

MEG-432

Earth Resistance Meter (4poles)











Overview:

MEG-432 is the ultimate tool for measuring the resistivity of soil and the resistance of the earth electrodes.

The wide range of the measurement combined with being easy to operate, made the device an ideal and reliable meter for wherever earth resistance testing is required.

The MEG-432 is widely used in different fields of industry Including: Power transmission lines developing, constructions, factory plants, etc. and also in educational institutes.

Features:

- 4poles earth resistance measurement 0 to 209.9k $\!\Omega$ with min. resolution 0.001Ω
- Auto ranging soil resistivity measurement 0 to 1999k Ωm
- Series interference voltage Ust (AC only) 0~50.9Vrms
- Measures frequency 400~500Hz
- Measuring Voltage Um optional/auto-selected 10Vrms 94Hz, 105Hz, 111Hz, 128Hz
- Test current maximum 10mA
- Advance filtering method based on FFT (fast Fourier transform) reduces noise interference
- Compensation for residual resistance Rk
- Data Memory 1000 sets
- Conforms to CATIV 150V, CATIII 300V





Parameter	Values		
	Selector	Range	Resolution
Earth Resistance	2Ω	$0.05\Omega - 2.099\Omega$	0.001Ω
	20Ω	$0.05\Omega - 20.99\Omega$	0.01Ω
	200Ω	$0.3\Omega - 209.9\Omega$	0.1Ω
	2000Ω	$3\Omega - 2099\Omega$	1Ω
	20kΩ	$0.03k\Omega - 20.99k\Omega$	10Ω
	200kΩ	$0.03k\Omega - 209.9k\Omega$	100Ω
Accuracy	$2\Omega \pm (3\% \text{rdg} \pm 0.03\Omega)$ [1] $20/200/2000/20K\Omega/200k\Omega \pm (3\% \text{rdg} \pm 5\text{dgt})$		
Auxiliary earth resistance Rh, Rs	8%of Re+Rh+Rs		
	Selector	ctor Resolution	
Soil Resistivity p=2*n*a*Rg [2]	2Ω 20Ω 200Ω 2000Ω 20kΩ 200kΩ	$0.3 - 395.4\Omega.m$ $0.3 - 3954\Omega.m$ $0.003 - 39.54K\Omega.m$ $0.03k - 395.4k\Omega.m$ $0.3k - 1999k\Omega.m$ $0.3k - 1999k\Omega.m$	
Series interference voltage Ust (A.C only) [3]	Range	Accuracy	Resolution
	0 — 30 Vrms	± (2%rdg± 2dgt) (50/60Hz) ± (3%rdg± 2dgt) (40/500Hz)	0.1v
	0 — 50.9Vrms	± (2%rdg± 2dgt) (50/60Hz) ± (3%rdg± 2dgt) (40/500Hz)	0.1v
Frequency of Ust	40 — 500 Hz	± (1%rdg± 2dgt)	0.5Hz
Measuring Current Im	max. 80mA		
Measuring Voltage Um	10Vrms 94,105,111,128Hz		
Compensation of Lead Resistance Rk	max. 2Ω max. 9Ω		
Memory capacity	1000 groups		
LCD	Dot-matrix 192x64 monochrome		
Power	AA 1.5V* 8		
Dimension	190*155*75mm		
Weight	900g		
Safety	IEC 61010-1 CAT.III 300V, CAT.IV 150V, Pollution degree 2, IEC 61010-031, IEC 61557-1,5, IEC 61326-1(EMC)		

- [1] Auxiliary earth resistance is 100Ω with RK correction.
- [2] Depending on the measured RK, interval [a] between auxiliary earth spikes is 1.0-30.0m.
- [3] This instrument is NOT designed to measure line voltages on the commercial powers.