


Insulation Resistance Tester Model Selection

Models	UT505A/UT505B	UT501A/UT501B/UT502A	UT511/UT512/UT512A/UT513A
Page	122	123	124
			
Test Voltage (V)	1000V	1000V/2500V	1000V/2500V/2500V/5000V
Insulation resistance	20GΩ/200GΩ	5GΩ/5GΩ/20GΩ	10GΩ/100GΩ/100GΩ/ITGΩ
Step voltage	50%-120% in range and 10% of step		
Short-circuit current	<2mA	<2mA	<1.8mA/<1.8mA/-3.5mA
Comparison function	●		●
Polarization index (PI)	●	501B/502A	●
Dielectric absorption ration (DAR)	●	501B/502A	●
Auto discharge	●	●	●
Low resistance	20KΩ/10MΩ	200Ω (501B/502A)	999.9Ω (511)
Display count	6000	2000	10000
True RMS	●		
Auto range	●	●	●
DC voltage	600V		1000V/600V/600V/600V
AC voltage	600V	750V	750V/600V/600V/600V
Resistance	10MΩ (505B)		
Capacitance	500μF (505B)		
Frequency	1kHz (505B)		
USB data transmission			512/512A/513A
Data storage	99		18
High voltage prompt	●	●	●
LCD backlight	●	●	●
Analog bar	●		●
Low battery indication	●	●	●
Overload prompt	●	●	●
Light alarm	●	●	●
Buzzer alarm	●	●	●
Auto power off	●	●	●
Timing measurement	●		
IEC 61557	61557-1:2007, 61557-2:2007, 61557-4:2007	501A: 61557-1:2007, 61557-2:2007 501B/502A: 61557-1:2007, 61557-2:2007, 61557-4:2007	512A/513A: 61557-1:2007, 61557-2:2007
Category ratings	CAT IV 600V	CAT III 600V	CAT III 600V
Certificates	CE, RoHS	CE, RoHS	CE, RoHS

UT505 SERIES

Handheld Insulation Resistance Testers

UT505 series handheld true RMS insulation resistance testers combine features of a digital multimeter and insulation resistance tester. Aside from the typical multimeter functions, these meters can also measure insulation resistance, PI, DAR, and automatically calculate resistance ratio to determine the insulation status. UT505 can be used in insulation resistance testing of precision tools, including motors, cables, transformers, switches, electrical appliances, and insulated materials.

- True RMS/analog bar graph
- DAR/PI/timing measurement
- Comparison measurement
- Auto fuse check (UT505B)
- High voltage output alarm
- Auto discharge
- Continuity buzzer
- 99-group data storage
- Step voltage
- Auto range/auto power off
- LCD backlight/data hold
- Low battery indication



● UT505A

Test Voltage	Insulation resistance (Ω)	UT505A	UT505B
Certificates	CE, RoHS		
50V	0.01MΩ~50MΩ 50MΩ~1GΩ	±(3%+5)	±(3%+3)
100V	1GΩ~10GΩ 0.01MΩ~100MΩ 100MΩ~1GΩ	±(3%+5)	±(10%+3) ±(3%+3) ±(3%+3)
250V	1GΩ~20GΩ 0.01MΩ~200MΩ 200MΩ~1GΩ	±(1.5%+5)	±(10%+3) ±(1.5%+5) ±(1.5%+5)
500V	1GΩ~50GΩ 0.01MΩ~500MΩ 500MΩ~1GΩ	±(1.5%+5)	±(10%+3) ±(1.5%+5) ±(1.5%+5)
1000V	1GΩ~100GΩ 0.1MΩ~2000MΩ 2GΩ~9.9GΩ 10GΩ~20GΩ 20GΩ~200GΩ	±(1.5%+5) ±(10%+3) ±(5%+3) ±(20%+10)	±(10%+3) ±(1.5%+5) ±(5%+3) ±(7%+3) ±(20%+3)
Test voltage accuracy	50V/100V/250V/500V/1000V	0%-10%	0%-20%
Load current	1mA	0%-10%	0%-10%
Short circuit current		<2mA	<2mA
Leakage current (A)	10~2000μA		±(10%+3)
Low resistance (Ω)	0.01Ω~20kΩ (about 5V/>200mA) 0.01Ω~100Ω (about 5V/>200mA/20mA optional)	±(1.5%+3)	±(1.5%+3)
General resistance (Ω)	0.01kΩ~10MΩ		±(3%+3)
DC voltage (V)	0V~600V	±(2%+3)	±(2%+3)
AC voltage (V)	0V~600V	±(2%+3)	±(1.5%+5)
Frequency (Hz)	45~1kHz		±(0.1%+3)
Capacitance (F)	100pF~500μF		±(5%+5)
Display count	6000		
Compliance standard	IEC 61557; 61557-1:2007; 61557-2:2007; 61557-4:2007		
Category ratings	CAT IV 600V		

GENERAL CHARACTERISTICS	
Power	1.5V battery (LR6) x 6
Display	78mm x 59mm
Product net weight	630g
Product size	103mm x 225mm x 59mm
Std. accessories	Batteries, test leads, test probes, alligator clips, English manual
Std. individual packing	Carrying bag, gift box
Std. quantity per carton	5pcs
Std. carton measurement	325mm x 320mm x 205mm
Std. carton gross weight	UT505A: 5.5kg; UT505B: 6.3kg
Optional accessory	Remote test lead