

SMARTEC®

Earth

MI 2124



EN / IEC 61557-5  
DIN / VDE 0100  
BS 7671, 16th Edition  
CEI 64.8  
EN / IEC 61010-1

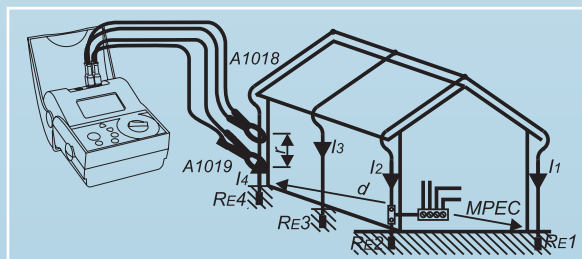
**Technical Specification**

<b>Earth Resistance (four-lead method)</b>	
Display range	0 ÷ 19.99 kΩ
Resolution	0.01; 0.1; 1; 10 Ω
Basic accuracy	±(2 % + 3 D)... (0 ÷ 2 kΩ)
Test voltage	<40 V / 125 Hz / sine wave
Short-circuit test current	<20 mA
High noise rejection	yes
Aut. potential and current probe res. test	yes
<b>Earth Resistance (four-lead method + clamp) A 1018</b>	
Display range	0 ÷ 1.99 kΩ
Other characteristics see under <b>four-lead method</b>	
<b>Earth Resistance (two test clamps) A 1018, A 1019</b>	
Display range	0 ÷ 19.99 Ω      20.0 ÷ 100.0 Ω
Basic accuracy	±(10 % + 2 D)...      ±(20 %)
<b>Specific Earth Resistance</b>	
Display range	0 ÷ 1999 kΩm (kΩft)
Calculation	$\rho = 2\pi aR_E$
Distance between test rods	1 ÷ 30 m (1 ÷ 90 ft)
Other characteristics see under <b>four-lead method</b>	
<b>Current (True RMS) A 1018, A 1019</b>	
Measurement principle	current clamp 1 A / 1 mA
Display range	0 ÷ 200 A
Resolution	0.1; 1 mA; 0.01; 0.1; 1 A
Basic accuracy	±(5 % + 5 D)... (0.5 mA ÷ 200 A)
Nominal frequency	50/60 Hz

**Optional Accessories**

- Soft carrying bag **Order No. A 1006**
- Small soft carrying bag **Order No. A 1020**
- Carrying strap **Order No. A 1007**
- Battery charger (230 V and/or 12 V DC) with a set of 4 NiCd batteries **Order No. A 1045**
- Earth test set - 50 m **Order No. S 2002**
- Test cable 4 x 1 m **Order No. S 2009**
- Low range clamp **Order No. A 1018**
- Standard range clamp **Order No. A 1019**
- Windows Software "Smart Link" with RS 232 interface cable **Order No. A 1050**

- **Earth resistance measurement**
  - 2-pole, 3-pole, 4-pole earth resistance measurements.
  - Selective earth resistance measurement with clamp (no influence from parallel earths; no opening of rusty junctions is needed).
  - Two clamp earth measurement for quick testing in urban areas (no opening of rusty junctions).
- **Specific earth resistance (ρ) measurement.**
- **True RMS current measurement** for determining problems on earth systems and conductors.
  - Outstanding features even in presence of mains interference and high probe resistance.
  - Warnings indication for out of limits results and incorrect test conditions.
  - 1000 memory locations and PC Software for print-out of measurement protocol.
  - Socket for external battery charger.
  - Auto power-off.



Example of recommended measuring method

**Standard Set Order No. MI 2124**

- Instrument
- Test lead 4.5 m, (black)
- Test lead 4.5 m, (green)
- Test lead 15 m, (red)
- Test lead 20 m, (blue)
- Earth test rod, 4 pcs
- Instruction manual
- Declaration of conformity
- Production verification data
- Declaration of warranty



**Optional Accessories**

