



GPS

ERT-40



Specially designed and manufactured for earth testing by adopting the latest digital and micro-processing technology and importing FFT and AFC technology

With a unique anti-interference capability and the ability to adapt to the environment, the ERT-40 produces consistency in repeat testing to ensure highly stable, precise and reliable prolonged measurements in earth resistance, soil resistivity, earth voltage and AC voltage. The ERT-40 kit consists of host machine, monitoring software, testing and communication wires and auxiliary ground pillars. The large LCD display of the host machine integrates a blue backlight and a bar graph indicator for a clear and easy-to-read screen. At the same time, it can store 300 sets of data, fulfilling historical enquiries and online real-time monitoring requirements with the included software,

Key Features

- 2/3/4-wires measurement of earth resistance, soil resistivity and earth voltage
- Anti-interference testing ability and repeated measurement stability – for precision analysis
- New body material; stands hits, avoids slipping, solid and durable
- Data upload with RS232 – storage data can be uploaded, saved and printed
- Alarm indicator
- Large LCD display with blue backlight
- Data memory: 300 sets

Application

- Electric power
- Telecommunications
- Meteorology
- Oil Field
- Construction
- Lightning protection
- Industrial electrical equipment

Technical Specifications

Model	ERT-40
Measuring Mode	Precise 4-pole measurement, 3-pole measurement, simple 2-pole measurement
Measuring Method	Earth Resistance: rated current change-pole method, measurement current 20mA Max Soil Resistivity: 4-pole measurement (Wenner method) Earth Voltage: average rectification (between P(S)-ES)
Earth Resistance	Range: 0.00Ω - 30.00kΩ, Resolution: 0.01Ω, Accuracy: ±1%rdg ±3dgt
Soil Resistivity	Range: 0.00Ω m- 9000kΩ m, Resolution: 0.01Ω m
Earth Voltage	Range: 0V - 600V AC, Resolution: 1V, Accuracy: ±1%rdg ±3dgt
Test Frequency	128Hz/111Hz/105Hz/94Hz (AFC)
Measuring Rate	Earth voltage: about 3 times/second, Earth Resistance and Soil Resistivity: about 5 times/second
Measuring Times	Over 5000 times (for short-circuit test, interval time should be at least 30 seconds)
Line Voltage	Below AC 600V
Data Storage/Hold/Access	300 sets, "MEM", "FULL", "HOLD", "READ" icon display indicator
Overflow Display	Exceeding measuring range overflow function: "OL" icon display
Auxiliary Earthing Test	Can measure auxiliary earth resistance, 0.00kΩ - 30kΩ (100R+rC<50kΩ, 100R+rP<50kΩ)
Overload Protection	Measuring earth resistance: between each interfaces of C(H)-E, P(S)-ES, AC 280V/3 seconds
Standard Test wire	4 wires: red 20m, black 20m, yellow 10m and green 10m
Simple Test Wire	2 wires: red 1.6m and black 1.6m
Auxiliary Earthing Rod	4 rods: diameter 10mm x 150mm

Standard Accessories

Auxiliary Earthing rod - 4pcs
Standard testing wire - 4pcs
Simple testing wire - 2pcs
RS232 cable
Software
Carrying Case

Power

DC 9V (Zi-Mn dry battery R14S 1.5V 6pcs)
Continuous standby for 300 hours

Insulation Resistance

Over 20MΩ (500V between circuit and enclosure)

Withstanding Voltage

AC3700V/rms (between circuit and enclosure)

EMC

IEC61326

Safety & Protection

IEC61010-1 (CAT III 300V, CAT IV 150V, Pollution 2)
IEC61010-031
IEC61557-1 (Earth Resistance)
IEC61557-5 (Soil Resistivity)
JJG 366-2004

General Specifications

Part Numbers / Optional Accessories		
Code	Item	Part Number
GPS-ERT-40	Digital Earth Resistance Tester	800240

Dimensions

215 x 190 x 95mm / 8.5 x 7.5 x 3.5" (w x d x h) approx.

Mass

4.5kg/9.2lbs approx.

Operating

-10°C to 40°C
Below 80% relative humidity

Services

1-year warranty (subject to product registration with GPS Ltd)

Visit www.gpslimited.com/register-product

Service and calibration available.

Please contact for more information

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