

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)		