Sonel®

Accessories for
Earth Resistance and Resistivity Meters

Good equipment is essential

measurements   test leads   communication   software   power supply   transportation

Sonel®   we measure globally

Flexible coil

F-x coil

FS-2 coil

FSX-3 coil

Flexible current coil, also known as a Rogowski coil, is useful for testing objects, on which hard clamps cannot be attached. In the measurements of alternating current, flexible coils are connected directly to the meter, whereas for earth resistance testing - the operators additionally use ERP-1 adapter. The coil is terminated with a 5-pin plug. It is available with different levels of the output signal and different lengths.

Name	Max. diameter of measured conductor	Output signal level	Index
F-1A	360 mm		WACEGF1AOKR
F-2A	235 mm		WACEGF2AOKR
F-3A	120 mm	38.8 µV / 1 A	WACEGF3AOKR
F-4	630 mm		WACEGF4OKR
FS-2	1260 mm	100 µV / 1 A	WACEGFS2OKR
FSX-3	630 mm	300 µV / 1 A	WACEGFSX3OKR

Accessories dedicated for:

MRU-200-GPS   MRU-200   ERP-1

ERP-1 adapter

WAADAERP1

WAADAERP1V2 set

WAADAERP1V3 set

The adapter is designed to work with earth resistance meters with test current of 200 mA, which provide the user with a choice of performing the measurement using 3-wire method or measurement clamps. Ergonomic, handy casing and ease of use make the resistance testing (e.g. earthing of transmission towers) quick and easy.
The measurements are carried out with flexible coil, available in several length options and electrical parameters.

Set	Index
ERP-1 adapter	WAADAERP1
ERP-1 adapter with FS-2 flexible coil and carrying case	WAADAERP1V2
ERP-1 adapter with FSX-3 flexible coil and carrying case	WAADAERP1V3

Accessories dedicated for:

MRU-200-GPS   MRU-200   MRU-120HD   MRU-120

C-3 current clamp

index: WACEGC3OKR

The clamp is used to measure alternating currents. The maximum diameter of the tested conductor is 52 mm. It is terminated with a 5-pin plug, compatible with Sonel devices. Using of the clamp eliminates the need to disconnect control connections, significantly reducing the testing time. This clamp allows user to determine the type of current flowing through the tested earthing element and to check the resulting voltage drop.
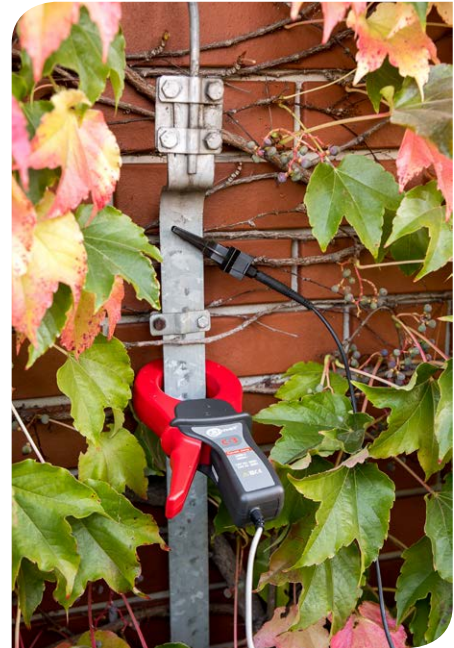
Accessory dedicated for:

MRU-200-GPS   MRU-200   MRU-120HD   MRU-120

MRU-30

N-1 transmitting clamp

index: WACEGN1BB

The transmitting clamp is used to measuring current for earth resistance measurements. Together with C-3 current clamp (hard) they are used in the two-clamp method, and in many cases they eliminate the need for driving the auxiliary probes into the ground. The maximum diameter of the tested conductor is 52 mm. The clamp is powered by a removable two-wire lead, terminated with 4 mm banana plugs.
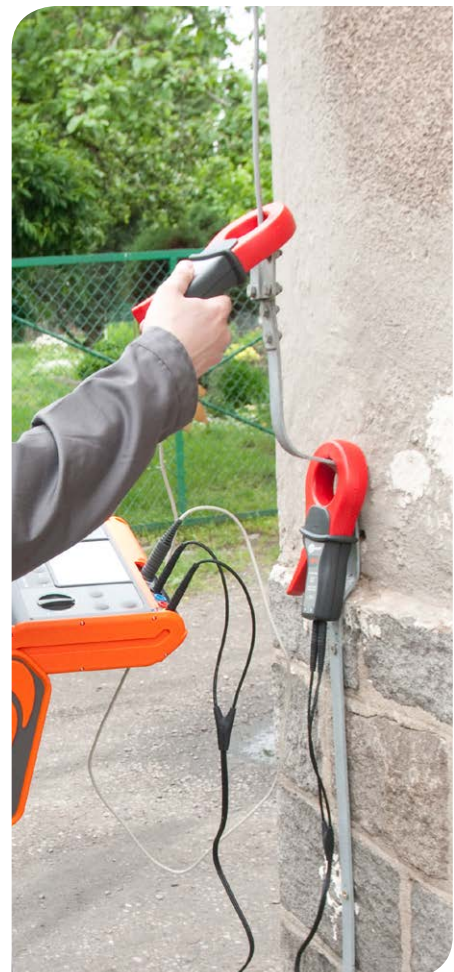
Accessory dedicated for:

MRU-200-GPS   MRU-200   MRU-120HD   MRU-120

MRU-30

Test lead for N-1 clamp

index: WAPRZ002DZBB

Two-wire test lead with a length of 2 meters. It connects N-1 transmitting clamp with measuring terminals of the meter used for earth resistance measurements.
The test lead is factory-fitted with two pairs of „H" and „E" tags, which indicate the correct way of connecting it to the meter terminals and clamps.

Accessory dedicated for:

MRU-200-GPS   MRU-200   MRU-120HD   MRU-120

MRU-30

Pin probes

Secure pin probes with Ø 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.

Plug	banana, 4 mm
Measurement category	1000 V, CAT III
Maximum current	20 A

Color	Index
Black	WASONBLOGB1
Red	WASONREOGB1
Blue	WASONBUOGB1
Yellow	WASONYEOGB1

Accessories dedicated for:

MRU-200-GPS	MRU-200	MRU-120HD	MRU-120
MRU-30	MRU-21	MRU-12	MRU-10

Crocodile clips

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 tu 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.

Plug	banana, 4 mm
Spread range	25 mm
Measurement category	1000 V, CAT III
Maximum current	20 A

Color	Index
Black	WAKROBL20K01
Red	WAKRORE20K02
Blue	WAKROBU20K02
Yellow	WAKROYE20K02

Accessories dedicated for:

MRU-200-GPS	MRU-200	MRU-120HD	MRU-120
MRU-30	MRU-21	MRU-12	MRU-10

Earth contact test probes (rods)

The test probes are designed for measuring earth resistance with 3- and 4-wire method. The probes are made of impact-resistant alloy and have an opening for direct connection of test leads with plugs without a guard.

Type	Length	Index
Bent	25 cm	WASONG25
Straight with a reel holder	30 cm	WASONG30
Straight with a reel holder	80 cm	WASONG80V2
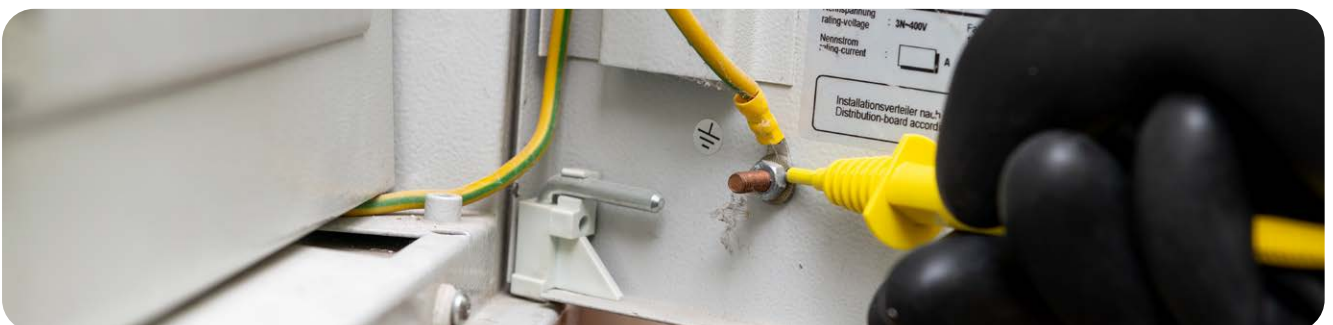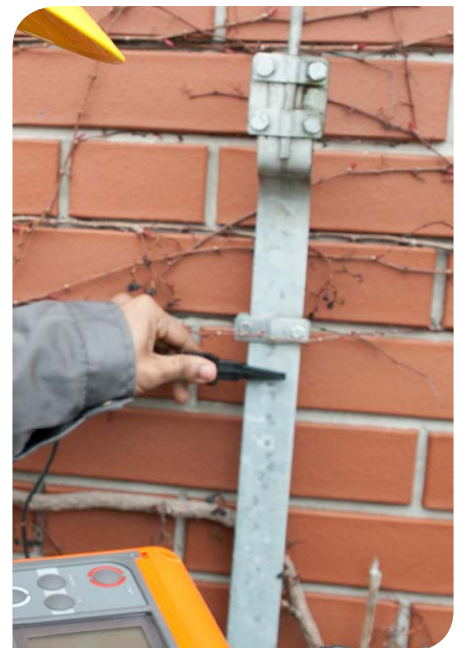
25 cm rod

30 cm rod

80 cm rod

Accessories dedicated for:

MRU-200-GPS	MRU-200	MRU-120HD	MRU-120
MRU-30	MRU-21	MRU-12	MRU-10

Cramp

index: WAZACIMA1

Professional cramp designed for use in situations when strong and durable metal connection is required. The cramp is provided with a thumbscrew for secure tightening it to the object. The terminal with a diameter of 4 mm is compatible with test leads with plugs and a guard.

Plug	banana, 4 mm
Spread range	50 mm

Accessory dedicated for:

MRU-200-GPS	MRU-200	MRU-120HD	MRU-120
MRU-30	MRU-21	MRU-12	MRU-10
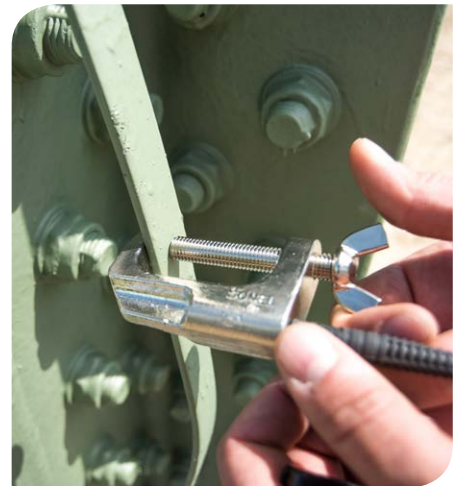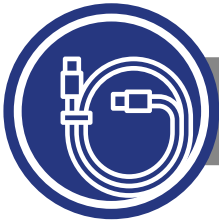
Test leads

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.

Plug	banana, 4 mm, safe, straight, nickel plated
Measurement category	CAT III 1000 V / CAT IV 600 V
Insulation material	silicon
Insulation type	double
Cross-section area of the wire	1 mm²

Color	Length	Index
Black		WAPRZ1X2BLBB
Red	1.2 m	WAPRZ1X2REBB
Blue		WAPRZ1X2BUBB
Yellow		WAPRZ1X2YEBB
Black		WAPRZ2X2BLBB
Red	2.2 m	WAPRZ2X2REBB
Blue		WAPRZ2X2BUBB
Yellow		WAPRZ2X2YEBB
Black	4 m	WAPRZ004BLBB
Blue		WAPRZ004BUBB

Accessories dedicated for:

MRU-200-GPS | MRU-200 | MRU-120HD | MRU-120 | MRU-30 | MRU-21 | MRU-12 | MRU-10

Test leads on reels

They are designed specifically for outdoor work - they have increased resistance to mechanical damage. One end of the test leads is terminated with a secure banana plug (4 mm), while the other end has a 4 mm lamella for connecting it to the reel and directly to the probe driven into the ground.

Color	Features	Index
Red	15 m, H-frame	WAPRZ015REBBN
Blue	15 m, H-frame	WAPRZ015BUBBN
Yellow	30 m, H-frame	WAPRZ030YEBBN
Red	30 m, H-frame	WAPRZ030REBBN
Blue	15 m, reel	WAPRZ015BUBBSZ
Red	25 m, reel	WAPRZ025REBBSZ
Blue	25 m, reel	WAPRZ025BUBBSZ
Red	30 m, reel	WAPRZ030REBBSZ
Yellow	40 m, reel	WAPRZ040YEBBSZ
Yellow	50 m, reel	WAPRZ050YEBBSZ
Yellow	60 m, reel	WAPRZ060YEBBSZ
Yellow	80 m, reel	WAPRZ080YEBBSZ

Accessories dedicated for:

MRU-200-GPS | MRU-200 | MRU-120HD | MRU-120 | MRU-30 | MRU-21 | MRU-12 | MRU-10

The test leads are also available with shielding and this version is dedicated for testing with the impact method, where the results are strongly influenced by interference from ambient electromagnetic field. One end of the test lead has two terminals - one for the working conductor and the other for shielding.

Color	Features	Index
Yellow	50 m, reel, shielded	WAPRZ050YEBBSZE

Accessory dedicated for:

MRU-200-GPS | MRU-200

Test lead on a H-frame

Test lead on a reel

Test lead on a reel, shielded

Test wire reel

index: WAPOZSZP1

It is used for winding leads. The reel is made of a material resistant to cracking, even at low temperatures. It is provided with an opening with a switching spring, enabling the reel to be directly inserted onto the probe driven into the ground. In order to improve the winding the leads, the reel is equipped with a folding handle. It also has a side terminal for connecting the test lead or a lead connecting a few wires.

Accessory dedicated for:

MRU-200-GPS	MRU-200	MRU-120HD	MRU-120
MRU-30	MRU-21	MRU-12	MRU-10

Test leads on a drum reel

The test leads on a drum reel are designed for measurements performed over large areas with significant distances between connecting point of the tested object and probes driven into ground. The reel is equipped with a terminal of banana type (4 mm) to provide two functions. The first one is connecting multiple drum cables into series. The second function involves connecting the reel with the meter - an additional short cable is used for this purpose. The entire device is completed with a metal, stabilizing stand.

Color	Features	Index
Red	75 m	WAPRZ075REBBSZ
Blue	75 m	WAPRZ075BUBBSZ
Yellow	75 m	WAPRZ075YEBBSZ
Red	100 m	WAPRZ100REBBSZ
Blue	100 m	WAPRZ100BUBBSZ
Yellow	100 m	WAPRZ100YEBBSZ
Red	200 m	WAPRZ200REBBSZ
Blue	200 m	WAPRZ200BUBBSZ
Yellow	200 m	WAPRZ200YEBBSZ

Accessories dedicated for:

MRU-200-GPS	MRU-200	MRU-120HD	MRU-120
MRU-30	MRU-21	MRU-12	MRU-10

Test leads on a drum reel, shielded

The shielded test leads are dedicated for testing the earthing systems with the impact method, where the results may be strongly influenced by interference from ambient electromagnetic field. The test lead wound on the drum has one end terminated with 4 mm lamella. The other end of the lead has two terminals (measuring terminals/sockets) - one for the working conductor and the other for shielding - installed on the side of the reel. The set includes also additional leads for connecting the reel to the meter.

Color	Features	Index
Yellow	75 m, shielded	WAPRZ075YEBBSZE
Yellow	100 m, shielded	WAPRZ100YEBBSZE
Yellow	200 m, shielded	WAPRZ200YEBBSZE

Accessories dedicated for:

MRU-200-GPS	MRU-200

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:

MRU-200-GPS   MRU-200   MRU-120HD   MRU-120

MRU-30   MRU-21
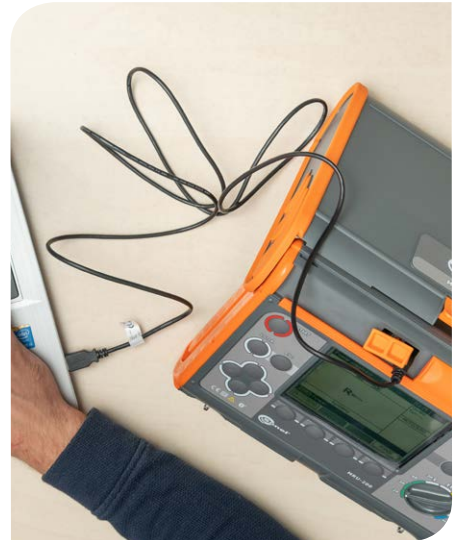
OR-1 adapter

index: WAADAUSBOR1

The adapter is designed for wireless data transmission between a PC and meters equipped with a corresponding transceiver module. It provides two-way communications between the measuring device and computer. To use this feature, the computer must have SONEL S.A. software installed, compatible with MRU meters.

Accessory dedicated for:

MRU-200-GPS   MRU-200

up to serial number **BU9999**   up to serial number **709999**
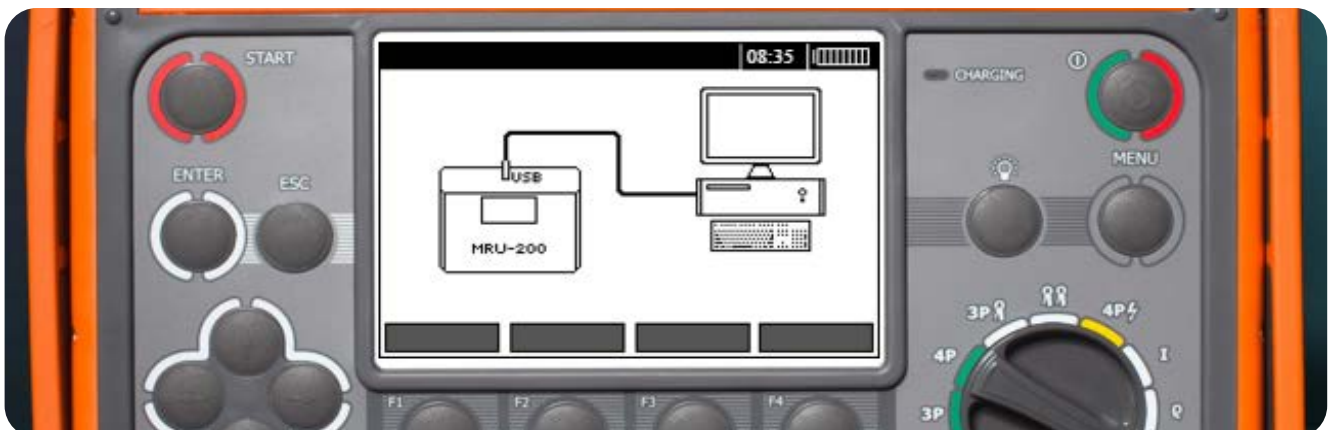
Manage
your
data!

MRU-200-GPS	MRU-120
MRU-200	MRU-30
MRU-120HD	MRU-21

MRU-200-GPS	MRU-200
up to serial number **BU9999**	up to serial number **709999**

MRU-200-GPS	MRU-200
from serial number **E40001**	from serial number **E30001**
MRU-12	

Sonel Reports PLUS

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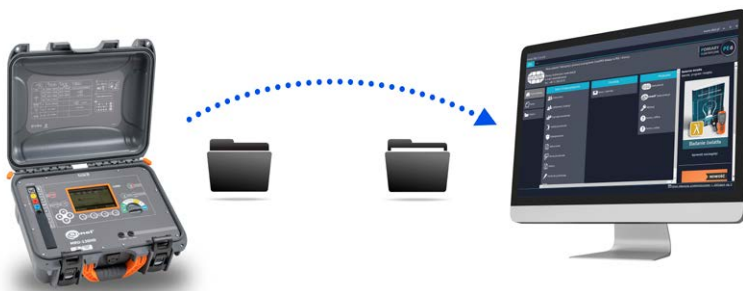
Sonel Reader

Read the measurement data and save them on your computer.

MRU-200-GPS	MRU-200-GPS
from serial number **E40001**	from serial number **E30001**

Sonel MRU Mobile

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

Sonel Reports PLUS

index: WAPROREPORTSPLUS

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:
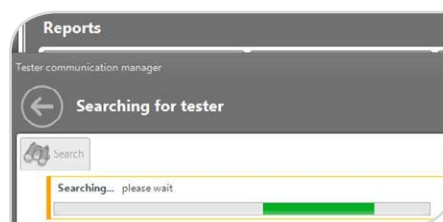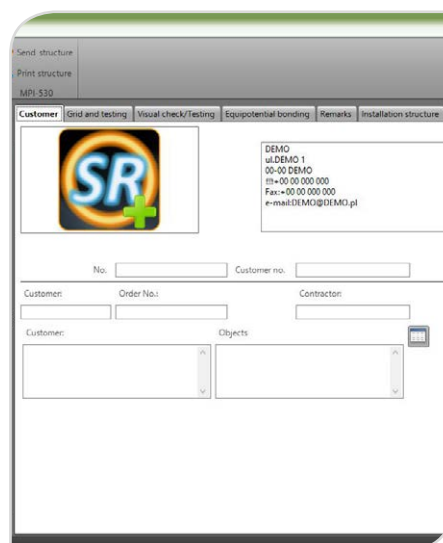
| MRU-200-GPS | MRU-200 | MRU-120HD | MRU-120 |
| MRU-30 | MRU-21 | MRU-12 | |

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:

MRU-200-GPS   MRU-200   MRU-120HD   MRU-120

MRU-30   MRU-21   MRU-12
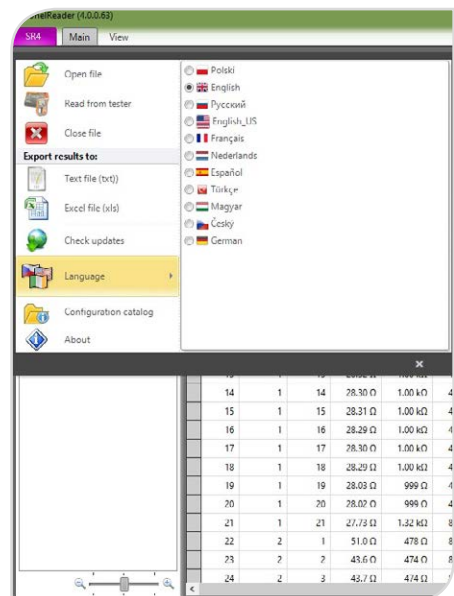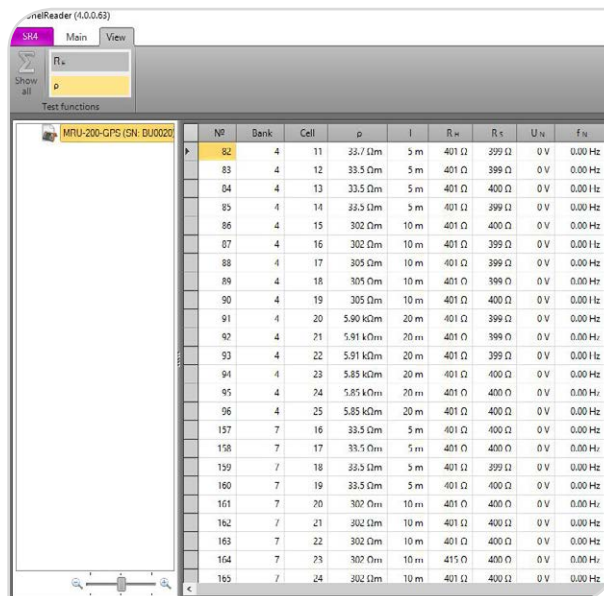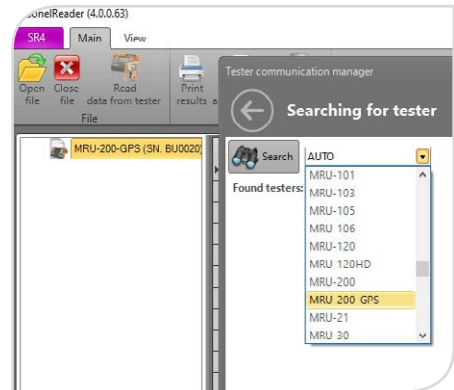
Sonel MRU Mobile

This app enables the user to **connect directly to the device** via Bluetooth and download measurement data from the meter. After reading the measurement results from the device, they can be easily and quickly **browsed** and **transferred from the measurement site** to a person who can help to interpret them or prepare the measurement report.

This app may be also used to add a photo, comment or voice note to the measurement results. The app provides also **access to the manual of the meter** and „Help" section, which facilitates the use of various measurement methods.

Users without the meter can use a set of **sample data**, implemented in demo mode.

Software dedicated for:

MRU-200-GPS   MRU-200

from serial number **E40001**

from serial number **E30001**

power supply

Rechargeable battery

The recheargeable NiMH (nickel metal hydride) battery for Sonel measuring devices. Its advantages include full leak-tightness, high capacity, low memory effect and high energy density. The battery may be charged even when it is not completely discharged. It is suitable as a backup energy bank in situations where the meter cannot be recharged.

Name	Features	Index
NiMH rechargeable battery	4.8 V 4.2 Ah	WAAKU07

Accessory dedicated for:

MRU-200-GPS   MRU-200   MRU-120

Name	Features	Index
NiMH rechargeable battery	4.8 V 3 Ah	WAAKU08

Accessory dedicated for:

MRU-120

Battery pack

index: WAPOJ1

A container for the set of batteries for Sonel meters. It enables user to replace the battery pack with four LR14 alkaline batteries. It is suitable as a backup energy bank in situations where the meter cannot be recharged.

Accessory dedicated for:

MRU-21

Z7 power supply

index: WAZASZ7

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

Input voltage	100…240 V AC
Output voltage	12 V DC
Maximum output power	30 W

Accessory dedicated for:

MRU-200-GPS MRU-200 MRU-120HD MRU-120

MRU-30

230 V mains cable (IEC C7 plug)

index: WAPRZLAD230

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

Cross-section area of the wire	2 x 0,75 mm^2
Nominal voltage	250 V AC/DC

Accessory dedicated for:

MRU-200-GPS MRU-200 MRU-120HD MRU-120

MRU-30

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.

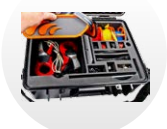**Accessory dedicated for:**

MRU-200-GPS MRU-200 MRU-120HD MRU-120

MRU-30

L2 carrying case

index: WAFUTL2

This case is designed for storage and transport of the meter and its accessories. The case has two main compartments, two pockets closed with the zipper and two Velcro pockets. It is also provided with a special pocket for documents and an insert for storing reels with test leads. The bottom of the case is protected against the contact with the ground by four feet. It is provided with a carrying handle and a strap for hanging it on the shoulder.

Accessory dedicated for:

MRU-200-GPS MRU-200 MRU-120

L3 carrying case

index: WAFUTL3

The case specially designed for the safe storage and transport of long (80 cm) probes driven into the ground. It is provided with a strap for hanging it on the shoulder. Strong seams prevent tearing of the material. Parts of the case exposed to puncturing by the probe tip/blade are reinforced.

Accessory dedicated for:

WASONG80V2

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:

MRU-120HD MRU-21

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:

MRU-120HD

L10 carrying case

index: WAFUTL10

Designed for storage and transport of the meter and its accessories. The case has two main compartments closed with a zipper and one pocket on the flap. The compartments are equipped with additional elastic bands for fixing accessories and a pocket for documents. 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:

MRU-30

L19 backpack

index: WAFUTL19

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. Equipped with a tablet pocket, it can accommodate a meter and a set of accessories. It is made of high-quality materials and has reinforced zippers and buckles.

Accessory dedicated for:

MRU-200-GPS   MRU-200   MRU-120   MRU-30

MRU-21
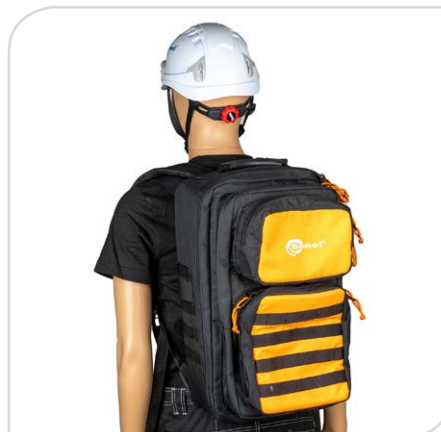
M6 carrying case

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:

MRU-12   MRU-10

M9 carrying case

index: WAFUTM9

This case is designed for storage and transport of the meter and its accessories. It is provided with two flaps locked with a zipper in places for measuring and communication inputs. The bottom of the case is protected against the contact with the ground by four feet. The case is provided with the strap for hanging the meter on the shoulder (during transport) or around the neck (during the measurement).

Accessory dedicated for:

MRU-30

XL3 hard carrying case

index: WAWALXL3

This case is designed for storage and transport of the meter and its accessories. It is made of a break-resistant plastic. It has a carrying handle and a strap for hanging it on the shoulder. The case is provided with a special insert, which is cut precisely to match the shape of equipment supplied with MRU meters.

Accessory dedicated for:

MRU-200-GPS   MRU-200   MRU-120

XL8 hard carrying case

index: WAWALXL8

The case is designed for storage and transportation of ERP-1 adapter with the measuring clamps. It is made of a break-re-sistant plastic. It has a carrying handle and a strap for hanging it on the shoulder. The case is provided with a special insert, which is cut precisely to match the shape of the adapter and flexible clamps.

Accessory dedicated for:

ERP-1

L2 hanging straps

index: WAPOZSZEKPL

The set includes a strap for carrying the meter in the hand, and a strap for hanging the device on the shoulder and around the neck. The longer strap is adjustable.

Accessory dedicated for:

MRU-200-GPS   MRU-200   MRU-120   MRU-21

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:

MRU-12   MRU-10

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:

MRU-12   MRU-10

Photo	Name	Index	MRU-200-GPS (L-2)	MRU-200-GPS (XL-3)	MRU-200 (L-2)	MRU-200 (XL-3)	MRU-120HD	MRU-120 (L-2)	MRU-120 (XL-3)	MRU-30	MRU-21	MRU-12	MRU-10	ERP-1
	ERP-1 adapter for earth resistance measurements	WAADAERP1	•	•	•	•	•	•	•					
	ERP-1 adapter for earth resistance measurements with FS-2 flexible coil	WAADAERP1V2	•	•	•	•	•	•	•					
	ERP-1 adapter for earth resistance measurements with FSX-3 flexible coil	WAADAERP1V3	•	•	•	•	•	•	•					
	F-1A flexible coil (Ø360 mm)	WACEGF1AOKR	•	•	•	•								•
	F-2A flexible coil (Ø235 mm)	WACEGF2AOKR	•	•	•	•								•
	F-3A flexible coil (Ø120 mm)	WACEGF3AOKR	•	•	•	•								•
	F-4 flexible coil (Ø630 mm)	WACEGF4OKR	•	•	•	•								•
	FS-2 flexible coil (Ø1260 mm)	WACEGFS2OKR	•	•	•	•								•
	FSX-3 flexible coil (Ø630 mm)	WACEGFSX3OKR	•	•	•	•								•
	N-1 transmitting clamp (Ø52 mm)	WACEGN1BB	•	•	•	•	•	•	•					
	C-3 current clamp (Ø52 mm)	WACEGC3OKR	•	•	•	•	•	•	•	•				
	Crocodile clip, black, 1 kV, 20 A	WAKROBL20K01	1	1	1	1	•	1	1	1	1	1	1	
	Crocodile clip, red, 1 kV, 20 A	WAKRORE20K02	1	1	1	1	•	•	•	•	•	•	•	
	Crocodile clip, blue, 1 kV, 20 A	WAKROBU20K02	•	•	•	•	•	•	•	•	1	1	•	

Photo	Name	Index	MRU-200-GPS (L-2)	MRU-200-GPS (XL-3)	MRU-200 (L-2)	MRU-200 (XL-3)	MRU-120HD	MRU-120 (L-2)	MRU-120 (XL-3)	MRU-30	MRU-21	MRU-12	MRU-10	ERP-1
	Crocodile clip, yellow, 1 kV, 20 A	WAKROYE20K02	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 1.2 m, black, 1 kV (banana plugs)	WAPRZ1X2BLBB	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 1.2 m, red, 1 kV (banana plugs)	WAPRZ1X2REBB	1	1	1	1	•	1	1	1	•	•	•	
	Test lead 1.2 m, blue, 1 kV (banana plugs)	WAPRZ1X2BUBB	•	•	•	•	•	•	•	•	1	•	•	
	Test lead 1.2 m, yellow, 1 kV (banana plugs)	WAPRZ1X2YEBB	•	•	•	•	•	•	•	•	•	•	•	
	Double-wire test lead 2 m, for N-1 clamps (banana plugs)	WAPRZ002DZBB	•	•	•	•	•	•	•					
	Test lead 2.2 m, black, 1 kV (banana plugs)	WAPRZ2X2BLBB	1	1	1	1	•	1	1	1	1	1	1	
	Test lead 2.2 m, red, 1 kV (banana plugs)	WAPRZ2X2REBB	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 2.2 m, blue, 1 kV (banana plugs)	WAPRZ2X2BUBB	•	•	•	•	•	•	•	•	•	1	•	
	Test lead 2.2 m, yellow, 1 kV (banana plugs)	WAPRZ2X2YEBB	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 4 m black 1 kV (banana plugs)	WAPRZ4X0BLBB	•	•	•	•	1	•	•	•	•	•	•	
	Test lead 4 m blue 1 kV (banana plugs)	WAPRZ4X0BUBB	•	•	•	•	1	•	•	•	•	•	•	
	Test lead 15 m, blue (on a reel)	WAPRZ015BUBBSZ	•	•	•	•	•	•	•	•	1	•	•	
	Test lead with banana plug; 15 m; red	WAPRZ015REBBN	•	•	•	•	•	•	•	•	•	1	1	

Photo	Name	Index	MRU-200-GPS (L-2)	MRU-200-GPS (XL-3)	MRU-200 (L-2)	MRU-200 (XL-3)	MRU-120HD	MRU-120 (L-2)	MRU-120 (XL-3)	MRU-30	MRU-21	MRU-12	MRU-10	ERP-1
	Test lead with banana plug; 15 m; blue	WAPRZ015BUBBN	•	•	•	•	•	•	•	•	•	1	•	
	Test lead 25 m, red (banana plugs, on a reel)	WAPRZ025REBBSZ	1	1	1	1	•	1	1	1	•	•	•	
	Test lead 25 m, blue (banana plugs, on a reel)	WAPRZ025BUBBSZ	1	1	1	1	1	1	1	•	•	•	•	
	Test lead 30 m, red (banana plugs, on a reel)	WAPRZ030REBBSZ	•	•	•	•	•	•	•	•	1	•	•	
	Test lead with banana plugs; 30 m; red	WAPRZ030REBBN	•	•	•	•	•	•	•	•	•	•	•	
	Test lead with banana plugs; 30 m; yellow	WAPRZ030YEBBN	•	•	•	•	•	•	•	•	•	1	1	
	Test lead 40 / 60 / 80 m, yellow (banana plugs, on a reel)	WAPRZ040YEBBSZ WAPRZ060YEBBSZ WAPRZ080YEBBSZ	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 50 m, yellow (banana plugs, on a reel)	WAPRZ050YEBBSZ	•	•	•	•	1	1	1	1	•	•	•	
	Test lead 50 m, yellow (banana plugs, on a reel, shielded)	WAPRZ050YEBBSZE	1	1	1	1								
	Test lead 75 / 100 / 200 m, red (banana plugs, on a reel)	WAPRZ075REBBSZ WAPRZ100REBBSZ WAPRZ200REBBSZ	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 75 / 100 / 200 m, blue (banana plugs, on a reel)	WAPRZ075BUBBSZ WAPRZ100BUBBSZ WAPRZ200BUBBSZ	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 75 / 100 / 200 m, yellow (banana plugs, on a reel)	WAPRZ075YEBBSZ WAPRZ100YEBBSZ WAPRZ200YEBBSZ	•	•	•	•	•	•	•	•	•	•	•	
	Test lead 75 / 100 / 200 m, yellow (banana plugs, on a reel, shielded)	WAPRZ075YEBBSZE WAPRZ100YEBBSZE WAPRZ200YEBBSZE	•	•	•	•								
	Pin probe, black 1 kV (banana socket)	WASONBLOGB1	•	•	•	•	•	•	•	•	•	•	•	

Photo	Name	Index	MRU-200-GPS (L-2)	MRU-200-GPS (XL-3)	MRU-200 (L-2)	MRU-200 (XL-3)	MRU-120HD	MRU-120 (L-2)	MRU-120 (XL-3)	MRU-30	MRU-21	MRU-12	MRU-10	ERP-1
	Pin probe, red 1 kV (banana socket)	WASONREOGB1	•	•	•	•	•	1	1	1	•	•	•	
	Pin probe, blue 1 kV (banana socket)	WASONBUOGB1	•	•	•	•	•	•	•	•	•	•	•	
	Pin probe, yellow 1 kV (banana socket)	WASONYEOGB1	•	•	•	•	•	•	•	•	•	•	•	
	Earth contact test probe (rod), 25 cm	WASONG25	•	•	•	•	•	•	•	•	•	4	2	
	Earth contact test probe (rod), 30 cm	WASONG30	4	4	4	4	4	4	4	2	2	•	•	
	Earth contact test probe (rod), 80 cm	WASONG80V2	•	•	•	•	•	•	•	•	•	•	•	
	Cramp	WAZACIMA1	1	1	1	1	2	1	1	1	•	•	•	
	NiMH battery 4.8 V 4.2 Ah	WAAKU07	1	1	1	1		•	•					
	NiMH battery 4.8 V 3.2 Ah	WAAKU08						1	1					
	NiMH battery 4.8 V 4.2 Ah (replaceable in the SONEL S.A. service)	WAAKU28					1							
	Battery pack	WAPOJ1										1		
	Z7 power supply	WAZASZ7	1	1	1	1	1	1	1	1				
	Mains cable with IEC C7 plug	WAPRZLAD230	1	1	1	1	1	1	1	1				
	Cable for battery charging from car cigarette lighter socket (12 V)	WAPRZLAD12SAM	1	1	1	1	•	•	•	•				

Photo	Name	Index	MRU-200-GPS (L-2)	MRU-200-GPS (XL-3)	MRU-200 (L-2)	MRU-200 (XL-3)	MRU-120HD	MRU-120 (L-2)	MRU-120 (XL-3)	MRU-30	MRU-21	MRU-12	MRU-10	ERP-1
	Test wire reel	WAPOZSZP1	•	•	•	•	•	•	•	•	•	•	•	
	L2 hanging straps (set)	WAPOZSZEKPL	1	1	1	1		1	1		1			
	M1 hanging straps	WAPOZSZE4										1	1	
	W1 hanging straps	WAPOZSZE5					1							
	M1 hanging hook straps	WAPOZUCH1										1	1	
	Cover (universal)	WAPOZUCH12	•	•	•	•		•	•		•			
	L2 carrying case	WAFUTL2	1	•	1	•		1	•					
	L3 carrying case for a 80 cm rods	WAFUTL3	•	•	•	•	•	•	•	•	•	•	•	
	L4 carrying case	WAFUTL4					1				1			
	L7 backpack	WAFUTL7						•						
	L10 carrying case	WAFUTL10								1				
	L19 backpack	WAFUTL19	•		•			•		•	•			
	M6 carrying case	WAFUTM6										1	1	
	M9 carrying case	WAFUTM9								1				

Photo	Name	Index	MRU-200-GPS (L-2)	MRU-200-GPS (XL-3)	MRU-200 (L-2)	MRU-200 (XL-3)	MRU-120HD	MRU-120 (L-2)	MRU-120 (XL-3)	MRU-30	MRU-21	MRU-12	MRU-10	ERP-1
	XL3 carrying case	WAWALXL3	•	1	•	1		•	1					
	XL8 carrying case	WAWALXL8												•
	USB cable	WAPRZUSB	1	1	1	1	1	1	1	1	1			
	PC software: Sonel Reports PLUS	WAPROREPORTSPLUS	•	•	•	•	•	•	•	•	•	•		
	PC software: Sonel Reader	WAPROREADER	•	•	•	•	•	•	•	•	•	•		

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