



GEO416

Professional meter for Earth Resistance measurements

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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 \div 19.99	0.01	$\pm(2.5\%rdg + 2dgt)$
20.0 \div 199.9	0.1	
200 \div 1999	1	
2.00 \div 19.99k	0.01k	
20.0 \div 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 \div 19.99	0.01	$\pm(2.5\%rdg + 2dgt)$
20.0 \div 199.9	0.1	
200 \div 1999	1	
2.00 \div 19.99k	0.01k	
20.0 \div 199.9k	0.1k	
0.20 \div 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	$\pm(2.0\%rdg + 2dgt)$



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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