

# DIGITAL INSULATION TESTER

**UDEY**<sup>®</sup>

**Model: MS-5**



**0.250 to 5 kV**  
**5 TERA OHM**

## Main functions:

Basic Functions	Insulation Resistance Test Voltage measurement Temp. Measurement	For testing the insulation resistance of electrical equipments: For testing the voltage of external circuits For testing the temperature
Application	Timer PI and DAR Value Display	For automatically stopping a test in a preset period of time For checking whether the leak current decreases after applying test voltage, indicating the insulation of the test equipment has deteriorated when PI or DAR is close to 1
	Temperature compensation	For calculating the insulation resistance under various temperatures [different from the tested temperature]
	Step Voltage Measurement	For determining whether the insulation resistance changes with the change of test voltage
µP based	Save data PC communication	For saving test result data For transferring data saved to the PC for record and study

## Features:

Vide range of testing	Testing voltages with broad range can be generated [250V to 5kV] Testing voltage can be preset as 250V,500V,1kV,2.5kV or 5kV or as voltage increase or decrease in steps of 25V or 100V
<b>Insulation Diagnosis</b>	<b>PI and DAR can be automatically calculated and displayed</b> <b>Step-voltage measurements and temperature compensation is carried out</b>
Large storage memory	Up to 100 manually tested data and 10 groups of log-data saved. Test data can be read on LCD, or uploaded to PC.
Clear Display	Large screen DIGITAL and GRADUATION BAR display. LCD screen is backlit, which is suitable for viewing when it is dark.
PC communication	USB interface provided for up-loading saved data to a PC for tabulation, report generation etc.
Choice of power	Tester powered either by an alkaline battery or by a rechargeable Ni-Hy battery [optional].

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Keyboard



Output sockets  
'L' / 'E' / 'Guard'



Output sockets  
'USB' / 'Temp.sens'



Test leads and  
crocodile clips

### Technical Specification

Test voltage	250V DC to 5kV DC.		
	Settings	preset value [250V,500V,1kV,2.5kV,5kV]	
	Output 250V to 1 kV:	Adjustment in steps of 25V.	
	Output 1kV to 5 kV:	Adjustment in steps of 100V.	
Test current	250V-1.00kV:	1mA	
	1.10kV-2.50kV	0.5mA	
	2.60kV-5.00kV	0.25mA	
Range and error	Maximum 5 Teraohm; 5% in effective range		
Short circuit current	3mA max		
Display: Test voltage	0V-999V; 0.98kV-5.50kV; Accuracy: ± 5% rdg + 5 dgt		
Test voltage	250 V DC	0.01 Mohm ~ 2.5 Gohm	2.51 Mohm ~ 250 Gohm
	500 V DC	0.01 Mohm ~ 5.0 Gohm	5.01 Gohm ~ 500 Gohm
	1000 V DC	0.01 Mohm ~ 10 Gohm	10.0 Gohm ~ 500 Gohm
		501 Gohm ~ 999 Gohm	
	2.5 kV DC	0.01 Mohm ~ 25 Gohm	25.1 Mohm ~ 500 Gohm
		501 Mohm ~ 999 Gohm	1 Tohm ~ 2.5 Tohm
	5 kV DC	0.01 Mohm ~ 50 Gohm	50.1 Gohm ~ 500 Gohm
		501 Mohm ~ 999 Gohm	1 Tohm ~ 5 Tohm
Leakage current test range	10 nA to 3mA	Reading: 1.00 nA ~ 3.00 mA	
Voltage test	DC VOLTAGE		AC VOLTAGE
	± [50V ~1000V]		50V ~750V [50-60 Hz]
Temperature range			
Accuracy	± 1.5 °C	± 1.0 °C	± 1.5 °C

### GENERAL SPECIFICATIONS

Display	: LCD with back lighting, maximum display: 999		
Terminals	: L [+] ; E [-] ; GUARD		
Power supply standard	: LR 14 alkaline battery 1.5V x 6 /		
Maximum input voltage	: 750V AC; ±1000V DC		
Max. voltage to earth.	: 1000Vrms [CATIII] ; 600Vrms [CATIV]		
Interface	: USB version 2.0 for communication with PC		
PC software	: Data transfer; Tester set-up; Data Output		
Insulation strength	: 6880VAC; 15 seconds		
Standard accessories	: Test cable, 3 meter x 3	USB cable x 1	CD x 1
	: Crocodile clips x 3	Temperature sensor x 1	Shoulder carrying bag
	: LR 14 alkaline battery x 6	Instruction Manual x 1	
Optional accessories	: Battery back, rechargeable nickel-metal hydride batteries with charger.		
Dimensions	: 28.4 [L] x 23 [W] x 12.5 [H] cm approx.		
Net weight	: 2.5kg approx. without batteries.		
Applicable standards	: Complies with EN61010-1:2001		
*Accuracy guaranteed	: 20 Gohm < 75% RH; 18- 28°C	500 Gohm < 65% RH; 18- 28°C	5 Tohm < 55% RH; 18- 28° C

Specifications subject to change due to constant up gradation



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