

TE-02 Electrostatic Properties Tester

Purpose:

Apparatus is intended for electrostatic properties testing (surface and vertical resistance) of materials for protective clothing, protective gloves and materials for other use.

Apparatus is made according to the requirements and apply for the tests according to the following standards:

- | | |
|-----------------------|--|
| EN 1149-1 | Protective clothing – Electrostatic properties – part 1: Test method for measurement of surface resistivity |
| EN 1149-2 | Protective clothing – Electrostatic properties – part 2: Test method for measurement of the electrical resistance through a material (vertical resistance) |
| EN 420; c. 4.5 | Protective gloves – General requirements and test methods |

Description of the device:

Device consists of electrical resistance measuring instrument (Ohmmeter) with range of $10^5 \Omega$ to $10^{14} \Omega$ with a limit of errors $\pm 5\%$ for range $\leq 10^{12} \Omega$ and a limit of errors $\pm 20\%$ for range $> 10^{12} \Omega$, annular electrodes for surface resistivity and base plate electrode (with insulating plate) for vertical resistance.

Dimension: Ohmmeter: (L) 200 x (W) 155 x (H) 100 mm; Electrodes and base: \varnothing 100 – 115 x 47 mm;

Weight: Ohmmeter: 1 kg; Electrodes and cables: 2,3 kg;

Power supply: 230 V ~ 50 Hz; 25 W

Operating principle:

Chose program for surface resistivity EN 1149-1 or vertical resistance EN 1149-2. Conditioned (and normative prepared) sample is placed between the electrodes (as described by corresponding standard) and then, with automatically applied potential of $(100 \pm 5) \text{ V}$ after (15 ± 1) second determined resistance is read off the screen.

