

Product Datasheet

The Tekneka 8855 Insulation Tester 5kV is a versatile and reliable testing solution designed for precision. This instrument ensures accuracy through various testing modes, including IR, PI, DAR, DD, SV, and Voltage measurement. Its user-friendly 5.6-inch LCD simplifies operation, while its robust construction is suitable for elevations up to 2000 meters. With a 600V CAT IV rating, it prioritizes electrical safety. It enables thorough analysis and has a data logging capacity of 1000 readings. Additionally, it provides an LED & along with alert beep sounds of the test result. The Tekneka 8855 is an extremely compact instrument that is highly effective for accurate and timely measurements in electrical testing.

Features

- It can measure IR, PI, DAR, DD, SV, and Voltage
- Insulation resistance measures from $10K\Omega$ to $5T\Omega$
- This device can short-circuit currents of ≤5mA
- Selectable noise filter 10/20/30/40s to improve the stability of the test process
- Shows the real-time graphical trend of the insulation resistance measurement
- It runs on a rechargeable Li-ion battery as well as mains power
- Can store up to 1000 readings & view the recorded values in the device
- 5.6-inch color LCD with High/Medium/Low brightness adjustment
- · Alerts user through LED and audible beep sound
- Test voltage can be set in 10V increments from 100 to 1000V and in 0.1/0.2V increments from 1000 to 5000V
- Measures AC/DC voltages ranging from 0 to 1000V
- Auto sleep mode reduces power consumption
- · Simple to quantify measurement of insulation leakage current



Applications

The Tekneka 8855 5kV insulation tester is frequently utilized in the fields of high-voltage equipment testing, motor and generator testing, cable and wire insulation testing, electrical substations, manufacturing quality control, renewable energy systems, aircraft and aerospace, railway systems, oil and gas industry, research and development.

Technical Specifications

Test Voltage	100V	250V	500V	1000V	2500V	5000V	Accuracy
RESISTANCE	$0.01 ext{M}\Omega$ to $1.00 ext{G}\Omega$	$0.01 \mathrm{M}\Omega$ to $2.50 \mathrm{G}\Omega$	$0.01 \mathrm{M}\Omega$ to $5.00 \mathrm{G}\Omega$	0.01MΩ to 10.0GΩ	$0.01 \mathrm{M}\Omega$ to $25.0 \mathrm{G}\Omega$	0.01MΩ to 50.0GΩ	±3% ±1dgt.
RANGE	1.00 to 100GΩ	2.50 to 250GΩ	5.00 to 500GΩ	10GΩ to 10TΩ	25.0GΩ to 2.50TΩ	50.0GΩ to 5.00TΩ	±15% ±1dgt.

Description	Range	Resolution	Accuracy
Insulation Resistance	10K Ω to 5T Ω	0.01ΜΩ	
Test Voltage	100 to 5000V	0.1V	+0.5% ±1dgt.
IR Test Time	45s to 99m 59s	-	-
Capacitance Range	0.01μF to 100μF	0.001μF	±20% ±0.005μF
Voltage Measurement (AC/DC)	0 to 1000V	0.01V (<10)/0.1(10~100V)/1V(>1000)	±2% rdg±5dgt.
Insulation Leakage Current	0.01nA to 20.00mA	0.01nA	±1.5% ±5dgt.
Output Short Circuit	≤5mA		
Time	Max: 99 minutes and 99 seconds, configurable based on test methodology		
Data Storage	Automatically save up to 1000 data sets and display the results in the device		

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General Specifications

Testing Functions	Insulation Test	IR
6	Polarization Index (Calculated)	
	Dielectric Absorption Ratio (Calculated)	DAR
	Dielectric Discharge Test	DD
	Step Voltage Test	SV
	External Voltage Testing	V
Display	5.6-inch color LCD	
Display Backlight	High/Medium/Low	
Electrical Safety	CAT IV 600V	
Test Indication	LED flash and buzzer sound	
Withstand Voltage	AC 5kV 50Hz, 1min between test leads and the cabinet	
Dielectric Strength	More than $500\text{M}\Omega$ between the cabinet and the test leads	
Test Hold Option	Yes	
Ambient Temperature	Yes	
Device Communication	USB port (optional)	
Operating Temperature & Humidity	-10 to 40°C @ <80%RH	
Storage Temperature & Humidity	-20 to 60°C @ <70%RH	
Protection Level	IP67 (Lid closed), IP52 (Lid open)	
Power Supply	100 to 240V AC 50/60Hz	
Rechargeable Battery	DC 14.8V, 2600mAh rechargeable Li-ion battery	
Continuous Operating Time	4.5hrs	
Charging Time	8hrs	
Compliance Standards	Safety: IEC 61010-1, EMC: IEC 61557 IEC61326-1	
Dimension (LxWxH)	360 x 240 x 145mm	
Weight	Device: 3.2kg, Package: 5.6kg	

NOTE: If the device is not used for an extended period of time, recharge the battery every 3 months.

Applicable Sta	Applicable Standards	
IEC 61010-1	Safety regulations for electrical measurement, control, regulation & lab devices	
IEC 610557	Measuring and monitoring facilities for testing the electrical safety in lines with nominal voltages up to AC 1000V & 1500V	

ESD immunity compliance		
IEC 61000-4-2	8kV atmospheric discharge	
IEC 61000-4-3	4kV contact discharge	

Packing Includes

- Test Leads with Clamp Clips (3 Meter)
- High Voltage Test Rods (3 Meter)
- Charger
- USB Cable (Optional)
- Carrying Bag



8855..... Insulation Tester 5kV Kit

8855P-TP..... Test Leads Set with Clamp Clips (3 Meter)

8855P-HP.... High Voltage Test Rods (3 Meter)

