

# SL366 4 Pin Soil Resistance Meter

## SPECIFICATIONS

Robust instrument, designed for tough environmental conditions, waterproof (rubber protective cover, IP56).

### General:

Display: 1999 digit LC-display with special symbols, digit height **25 mm**, fluorescent backlight

User interface: Instant measurement through **TURN and START - one button concept**. The only operating elements are rotary switch and START button.

### Temperature ranges:

Working temp.: -10° C ...+50° C (+14° F ...+122° F)  
 Operating temp.: 0° C ...+35° C (+32° F ... +95° F)  
 Storage temp.: -20° C ...+60° C (-4° F ...+140° F)  
 Reference temp.: +23° C ±. 2° C (+73° F ± 4° F)


Temp. coefficient: ± 0,1 % of reading / K

Intrinsic error: Refers to the reference temperature range and is guaranteed for 3 years.

Operating error: Refers to the operating temperature range and is guaranteed for 3 years.

Climatic class: C1 (IEC 654-1), -5° C...+45° C, 5%...95% RH

Protective type: IP56 according to EN 60529

Safety: Protection by double insulation 

EMC (Emission): IEC 61326-1:1997 Class B  
 CISPR16 (CISPR22), CISPR16-1

EMC (Immunity): IEC61326-1:1997  
 IEC 61000-4-2 8 kV (air) perf. criteria B,  
 IEC 61000-4-3 3 V/m perf. criteria A,  
 IEC 61000-4-4 0,5 kV perf. criteria B  
 IEC 61000-4-5 1 kV perf. criteria B  
 IEC 61000-4-6 3 V perf. criteria A  
 IEC 61000-4-8 Level 4, 30A/m perf. criteria A

Quality system: developed, designed and manufactured according to DIN ISO 9001

External voltage: Max. U<sub>ext</sub> = 24 V (AC + DC), measurement inhibited for higher values

U<sub>ext</sub> rejection: >120dB (16<sup>2</sup>/3, 50, 60, 400Hz)

Measuring time: typical 6 sec

Max. overload: 250 Vrms

Auxiliary power: 6 x 1,5 V mignon cells alkali-manganese (type AA LR6)

Battery life span: typical > 3000 measurements

Dimensions: 240 x 180 x 110 mm

Weight: 1,1 kg (including batteries)

### R<sub>A</sub> 3-pole ground resistance measurement (IEC 1557-5)

Range	Intrinsic error	Operating error
0 Ω ... 20 kΩ	±(2% of rdg + 3 dig)	±(5% of rdg + 3 dig)

Measuring principle: Current/voltage

Measuring voltage: U<sub>m</sub> = 48 Vac.

Short-circuit current: > 50 mA

Meas. frequency: 128 Hz (125 Hz on request)

Probe resistance (R<sub>s</sub>): max. 100 kΩ

Auxiliary earth electrode resistance (R<sub>h</sub>): max. 100 kΩ

Monitoring of R<sub>s</sub> and R<sub>h</sub> with error indicator.

Automatic range selection.

### R<sub>A</sub> 4-pole ground resistance measurement (IEC 1557-5)

Range	Intrinsic error	Operating error
0 Ω ... 20 kΩ	±(2% of rdg + 3 dig)	±(5% of rdg + 3 dig)

Measuring principle: Current/voltage

Measuring voltage: U<sub>m</sub> = 48 Vac.

Short-circuit current: > 50 mA

Measuring frequency: 128 Hz (125 Hz on request)

Probe resistance (R<sub>s</sub>+ Res): max. 100 kΩ

Auxiliary earth electrode resistance (R<sub>h</sub>): max. 100 kΩ

Monitoring of R<sub>s</sub> and R<sub>h</sub> with error indicator.

Automatic range selection.

### Soil resistivity measurement (ρ)

Range	Intrinsic error	Operating error
0 Ωm...100 kΩm	±(2% of rdg + 3 dig)	±(5% of rdg + 3 dig)

Measuring principle: Current/voltage

Measuring voltage: U<sub>m</sub> = 48 Vac.

Short-circuit current: > 50 mA

Measuring frequency: 128 Hz (125 Hz on request)

Probe resistance (R<sub>s</sub>): max. 100 kΩ

Auxiliary earth electrode resistance (R<sub>h</sub>): max. 100 kΩ

Monitoring of R<sub>s</sub> and R<sub>h</sub> with error indicator.

Automatic range selection.

Note: Measurement specifications relate to a stake distances of 4 m!