

Surface electrical exploration

## Kaskad-2M Apparatus for pulse surface electrical exploration

Electrical exploration equipment 151 VNIIGIS is designed to study the near-surface geoelectrical structure by near-field time-domain electromagnetic sounding.

### PROBLEMS TO BE SOLVED

- detailed stratification of near-surface geoelectrical structure within the depth range 2-1000 m;
- fresh groundwater exploration and prospecting;
- fresh-water complex salinization nature within intense oil recovery zones;
- local geoelectrical objects identification and plotting (for example kimberlite pipes);
- plane-table mapping and geotechnical plotting while ore, coal deposits exploration and prospecting;
- intense oil ingress detection and plotting within the depth range up to 1000 m.

### SPECIFICATIONS

Receiving-transmitting coil radius, m	10-1000
Max. current amplitude in the receiving-transmitting coil, A	20
Signal measurements time range, ms	0,002÷250
Transient phenomenon EMF measurements range, V	$5 \cdot 10^{-6} \div 50$
Measurements relative error, %	5
Repeatable interference release of 50 Hz, dB	60
Power consumption, W	3
Apparatus dimensions, mm	285×250×180
Weight, kg	6

**Delivery set:** receiving-transmitting section, a lap-top, cable adapter.