

UNI-T®

UT512D/UT512E 2.5kV Insulation Resistance Testers

UT512D/UT512E is digital high-voltage insulation resistance tester, designed with multiple ranges including 250V, 500V, 1000V, 2500V. It is an ideal measurement meter for electric power, telecommunication, meteorology, machine room, oil field, electromechanical installation and maintenance, and power supply department of Industry and mining enterprise.

Main features:

- Output voltage range: Up to 2.5KV
- PI/DAR measurement
- Short circuit current measurement
- Automatic leakage current display
- Stepping voltage: 10% of the range
- High voltage alarm
- Automatic discharge
- Data storage: 999 set
- PC software analysis: via USB cable
- Overvoltage category: CAT IV 600V



UT512D



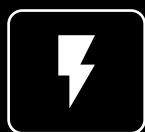
UT512E



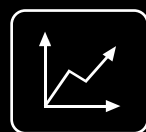
Comparison
function



Anti-Misplug
(UT512E only)



Auto
discharge



PC software
analysis



Lithium battery
(UT512E only)

Technical Specifications

| Rated voltage | UT512D | UT512E | Accuracy |
|--------------------------------|---|---------------|---|
| 250V | <0.25MΩ | <0.25MΩ | reference only |
| | 0.25MΩ~4.99GΩ | 0.25MΩ~4.99GΩ | ±(5%+5) |
| | 5.00GΩ~24.9GΩ | 5.00GΩ~49.9GΩ | ±(20%+10) |
| | 25.0GΩ~100GΩ | 50.0GΩ~250GΩ | reference only |
| 500V | <0.50MΩ | <0.50MΩ | reference only |
| | 0.50MΩ~9.99GΩ | 0.50MΩ~9.99GΩ | ±(5%+5) |
| | 10.0GΩ~49.9GΩ | 10.0GΩ~99.9GΩ | ±(20%+10) |
| | 50.0GΩ~200GΩ | 100GΩ~500GΩ | reference only |
| 1000V | <1.00MΩ | <1.00MΩ | reference only |
| | 1.00MΩ~19.9GΩ | 1.00MΩ~19.9GΩ | ±(5%+5) |
| | 20.0GΩ~99.9GΩ | 20.0GΩ~199GΩ | ±(20%+10) |
| | 100GΩ~400GΩ | 200GΩ~1.00TΩ | reference only |
| 2500V | <2.50MΩ | <2.50MΩ | reference only |
| | 2.50MΩ~49.9GΩ | 2.50MΩ~49.9GΩ | ±(5%+5) |
| | 50.0GΩ~249GΩ | 50.0GΩ~499GΩ | ±(20%+10) |
| | 250GΩ~1.00TΩ | 500GΩ~2.50TΩ | reference only |
| Capacitance test | NA | 0.01uF~2.0uF | ±(15%+3) |
| Low resistor test | NA | 0.1Ω~600Ω | ±(2%+10) |
| Output voltage (Rating) | stepping voltage range | | Step by 10% of each range each time, and adjust the voltage range to 50%~120% of each range; Display accuracy: ±(10% read+10V) Output accuracy: ±(0%~20%) |
| 250V | 350V, 275V, 300V | | |
| 500V | 300V, 350V, 400V, 450V, 500V, 550V, 600V | | |
| 1000V | 500V, 600V, 700V, 800V, 900V, 1000V, 1100V, 1200V | | |
| 2500V | 1250V, 1500V, 1750V, 2000V, 2250V, 2500V | | |
| DC voltage | 30~1000VDC | | ±(3%+5) |
| AC voltage | 30~750VAC 50Hz/60Hz | | ±(3%+5) |
| Current | 0.01nA~3.5mA | 0.01nA~5mA | |
| Short-circuit current | about 3.5mA | about 5mA | |
| Features | | | |
| PI test | automatic display | | |
| DAR test | automatic display | | |
| Timing measurement | √ | | |
| Resistance comparison | √ | | |
| Monitoring function | Monitor the voltage of measured object and the discharge state after testing. If voltage is higher than 36V, it is forbidden to test for protecting the tester and the operator | | |
| Timer testing | Record testing time automatically. Timing range: 0s~99m and 59s | | |
| Storage function | 999 sets | | |
| Data transmission | Upload testing data to computer via USB cable. | | |
| Low battery indication | √ | | |
| Auto power off | N/A | | |
| Dimensions | 238 x 166 x 90.5mm | | |
| CAT rating | CAT IV 600V | | |
| General Characteristics | | | |
| Power supply | 8 x LR14 Alkaline battery | UT512D | |
| | 14.8V,5200mAh lithium battery | UT512E | |
| Product color | Black+Red | | |
| Product weight | About 1800g (including battery) | | |
| Accessories | User manual 1 pc; Test lead (red, black, green: 1 for each) 3 pcs; USB cable 1 pc; Lithium battery charger (Output: 16.8Vdc, 2A) 1 pc (UT512E only); Lithium battery pack (14.8V, 5200mAh) 1 pc (UT512E only); Adapting charging stand (optional, model: UT-W12, for UT512E only); 8 PCS LR14 alkaline batteries (UT512D); Carrying strap 1pc | | |
| Standard package | case + carton | | |
| Package quantity | 1pcs | | |
| Package size | 238 x 166 x 90.5mm (L x W x D) | | |