

Cable and underground infrastructure locator

LKZ-1500 / LKZ-1500-LITE

index: WMGBLKZ1500 / WMGBLKZ1500LITE

# LKO-1500 / LKO-1500-LITE

index: WMGBLK01500 / WMGBLK01500LITE

# LKN-1500



LKZ-1500

LKZ-1500-LITE

# **Underground detectives**

### Features

The LKZ locator set consists of a LKN transmitter and LKO receiver. It allows for location, identification and tracking of the route of objects buried in the earth. The user will be able to trace:

- power cords and cables, control cables, telecommunications cables,
- underground elements of lightning protection systems, cathodic protection systems,
- water and sewage systems,
- fuel transmission systems (pipelines, gas pipelines)
- heating systems and pre-insulated pipes.

The sets of LKZ series are an invaluable support in earthworks carried out for various industries, including energy, installation, construction, railway, telecommunications, water and sanitary, heating, geodetic and many others.

**LKN-1500 transmitter** introduces a specific signal to the tracked objects, enabling LKO receivers to route in the active mode. The receivers operate also in a passive mode that uses the network frequencies and telecommunications signals present in the facility.

**LKO-1500-LITE receiver** is designed according to "intuitive and user-friendly" principle and it is an ideal solution for users entering the world of cable location and routing. **LKO-1500 receiver** is a level higher: it facilitates the work of the user to with many features, including visualization of the cable routing in the tested object or a greater number of frequencies to choose from. It is also distinguished by the option of tracing cable short-to-earth faults with the use of additional accessories.



# LKN-1500 transmitter

- Transmission of double frequency signals.
- The mode of limiting the voltage of the transmitted signal.
- Transmitter power: 1 W, 2 W, 5 W, 10 W.
- Operation in direct galvanic or inductive connection mode internal transmitting antenna.
- Compatible with transmitting clamps.
- Continuous or interval mode of operation that extends battery life.
- Case housing.

# LKO-1500-LITE receiver

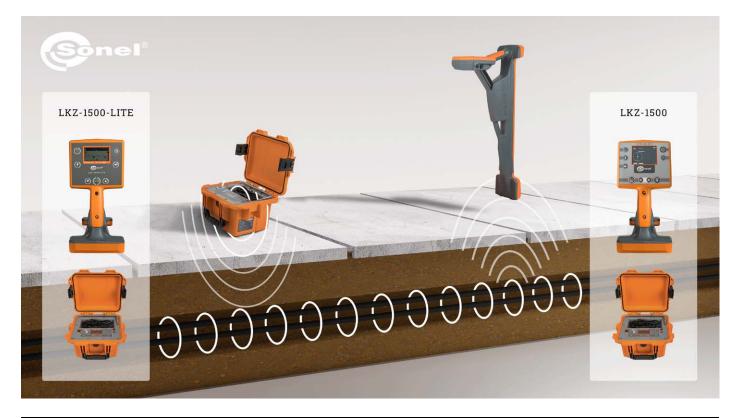
### Active mode

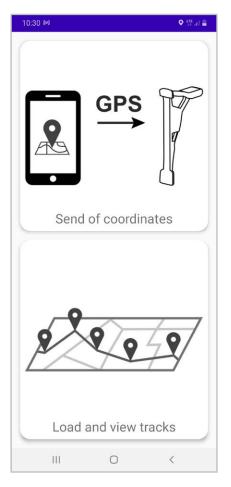
- » work with LKN-1500 transmitter at the frequencies of 1024 Hz, 8928 Hz, 33 kHz.
- Passive mode work at the frequencies of:
- » 50 Hz,
- » RADIO (10...36 kHz),
- » SB (48 Hz...14 kHz).
- Location depth up to **6 m**.

# LKO-1500 receiver

### • Active mode:

- » work with LKN-1500 transmitter at the frequencies of 273 Hz, 526 Hz, 1024 Hz, 8928 Hz, 33 kHz,
- » work with transmitters other than LKN-1500 at the frequencies of 491 Hz, 512 Hz, 982 Hz, 2000 Hz, 2048, Hz 8440 Hz, 9828 Hz, 10000 Hz.
- Passive mode work at the frequencies of:
  - » 50 Hz, 60 Hz, 100 Hz, 300 Hz, 550 Hz, 1450 Hz,
  - » RADIO (10...36 kHz),
  - » SB (48 Hz...14 kHz).
- Location depth up to **10 m**.
- Operation with external probes.





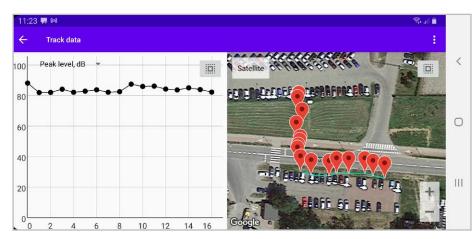
# Sonel LKZ Terminal

The application works with the Sonel LKZ-1500 wire and cable locator. By replacing the external GPS module, it allowing the user to define and record the geographic coordinates of the cable route.



The application additionally enables:

- live positioning preview,
- · measuring the distance to a specific point on the route,
- export of routes saved in LKO-1500 to the phone's memory,
- · reading routes from the phone's memory,
- · preview of the saved values of all parameters,
- · data export to PC.

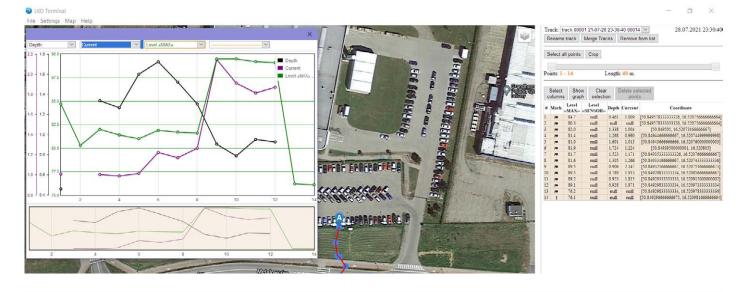




# Sonel LKO Terminal

A dedicated PC program for handling data stored in Sonel LKO-1500. It allows you to map a route from your location and read the data stored in the receiver. The data includes:

- coordinates of the place of measurement according to GPS information,
- · reading the depth of the object and value of current flowing in it,
- · the direction of the forced current,
- operating frequency,
- · date and local time at the time of measurement according to GPS information,
- export of route data to a file.



# **Technical specifications**

LKN-1500 transmitter		
Ingress protection	IP54	
Power supply	VRLA (AMG) lead-acid 12 V / 7 Ah	
Dimensions	275 x 250 x 180 mm	
Weight	ca. 4.9 kg	
Operating temperature	-20+55°C	
Storage temperature	-50+70°C	
Nominal temperature	23 ± 2°C	
Relative humidity	no more than 90% at the temperature of +30°C	
LKO-1500 / 1500-LITE receiver		
Ingress protection	IP54	
Power supply	Ni-MH 6 V/2000 mAh battery pack	
	5x AA 1.5 V battery	
	5x Ni-MH 1.2 V rechargeable battery	
Dimensions	700 x 300 x 140 mm	
Weight		
LKO-1500-LITE	ca. 1.7 kg	
LKO-1500	ca. 1.8 kg	
LK0-1500	Ca. 1.0 kg	
Operating temperature	-20+55°C	
Operating temperature	-20+55°C	

Relative humidity

no more than 95% at the temperature of +30°C



# LKZ-1500 • LKZ-1500-LITE | Standard accessories



LKN-1500 transmitter WMGBLKN1500







Test lead 5 m 1 kV (banana plugs) red / blue

Ground probe 23 cm

WASONG23





Hanging strap only for LKZ-1500 WAP0ZSZE6

LKO-1500

only for LKZ-1500

WMGBLK01500

only for LKZ-1500

WAP070SI 4

Sun-protecting cover

receiver



# LKO-1500 • LKO-1500-LITE | Optional accessories



Hanging strap only for LKO-1500 WAPOZSZE6



Sun-protecting cover only for LKO-1500 WAP070SI 4



#### Power supply

LKO-1500-LITE

WMGBLK01500LITE

Power supply

Battery compartment WAP0J3

Rechargeable battery NiMH 6 V, 2 Ah

Battery charger Z16 WAZASZ16 Battery charger Z17 WAZASZ17

WAAKU23

only for LKZ-1500-LITE

receiver

Battery compartment WAP0J3

Rechargeable battery NiMH 6 V, 2 Ah WAAKU23

Battery charger Z17 WAZASZ17



Bag L13 WAFUTL13



## LKN-1500 | Standard accessories



Crocodile clip 1 kV 20 A red / blue WAKRORE20K02 WAKROBU20K02



Test lead 5 m 1 kV (banana plugs)



#### **Battery charger Z16**



Ground probe 23 cm

Transmitting clamps only for • LKZ-1500 / 1500-LITE

• LKN-1500

N-1 (fi 52 mm)

N-4 (fi 110 mm)

N-5 (fi 125 mm) WACEGN5

WACEGN1BB

WACEGN4

red / blue WAPRZ005REBB WAPRZ005BUBB



WAZASZ16

WASONG23

LKZ-1500 / 1500-LITE · LKO-1500 · LKN-1500 | Optional accessories





A-frame WAADALKZRA2

