

# GEO416

Rel. 1.01 of 16/10/07

**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°C  $\pm$  5°C ; <60%HR

### Earth Resistance 3-wire and 2-wire systems

Range ( $\Omega$ )	Resolution ( $\Omega$ )	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:  $\leq 12mAAC$   
 Open circuit voltage:  $\leq 25V ACTRMS$   
 Test frequency: 77.5Hz  $\pm$  1Hz  
 Rprobes:  $\leq 50k\Omega$

### Earth Resistivity $\rho$ with 4-wire method

Range ( $\Omega m$ )	Resolution ( $\Omega m$ )	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:  $\leq 12mAAC$   
 Open circuit voltage:  $\leq 25V ACTRMS$   
 Test frequency: 77.5Hz  $\pm$  1Hz  
 Probe distance range: 1 $\div$ 10m  
 Rprobes:  $\leq 50k\Omega$

### Noise Voltages


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

## 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**