

Insulation Resistance Testers



Models	UT505A	UT505B	UT501A	UT501B	UT501C	UT502A	UT502C
Page	149	149	148	148	146	148	146
							
Test voltage	1000V	1000V	1000V	1000V	1000V	2500V	2500V
Insulation resistance	20GΩ	200GΩ	5GΩ	5GΩ	5GΩ	20GΩ	20GΩ
Step voltage	50%-120% in range and 10% steps	50%-120% in range and 10% steps					
Short-circuit current	<2mA	<2mA	<2mA	<2mA	<2mA	<2mA	<2mA
Comparison function	●	●					
Polarization index (PI)	●	●		●		●	
Dielectric absorption ration (DAR)	●	●		●		●	
Secondary display for current		●					
Auto discharge	●	●	●	●	●	●	●
Low resistance (Continuity)	20kΩ	10MΩ		200Ω		200Ω	
True RMS	●	●					
Auto range	●	●	●	●	●	●	●
DC voltage	600V	600V					
AC voltage	600V	600V	750V	750V	750V	750V	750V
Resistance		10MΩ					
Capacitance		500μF					
Frequency		1kHz					
Data storage	99	99					
High voltage prompt	●	●	●	●	●	●	●
LCD backlight	●	●	●	●	●	●	●
Analog bar	●	●					
Low battery indication	●	●	●	●	●	●	●
Overload prompt	●	●	●	●	●	●	●
Light alarm	●	●	●	●	●	●	●
Buzzer alarm	●	●	●	●	●	●	●
Auto power off	●	●	●	●	●	●	●
Timing measurement	●	●					●
Meets IEC 61557	61557-1:2007, 61557-2:2007, 61557-4:2007	61557-1:2007, 61557-2:2007, 61557-4:2007	61557-1:2007, 61557-2:2007	61557-1:2007, 61557-2:2007, 61557-4:2007		61557-1:2007, 61557-2:2007, 61557-4:2007	
Category ratings	CAT IV 600V	CAT IV 600V	CAT III 600V	CAT III 600V	CAT II 1000V / CAT III 600V	CAT III 600V	CAT II 1000V / CAT III 600V
Certificates	CE/UKCA/cETLus	CE/UKCA/cETLus	CE/UKCA	CE/UKCA		CE/UKCA	

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 and DAR to determine the insulation status. UT505 can be used in insulation resistance testing of precision tools, motors, cables, transformers, switches, electrical appliances, and insulated materials.

Specifications	Insulation resistance (Ω)	UT505A	UT505B
Certificates	CE, UKCA		
50V	0.01M Ω ~50M Ω 50M Ω ~1G Ω	$\pm(3\%+5)$	$\pm(3\%+3)$ $\pm(3\%+3)$
100V	1G Ω ~10G Ω 0.01M Ω ~100M Ω 100M Ω ~1G Ω	$\pm(3\%+5)$	$\pm(10\%+3)$ $\pm(3\%+3)$ $\pm(3\%+3)$
250V	1G Ω ~20G Ω 0.01M Ω ~200M Ω 200M Ω ~1G Ω	$\pm(1.5\%+5)$	$\pm(10\%+3)$ $\pm(1.5\%+5)$ $\pm(1.5\%+5)$
500V	1G Ω ~50G Ω 0.01M Ω ~500M Ω 500M Ω ~1G Ω	$\pm(1.5\%+5)$	$\pm(10\%+3)$ $\pm(1.5\%+5)$ $\pm(1.5\%+5)$
1000V	1G Ω ~100G Ω 0.1M Ω ~2000M Ω 2G Ω ~9.9G Ω 10G Ω ~20G Ω 20G Ω ~200G Ω	$\pm(1.5\%+5)$ $\pm(10\%+3)$ $\pm(20\%+10)$	$\pm(10\%+3)$ $\pm(1.5\%+5)$ $\pm(5\%+3)$ $\pm(7\%+3)$ $\pm(20\%+3)$
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)	10~2000 μ A		$\pm(10\%+3)$
Low resistance (Ω)	0.01 Ω ~20k Ω (about 5V/>200mA) 0.01 Ω ~100 Ω (about 5V/>200mA/20mA optional)	$\pm(1.5\%+3)$	$\pm(1.5\%+3)$
General resistance (Ω)	0.01k Ω ~10M Ω		$\pm(3\%+3)$
DC voltage (V)	0V~600V	$\pm(2\%+3)$	$\pm(2\%+3)$
AC voltage (V)	0V~600V	$\pm(2\%+3)$	$\pm(1.5\%+5)$
Frequency (Hz)	45~1kHz		$\pm(0.1\%+3)$
Capacitance (F)	100pF~500 μ F		$\pm(5\%+5)$
Display count	6000		
Compliance standard	IEC 61557; 61557-1:2007; 61557-2:2007; 61557-4:2007		
Category ratings	CAT IV 600V		



UT505A

Features

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

Characteristics

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