

Compact Earth Tester

HANDY GEO

- Three pole earth tester
- Two pole resistance measure
- Measurement in accordance with EN61557-5
- Single button operation
- Protective rubber holster
- 128 Hz test frequency
- Alarm limit settings
- Backlit display
- Automatic power down
- Measurement of R_H and R_S



General

Measuring System

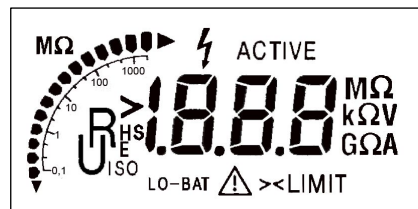
The Handy GEO is a simple to use earth tester. Its compact size and rugged holster make it an ideal field earth tester.

The large clear LC display provides high visibility results in daylight or poor light conditions.

The Handy GEO is supplied in a number of configurations from the basic version with simple accessories to the fully equipped three-pole measurement kit.

General technical data

Display: 3½-digit (1999) 7 segment-liquid-crystal-Display, 16mm high, 16-division analog scale with Overload-, Underload and special symbols display, switchable display illumination



Climate class:	KGW as per DIN VDE 40040
Working temperature range:	-10° C ... +50° C
Operating temp. range:	0° C ... +30° C
Reference temp. range:	23° C (±2° C)
Storage temp. range:	-20° C ... +60° C
Safety class:	Complies with safety class II
Max. voltage relative to earth	IEC 1010-1: max. 600V specified to IEC 1010 part 1 (inst. CAT II, pollution degree 2)
Safety class:	IP 40 as per DIN VDE 40050
Batterytype:	Alkaline 9 V IEC 6LR61
Intrinsic error:	refers to the reference temperature range and is guaranteed for 3 years
Operating measurement considers influence of operating deviation:	temperature.
Position and supply voltage have no influence.	



Dimensions and Weights

Dimensions: 113 (W) x 54 (D) x 216 (L) mm
Weight: Basic unit with accessories 990 Gram

Measurement of earthing resistance (RE 3-pole)

Measuring method: Current and voltage measurement as per IEC 61557-5
Open circuit voltage: <25 V AC
Short circuit current: >50 mA AC
Measuring frequency: 128 Hz, noise voltage suppression at 16 2/3 Hz, 50 Hz and 60 Hz >80 dB

Range	Resolution	Display	Intrinsic error	Operat.meas. deviation
0.15...20 Ω	0.01 Ω	0...19.99 Ω	$\pm(6 \% \text{ of mv} + 5D)$	$\pm(8 \% \text{ of mv} + 5D)$
200 Ω	0.1 Ω	20,0...199.9 Ω		
2000 Ω	1 Ω	200...1999 Ω		

RH- and RS-measuring range fix 200 k Ω . Automatic switch-over of the resolution (display range), dependent on RH, automatic test of resistances probe with warning at measuring deviations >30%.

Measurement of resistance (RE 2-pole)

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Measurement noise voltage (AC / DC)

Mean value rectification at AC calibrated for RMS-display for sinewave, displayed is value for AC or DC whichever is greater.

Range	Resolution	Display	Intrinsic error
1...30 V	0.1 V	0...30.0 V	$\pm(10 \% \text{ of mv} + 5D)$

U_{max}: 30 V_{eff}
Max. overload: between earth, auxiliary earth and probe 250 V_{eff}
Input resistance: approx. 1 M Ω
Common mode rejection/CMR: >80 dB at 50 Hz and 60 Hz

Scope of Delivery and Accessories

Handy GEO

Description	Order No.
Handy GEO (Basic Unit) Accessories supplied: 1 protective cover + carrying belt + 2 hooks 1 Operating instruction English / German / French 1 Battery, Alkaline 9V IEC 6LR61	A 1885 03110
Handy GEO (Set 1) Accessories supplied: 1 protective cover + carrying belt + 2 hooks 1 Operating instruction Engl. / Germ. / French 1 Battery, Alkaline 9V IEC 6LR61 1 carrying case with 2 earth/ground spikes 1 reel (25 m lead) and 1 reel (50 m lead) 2 measuring leads 1.5 m; 2 alligator clips	A 1885 03111
Accuset for Handy ISO / GEO accu with plug in power supply	A 6403 03111/AT
Carrying Case for Handy GEO with 2 earth/ground spikes, 1 reel (25m lead), 1 reel (50m lead), 2 measuring leads 1.5m, 2 alligator clips	A 6030 03100

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