

M71 - GEO416 INSTRUMENTS FOR MEASURING EARTH RESISTANCE AND GROUND RESISTIVITY

Models **M71** and **GEO416** are innovative instruments for measuring ground resistance with 2-wire and 3-wire methods and ground resistivity (*only GEO416*) with 4-wire method in compliance with reference standards. The instruments allow carrying out measurements with a wide measuring range (50kΩ) and an efficient internal compensation of the disturbance effects present on systems. Model **GEO416**, differently from model **M71**, allows storing each measurement result in its own internal memory and to download the saved data with the aid of the dedicated software.

FUNCTIONS	M71	GEO416
2-wire earth measurement	•	•
3-wire earth measurement	•	•
Measuring range	0.01Ω - 50kΩ	0.01Ω - 50kΩ
4-wire method ground resistivity		•
Compensation of disturbance voltages	•	•
Compensation of test cables	•	•
Storage of results		•
Optical/USB interface for connection to PC		•
Safety	EN61010-1	EN61010-1
Measurement category	CAT III 240V	CAT III 265V
Power supply	4x1.5V Type AA	6x1.5V Type AA
Size (LxWxH) mm	240x100x45	222x162x57
Weight (with batteries)	630g	1kg

ACCESSORIES	Code
Standard	
- Set of 3 cables + 3 alligator clips 2 metal probes (<i>only M71</i>)	KIT0071
- Set of 4 cables + 4 metal probes (<i>only GEO416</i>)	KITERRNE
- Set of 4 alligator clips (<i>only GEO416</i>)	COC4-UK
- Carrying bag (<i>only M71</i>)	SP-6085
- Carrying bag (<i>only GEO416</i>)	BORSA2000N
- ISO9000 calibration certificate	
- User manual on CD-ROM (<i>only M71</i>)	
- Quick reference guide (<i>only M71</i>)	
Optional	
- PC Windows software + optical / USB cable (<i>only GEO416</i>)	TOPVIEW2006


 จัดจำหน่ายโดย : บริษัท เอฟเวอร์เทค จำกัด
 TEL : (02)8702884-5, (02)4289793-5
 Email: sales@evertech.co.th
 www.evertech.co.th



M71
HV000071



NEW
GEO416
HV000416



1. ELECTRICAL SPECIFICATIONS (*)

Accuracy in indicated as \pm (% of reading + number of digits) at $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$; $<60\%HR$

Earth Resistance 3-wire and 2-wire systems

Range (Ω)	Resolution (Ω)	Accuracy
0.01 ÷ 19.99	0.01	$\pm(2.5\%rdg + 2dgt)$
20.0 ÷ 199.9	0.1	
200 ÷ 1999	1	
2.00 ÷ 19.99k	0.01k	
20.0 ÷ 49.9k	0.1k	

Test current: $\leq 12\text{mAAC}$
 Open circuit voltage: $\leq 25\text{V ACTRMS}$
 Test frequency: $77.5\text{Hz} \pm 1\text{Hz}$
 Rprobes: $\leq 50\text{k}\Omega$

Earth Resistivity ρ with 4-wire method

Range (Ωm)	Resolution (Ωm)	Accuracy
0.06 ÷ 19.99	0.01	$\pm(2.5\%rdg + 2dgt)$
20.0 ÷ 199.9	0.1	
200 ÷ 1999	1	
2.00 ÷ 19.99k	0.01k	
20.0 ÷ 199.9k	0.1k	
0.20 ÷ 3.15M	0.01M	

Test current: $\leq 12\text{mAAC}$
 Open circuit voltage: $\leq 25\text{V ACTRMS}$
 Test frequency: $77.5\text{Hz} \pm 1\text{Hz}$
 Probe distance range: $1 \div 10\text{m}$
 Rprobes: $\leq 50\text{k}\Omega$

Noise Voltages

Range (V)	Resolution (V)	Accuracy
460	1	$\pm(2.0\%rdg + 2dgt)$



จัดจำหน่ายโดย : บริษัท เอฟเวอร์เทค จำกัด
 TEL : (02)8702884-5, (02)4289793-5
 Email: sales@evertech.co.th
 www.evertech.co.th




2. GENERAL SPECIFICATIONS

DISPLAY, MEMORY, SERIAL INTERFACE:

Features:	Custom LCD with backlight
Visible area:	73x65 mm
Memory:	999 locations
Serial interface:	RS-232 /USB

POWER SUPPLY:

Batteries:	6 batteries 1.5V type LR6-AA-AM3-MN 1500
Low batteries indications:	"  "
Batteries life:	about 500 test

MECHANICAL FEATURES:

Dimensions:	222 (W) x 162(L) x 57(D) mm
Weight (included batteries):	about 1kg

WORKING ENVIRONMENTAL CONDITIONS:

Reference temperature:	23°C ± 5°C
Working temperature:	0° ÷ 40°C
Allowed relative humidity:	<80%HR
Storage temperature:	-10 ÷ 60°C
Storage humidity:	<80%HR

GENERAL REFERENCE STANDARDS:

Safety of measuring instruments:	IEC / EN61010-1
Safety of accessories:	IEC / EN61010-031
Product type standard:	IEC / EN61557-1, IEC / EN61557-5
Insulation:	double insulation
Pollution degree:	2
Overvoltage category:	CAT III 240V to ground, 415V between inputs
Max altitude:	2000m
EMC:	EN61326-1(1998) + A1(1999)

This instrument complies with the requirements of the European Low Voltage Directives 2006/95/CEE (LVD) and EMC 2004/108/CE