



The Sonel MRU-120HD Ground Resistance Tester in weather proof hard case allows the user to take earth resistance methods, using the 3-pole and 4-pole methods. Additionally, the MRU-120 offers selective earth resistance measurements, using an auxiliary clamp, meaning no influences from parallel earths or opening of junctions is required.

It is possible to employ the Wenner method of measurement, the electrode and clamp method, for multiple earthing, or the two clamp method for measurements without the use of auxiliary rods. Additionally the MRU-120 will automatically calculate the resistance of electrodes and compensate for this reading for greater accuracy. Interference voltages and frequencies are measured with the MRU-120 to eliminate inaccuracies caused by these phenomena. The MRU-120 will calculate the distance between electrodes in metres or feet. When utilising a clamp for measurements, the MRU-120 can calibrate the used clamp. This instrument is built for accuracy and speed for professional measurements of various applications where ground resistance is required.

The MRU-120HD is a professional grade instrument with all functions being selectable on its rotary dial. Being a menu driven instrument, all functions are clearly displayed on its large multifunction backlit graphical LCD display, with functions selected via the soft touch keys. Its ergonomic design permits the user to hang the meter for hands free use.

- Multi-function Earth Test Set in weather proof Hard Case
- Measurement of earth resistance (3-pole and 4-pole method)
- Measurement of multiple earthing resistance (3-lead + clamp)
- Measurement of multiple earthing resistance with use of 2 clamps
- Earth resistivity measurement
- It allows to take the measurements of:
  - earth resistance using auxiliary electrodes,
  - earth resistance using auxiliary electrodes and clamp (for measurements of multiple earth)
  - earth resistance using double clamps (for measurement of earthing when it is impossible to use auxiliary electrodes),
  - ground resistivity (Wenner method),
  - measurement of continuity of equipotential bondings and protective conductors (meeting the requirements of IEC 60364 - 6-61:2000 section 6.12.2) with auto-zero function – with current 200 mA.

**Additionally:**

- measurement of resistance of auxiliary electrodes  $R_s$  and  $R_{\infty}$ ,
- measurement of interference voltage,
- measurement of interference frequency,
- measurement in the presence of interference voltage in the power network with frequency 50 Hz, 60 Hz
- selection of maximum measuring voltage (25 V and 50 V)
- introducing the distance between the electrodes for the resistivity in metres (m),
- memory of 990 measurements (10 banks of 99 cells each),
- calibration of clamp used,
- real time clock (RTC),
- data transmission to the computer (USB, wireless),
- indication of battery state

The Sonel MRU-120HD is supplied as a testing kit complete with:

4m Black test lead, 4m Green test lead, Black crocodile clip, Green crocodile clip, 2x 25m test lead reels green & blue, 50m red test lead reel, USB cable, 4x 30cm earth stakes, Accessories carry case, Device carry harness, device charger and cable, Sonel Reader software, calibration certificate & manual, 2 years warranty.

Optional: 2x Current probes

**The Sonel MRU-120HD can be customised to include:**

4m Black test lead, 4m Green test lead, Black crocodile clip, Green crocodile clip, 2x 25m test lead pack reels green & blue, 50m red test lead pack reel, USB cable, 4x 35cm earth T Helical stakes, large canvas carry bag, device charger and cable, Sonel Reader software, calibration certificate & manual, 2 years warranty, 2 x Current probes, 2x Insulation piercing connections, fused bridging lead.