15KV<br>WAPRZ020BLKROE15KV | •        | •        | •        | •        |          |          |          |          |        |        |       |
|       | Test lead 5 kV (banana plugs) red 3 / 5 / 10 m                   | WAPRZ003REBB5K<br>WAPRZ005REBB5K<br>WAPRZ010REBB5K                           |          |          |          |          |          | •        | •        | •        |        |        |       |       | Test lead 15 kV with crocodile clip, red 1.8 m                                | WAPRZ1X8REKRO15KV  | •        | •        | •        | •        |          |          |          |          |        |        |       |
|       | Test lead 5 kV (banana plugs) blue 1.8 m                         | WAPRZ1X8BUBB   |          |          |          |          |          | 1        | 1        | 1        |        |        |       |       | test lead 15 kV with crocodile clip, red 3 m                                  | WAPRZ003REKRO15KV  | 1        | 1        | 1        | •        | •        |          |          |          |        |        |       |
|       | Test lead 5 kV (banana plugs) blue 3 / 5 / 10 m                  | WAPRZ003BUBB5K<br>WAPRZ005BUBB5K<br>WAPRZ010BUBB5K                           |          |          |          |          |          | •        | •        | •        |        |        |       |       | test lead 15 kV with crocodile clip, red 5 / 10 / 20 m                        | WAPRZ005REKRO15KV<br>WAPRZ010REKRO15KV<br>WAPRZ020REKRO15KV    | •        | •        | •        | •        |          |          |          |          |        |        |       |
|       | Test lead 11 kV (banana plugs, shielded) black 1.8 m             | WAPRZ1X8BLBBE10K   |          | •        | •        | 1        | 1        |          |          |          |        |        |       |       | Test lead 15 kV with crocodile clip, blue 1.8 m                               | WAPRZ1X8BLKRO15KV  | •        | •        | •        | •        |          |          |          |          |        |        |       |
|       | Test lead 11 kV (banana plugs, shielded) black 3 / 5 / 10 / 20 m | WAPRZ003BLBBE10K<br>WAPRZ005BLBBE10K<br>WAPRZ010BLBBE10K<br>WAPRZ020BLBBE10K |          | •        | •        | •        | •        |          |          |          |        |        |       |       | Test lead 15 kV with crocodile clip, blue 3 m                                 | WAPRZ003BLKRO15KV  | 1        | 1        | 1        | •        | •        |          |          |          |        |        |       |
|       | Test lead 11 kV (banana plugs) red 1.8 m                         | WAPRZ1X8REBB10K  |          | •        | •        | 1        | 1        |          |          |          |        |        |       |       | Test lead 15 kV with crocodile clip, blue 5 / 10 / 20 m                       | WAPRZ005BLKRO15KV<br>WAPRZ010BLKRO15KV<br>WAPRZ020BLKRO15KV    | •        | •        | •        | •        |          |          |          |          |        |        |       |
|       | Test lead 11 kV (banana plugs) red 3 / 5 / 10 / 20 m             | WAPRZ003REBB10K<br>WAPRZ005REBB10K<br>WAPRZ010REBB10K<br>WAPRZ020REBB10K     |          | •        | •        | •        | •        |          |          |          |        |        |       |       | PRS-1 resistance test probe   | WASONPRS1  | •        | •        | •        | •        | •        | •        | •        | •        | •      | •      | •     |
|       | Test lead 11 kV (banana plugs) blue 1.8 m                        | WAPRZ1X8BUBB10K  |          | •        | •        | 1        | 1        |          |          |          |        |        |       |       | Probe for measuring resistance in zones with ESD protection (2 pcs.)          | WASONPRS2  |          |          |          |          |          |          |          | •        |        |        |       |
|       | Test lead 11 kV (banana plugs) blue 3 / 5 / 10 / 20 m            | WAPRZ003BUBB10K<br>WAPRZ005BUBB10K<br>WAPRZ010BUBB10K<br>WAPRZ020BUBB10K     |          | •        | •        | •        | •        |          |          |          |        |        |       |       | Probe for measuring resistance in zones with ESD protection (kit with a case) | WASONPRS2KIT   |          |          |          |          |          |          |          | •        |        |        |       |



| Photo   | Name  | Index             | MIC-15K1 | MIC-10K1 | MIC-5050 | MIC-5010 | MIC-5005 | MIC-5001 | MIC-2511 | MIC-2501 | MIC-30 | MIC-10 | MIC-5 |
|---|---|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|--------|--------|-------|
|   |   |                   |          |          |          |          |          |          |          |          |        |        |       |
|    | L4 carrying case                            | WAFUTL4           | 1        | 1        | 1        | 1        | 1        |          |          |          |        |        |       |
|    | L7 backpack                                 | WAFUTL7           | •        | •        | •        | •        | •        |          |          |          |        |        |       |
|    | L14 carrying case                           | WAFUTL14          | •        | •        | •        | •        | •        |          |          |          |        |        |       |
|    | M6 carrying case                            | WAFUTM6           |          |          |          |          |          |          | 1        |          | 1      | 1      |       |
|    | M8 carrying case                            | WAFUTM8           |          |          |          |          |          | 1        |          | 1        |        |        |       |
|    | M15 carrying case                           | WAFUTM15          |          |          |          |          |          |          |          | •        |        |        |       |
|  | S2 carrying case                            | WAFUTS2           |          |          |          |          |          |          |          |          |        |        | •     |
|  | S4 armband case for Mini Bluetooth keyboard | WAFUTS4           | •        | •        |          |          |          |          |          |          |        |        |       |
|  | L7 carrying case for PRS-2                  | WAWALL7           |          |          |          |          |          |          |          | •        |        |        |       |
|  | USB cable                                   | WAPRZUSB          | 1        | 1        | 1        | 1        | 1        | 1        |          |          | 1      |        |       |
|  | Type C USB cable                            | WAPRZUSBC         |          |          |          |          |          |          |          | 1        |        |        |       |
|  | PC software: Sonel Reports Plus             | WAPROREPORTSPPLUS | •        | •        | •        | •        | •        | •        | •        | •        | •      | •      | •     |
|  | PC software: Sonel Reader                   | WAPROREADER       | •        | •        | •        | •        | •        | •        | •        | •        | •      | •      | •     |

1, 2, 4 - the number of standard accessories  
• - optional accessory

