

## Earth Resistance / Soil Resistivity Tester PRO ERT-1602

### PRODUCT FUNCTION

The Pro ERT-1602 features precision 4-wire, 3-wire and simple 2-wire measurement methods to measure Earth Resistance, Soil Resistivity, Earth Voltage and AC Voltage.

This Earth Resistance Soil Resistivity Tester comprises of host machine, monitoring software, test wires, auxiliary ground rod and communication cable.

It can store up to 300 sets of data simultaneously, through the monitoring software to document and analyse historical data.

It also offers online real-time monitoring functions, dynamic display, alarm indication with historical data reading, accessing, saving, reporting, printing and other functions.



### PRODUCT FEATURES

- Import FFT (fast Fourier transform) technology, AFC (automatic frequency control) technology, with unique anti-interference ability and environmental adaptability ensure high repeated test consistency.
- The large LCD display, white backlight and bar graph make the readings clear at a glance.
- Features USB interface with data upload function; storage data can be uploaded to the computer and can be saved and printed.
- Audio-visual Alarm and Overload Protection.

### GENERAL SPECIFICATIONS

Earth Resistance(R)	Range: 0.00Ω~30.00Ω	Resolution: 0.01Ω	Accuracy: ±2%rdg±3dgt
	Range: 30.0Ω~300.0Ω	Resolution: 0.1Ω	Accuracy :±2%rdg±3dgt
	Range: 300Ω~3000Ω	Resolution: 1Ω	Accuracy: ±2%rdg±3dgt
	Range: 3.00kΩ~30.00kΩ	Resolution: 10Ω	Accuracy: ±4%rdg±3dgt
Earth Voltage	Range: 0.0~600V AC	Resolution: 0.1V	Accuracy: ±2%rdg±3dgt
Soil Resistivity (ρ) ( $\rho=2\pi aR$ , a:1 m-100m, $\pi=3.14$ )	Range: 0.00Ωm~99.99Ωm	Resolution: 0.01Ωm	According to the precision of R
	Range: 100.0Ωm~999.9Ωm	Resolution: 0.1Ωm	
	Range: 1000Ωm~9999Ωm	Resolution: 1Ωm	
	Range: 10.00kΩm~99.99kΩm	Resolution: 10Ωm	
	Range: 100.0kΩm~999.9kΩm	Resolution: 100Ωm	
	Range: 1000kΩm~9000kΩm	Resolution: 1kΩm	

## Earth Resistance / Soil Resistivity Tester PRO ERT-1602

Measuring Method	Earth Resistance: Rated current change-pole method, measurement current 20mA Max		
	Soil Resistivity: Wenner 4-pole measurement; Voltage to Earth: Average rectifier		
	Earth Voltage: Average rectification (between P(S)-ES)		
Test Frequency	128Hz / 111Hz / 105Hz / 94Hz (AFC)		
Short-circuit Test Current	AC 20mA max	Open-circuit Test Voltage	AC 40V max
Data Storage	300 groups	Test Voltage Wave	Sine wave
Electrode Distance Range	Can be set 1m-100m	Weight	4.5kg (with package)
Data Access	Data read function: "READ" symbol display		
Data Hold	Data hold function: "HOLD" symbol display		
Overflow Indication	Exceed measurement range overflow function: "OL" symbol display		
LCD Dimension	LCD Frame Dimension:128mm×75mm; LCD Window Dimension: 124mm×67mm		
Tester Dimension	212mm(L) × 175mm(W) × 76mm(H)		
Testing Wires	Red 20m, Black 20m, Yellow 10m, Green 10m, Red 1.6m, Black 1.6m (Total 6pcs)		
Auxiliary Earth Rod	4 PCS: Φ10mm×150mm		
USB Interface	If measured value exceeds set alarm value, alarm goes "toot-toot-toot".		
Alarm Function	Measuring value exceeds alarm setting value, will "Toot-toot-toot" alarm hint		
Auto Power-off	15 Minutes after power on, will automatic power off without any operation		
Overload Protection	Earth Resistance: between each interfaces of C(H)-E, P(S)-ES, AC 280V/3 seconds		
Interference Test	Automatic recognition of interference signal, interference voltage higher than 5V will display " ))) " symbol		
Auxiliary Earth Test	With auxiliary earth resistance test function: 0.00KΩ-30kΩ (100R+rC<50kΩ, 100R+rP<50kΩ)		
Line Voltage	Measure voltage to ground, AC voltage: AC 600V Max		
Battery Voltage	While battery voltage decreases to around 7.5V, will display low battery voltage symbol "  ", and remind to replace the battery		
Working Current	System Standby: around 20mA (Backlight shut off); Power on: 45mA (backlight shut off at 25mA); Measurement:100mA (Backlight shut off)		
Accessories	Meter, 4 Earth Rods, 4 Standard Test Wires (Red 20m; Yellow: 10m; Green: 10m; Black:20m), 2 Simple Test Wires (Red 1.6m; Black 1.6m), Special USB Communication Cable, Software CD, Hard Carrying Case, User Manual		
Withstand Voltage	Over 20MΩ (between circuit and enclosure it is 500V)		
Electromagnetic Features	IEC61326 (EMC)		
Suitable Safety Standard	IEC61010-1 (CAT III 300V, CAT IV 150V, Pollution 2), IEC61010-031, IEC61557-1 (Earth resistance), IEC61557-5 (Soil resistivity), JJG 366-2004		
Power	DC 9V (Alkaline dry battery R14S 1.5V 6 PCS, continuous standby for 300 hours)		
Weight	Meter 950g, Test Wires 1560gms, Auxilliary Ground Rods (4 nos) 935g		
Working Temperature & Humidity	-10°C-40°C, below 80%RH		
Storage Temperature & Humidity	-20°C-60°C, below 70%RH		

