

ADVANCED PORTABLE RESISTIVITY METER

McOHM EL3i



<Abstract>

The McOHM EL3i is an advanced portable resistivity meter that can be applied to both surface electrical resistivity survey and borehole logging (Resistivity, Temperature & Caliper).

It can be utilized with 4-electrode arrays for the surface electrical resistivity surveys. Also, it can be used as an earth ground tester by 3-electrode measurements.

A color 10.1 inch LCD tablet, a powerful transmitter (maximum 400 V, 120 mA), and a high-performance potential measurement parts are all stored in one compact case, giving this instrument superior operability and portability.

<Features>

- Available for both Electrical resistivity survey and Borehole logging.
- Equipped with a color 10.1 inch LCD tablet.
- Easy data copy through USB ports (USB 3.0 x 3 ports).
- Powerful transmitter (maximum 400 V, 120 mA), Pre-amplifier with high input resistance of up to 10 M Ω , 24 bit A/D converter & High-performance receiver (1 μ V resolution).
- Up to 1000 mA is possible when used with a Power Booster.
- Data format is CSV which can be edited easily on PC.

< Specifications >

(1) Resistivity Survey

Maximum Transmitting Voltage	: 400 V (800 Vp-p) [Logging : 60 V (120 Vp-p)]
Cycle Time	: 2, 3, 4 seconds
Transmitting Current	: 1, 2, 20, 60, 120 mA (constant current) 250, 500, 750, 1,000 mA (400 Vp-p) are possible with Power Booster
Potential measuring Range	: ± 5 V
Resolution	: 1 μ V (24 bit Delta Sigma A/D converter)
Applicable allocation of electrodes	: Schlumberger, Wenner, Dipole-Dipole

(2) Borehole Logging

- Normal Resistivity Logging

Applied probe	: Normal probe (Model-3174)
Measurement items	: Normal Resistivity (Electrode spacing : 25, 50, 100 cm), SP
Measuring Range	: Resistivity 0 - 20 K Ω m, SP ± 2 V
Transmitting Current	: 1, 2, 20, 60 mA (constant current)
Conducting cycle	: 20 Hz

- Temperature logging

Applied probe	: Temperature probe (Model-3571)
Measurement range	: 0 - 70 $^{\circ}$ C

- Caliper logging

Applied probe	: Caliper probe (Model-3973)
Measuring Range	: 50 - 100 mm (Option : 300 mm)

System

OS	: Windows 10 Pro, 64 bit
Display	: 10.1", IPS liquid-crystal (1,920 x 1,200 pixel) with touch screen
Internal storage device	: SSD 128 GB
Interface	: USB 3.0 \times 3 ports
Operating Voltage	: 12 VDC (10.8 : 13.2 V : External battery)
Operating Temperature	: -5 - 45 $^{\circ}$ C
Dimensions	: 178 mm (H) x 376 mm (W) x 475 mm (L)
Weight	: 9 kg



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Please note specifications are subject to change without notice for the improvement.



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