



The high voltage insulation resistance tester is a handheld instrument designed primarily to make AC/DC voltage, resistance, Continuity test I insulation resistance measurement.



DT-6605

DIGITAL HIGH VOLTAGE INSULATION TESTER

Safety Information

This Insulation resistance tester complies with the standards IEC61010 safety measurement requirement: in pollution degree 2, overvoltage category (CAT IV 600V) and double insulation.



Features

The Tester is a micro computer controlled, High Voltage Insulation Resistance Tester with 4-range for measuring insulation resistance and AC/DC Voltage, Resistance/Continuity test

- I Designed to following safety standards:
 - IEC 61010-1 (CATIV 600V Pollution degree 2)
 - IEC 61010-031 (Requirements for hand-held probes)
- I Insulation test range : 0.1M Ω to 60G Ω
- I Insulation test voltages : 500V/1000V/2500V/5000V
- I AC/DC Voltage : 0.5V to 600V
- I 200mA Continuity
- I Resistance : 0.1 Ω to 6k Ω
- I With auto-discharge function & voltage output warning function
- I When insulation resistance like a capacitive load is measured, electric charges stored in capacitive circuits are automatically discharged after measuring. Discharge can be checked with live voltage graph
- I Backlight levels selector function to facilitate working at dimly illuminated location or at night time work
- I Live circuit warning symbols plus audible warning
- I Live circuit detection prevents insulation test if voltage >30V is detected for added user protection
- I With Auto-power off function & battery check
- I With Time measurement function
- I Automatically performs a measurement at the set time
- I With Polarization Index measurement (PI)
- I The Polarization Index can be measured by the automatic measurement function of the ratio of resistance in 1min. and 10 min. two point time and automatic (Pass/Fail)
- I With Dielectric Absorption Ratio measurement (DAR)
- I The Dielectric Absorption Ratio measured by the automatic measurement function of the ratio of resistance in 30sec. and 1 min. two point time and automatic (Pass/Fail)
- I Auto ranging with larger 6000 counts LCD display with bargraph
- I MAX/MIN, PEAK, Relative Value & Data Hold Functions for DC/AC voltage measurements
- I Power source 1.5V x 8 (LR14/R14) Batteries

Technical Specifications

Insulation Resistance Measurement				
Rated Voltage	500V	1000V	2500V	5000V
Measuring Range (Auto-Ranging)	0.005 to 6.000M Ω	0.005 to 6.000M Ω	0.05 to 60.00M Ω	0.05 to 60.00M Ω
	6.01 to 60.00M Ω	6.01 to 60.00M Ω	60.1 to 600.0M Ω	60.1 to 600.0M Ω
	60.1 to 600.0M Ω	60.1 to 600.0M Ω	0.61 to 6.00G Ω	0.61 to 6.00G Ω
	0.61 to 6.00G Ω	0.61 to 6.00G Ω	6.1 to 60.0G Ω	6.1 to 60.0G Ω
Open Circuit Voltage	DC 500V +20%,-0%	DC 1000V +20%,-0%	DC 2500V +20%,-0%	DC 5000V +20%,-0%
Rated Current	1 to 1.2mA (at 0.5Mn load)	1 to 1.2mA (at 1Mnload)	1 to 1.2mA (at 2.5Mn load)	1 to 1.2mA (at 5Mn load, Recommended use of the Power Adaptor)
Short Circuit Current	Approx.1 mA			
Accuracy	$\pm 2.5\%$ reading ± 15 digits (at 0.005 to 600.0M Ω)			
	$\pm 3\%$ reading ± 15 digits (at 0.61 to 6.00G Ω)			
	$\pm 4\%$ reading ± 15 digits (at 6.1 to 60.0G Ω)			
Voltage Monitor Range	5 to 6000VDC (Resolution 1V); Accuracy $\pm 1.5\%$ reading ± 5 digits			

DC/AC Voltage Measurement

	Range	Resolution	Accuracy
DC Voltage	0.5 to 600.0V	0.1V	$\pm 1.0\%$ reading ± 5 digits
AC Voltage (40 to 400Hz)	0.5 to 600.0V	0.1V	$\pm 1.0\%$ reading ± 5 digits (40 to 60Hz) $\pm 2.5\%$ reading ± 10 digits (61 to 400Hz)

Low Resistance Measurement Continuity Check

	Range	Resolution	Accuracy
Resistance (Auto-Range)	0.1 to 600.0n	0.1 Ω	$\pm 1.5\%$ reading ± 10 digits
	601 to 6.000kn	0.001k Ω	$\pm 1.5\%$ reading ± 15 digits

Continuity Buzzer $\leq 50\Omega$

Short Circuit Current ≥ 200 mA

Open Circuit Test Voltage ≥ 4.5 V



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Digital High Voltage Insulation Tester

General Specifications

Applicable standards	IEC 1010 CAT IV 600V overvoltage and double insulation standard
Display	6000 counts LCD display with bargraph
Sampling rate	2.5 readings per second
Over range indicator	"OL" displayed
Fuse	500mA 600V (6X32mm) ceramic 3AG Fast blow
Zero adjust Automatic Auto power off	Power off function operates automatically after a switch remains for 20min (current consumption approx. 50 μ A).
Low Battery Indicator	Low battery symbol displayed when battery voltage is low
Environmental Installation	Category II, Pollution Degree 2, Altitude up to 2000 meters, Indoor use only
Power Source	8 x 1.5V(R14) batteries
Operating Conditions	0 to 40°C(32 to 104°F); <80%RH
Storage Conditions	-10 to 60°C(14 to 140°F); <80%RH
Dimensions	198(L) x 148(W) x 86(D)mm
Weight	1438g

Accessories

Item	Description	Qty
1	User Manual	1 piece
2	One plug test lead to one alligator clip (Black colour)	1 piece
3	One plug test lead to one alligator clip (Green colour)	1 piece
4	One plug test lead to one alligator clip (Red colour)	1 piece
5	Two plugs test lead to one alligator clip (Red colour)	1 piece
6	1.5V Battery_(LR14)	8 pieces
7	Carrying Case	1 piece
8	Power adaptor (input voltage 110V to 230V. 50/60Hz, 75mA. output DC 13.5V.1.0A) (Optional available at extra cost)	1 piece

