

Product Function

Precision 4-wire method, 3-wire method and simple 2-wire method earth resistance measurement, soil resistivity measurement, earth voltage measurement.


Product features

1. Import FFT (fast fourier transform) technology, AFC (automatic frequency control) technology, with unique anti-interference ability and environment adaptability, with strong retest consistency.
2. The host equip with large LCD display, with white backlight and bar graph indication, clear and obvious.
3. Equip with USB interface, data upload function, storage data can upload to computer save and print.
4. Audible and visual alarm and overload protection function.



Technical Specification

| Model | ETCR3000B Earth Resistance/ Soil Resistivity Tester | | |
|--------------------------|--|---------------------------|---|
| 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) | Range:0.00Ωm~99.99Ωm | Resolution:0.01Ωm | According to the precision of R (ρ=2πaR, a:1 m-100m, π=3.14) |
| | 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 | | |
| Power Supply | DC 9V (Alkaline dry battery LR14 1.5VX6PCS) | | |
| Measurement Method | Earth Resistance: rated current change-pole method, measurement current 20mA Max Soil Resistivity: Wenner 4-pole measurement; Voltage to earth: Average rectifier | | |
| Test Frequency | 128Hz/111Hz/105Hz/94Hz(AFC) | | |
| Test Voltage Wave | Sine wave | | |
| Test Current | >20mA(Sine wave) | Open-circuit Test Voltage | AC 40V max |
| Data Storage | 300 groups | Data Hold | "HOLD" symbol indication |
| Data Access | "READ" symbol indication | Overflow Indication | Over range overflow "OL" symbol indication |
| Electrode Distance Range | Can be set 1m~100m | | |
| LCD Dimension | LCD dimension:128mmX75mm; LCD display area: 124mmX67mm | | |
| Tester Dimension | 215mm(L)X178mm(W)X83mm(H) | | |
| Weight | 4.5kg(include accessories and package) | | |
| Test Line | Red 20m, black 20m, yellow 10m, green 10m, red 1.6m, black 1.6m (total 6PCS) | | |
| Auxiliary Ground Stake | 4 PCS: Φ9mm×230mm | | |
| USB Interface | Equip with USB interface, software supervision, storage data can be uploaded to computer, saved and printed; Communication cable length:1.5m | | |
| Alarm Function | The measured value exceeds alarm setting value, "Du--du--du" alarm sound | | |
| Automatic Shutdown | 15 minutes without any operation after starting up, the tester will shutdown automatically | | |
| Overload Protection | Earth resistance: between each terminals of C(H)-E、P(S)-ES, AC 280V/3 seconds | | |
| Interference Test | Automatic identify the interference signal, interference voltage higher than 5V will display "NOISE" symbol | | |

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| Auxiliary Earth Test | With auxiliary earth resistance test function: $0.00\text{K}\Omega\text{-}30\text{k}\Omega(100\text{R}+\text{rC}<50\text{k}\Omega, 100\text{R}+\text{rP}<50\text{k}\Omega)$ |
| Line Voltage | Measure voltage to earth: AC 600V Max |
| Battery Voltage | While battery voltage drop to around 7.5V, low battery voltage symbol "  " will display, and remind to replace the battery |
| Working Current | Standby: around 20mA (Backlight off);Power on: 45mA(backlight off 25mA);Measurement:100mA (Backlight off) |
| Accessories | Tester:1PC; Ground stake: 4PCS; Test line:4PCS; Simple test line:2PCS; USB special communication cable:1PCS; Tester case:1PC |