

## **Product Datasheet**

The Tekneka 8865 Insulation Tester 10kV 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 screen simplifies operation, while its robust construction is suitable for elevations up to 2000 meters. With a CAT IV 600V rating, it prioritizes electrical safety. It enables thorough analysis and has the data logging capacity of 1000 readings. Additionally, it provides a LED & along with alert beep sounds of the test result. The Tekneka 8865 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 10KΩ to20TΩ
- This device can short circuit currents of ≤5mA
- Selectable noise filter10/20/30/40s to improve stability of the test process
- · Shows 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 colour LCD with High/Medium/Low brightness adjustment
- Alerts user through LED and audible beep sound
- Test voltage can be set in 10V increments from 100V to 1000V and in 0.1/0.2V increments from 1000V to 10kV.
- Measures AC/DC voltages ranging from 0 to 1000V
- Auto sleep mode reduces power consumption
- · Simple to quantify measurement of insulation leakage current



### **Application**

The Tekneka 8865 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 Specification**

Test Voltage	100V	250V	500V	1000V	2500V	5000V	10000V	Accuracy
RESISTANCE RANGE	$\begin{array}{c} 0.01 \text{M}\Omega \\ \text{to} \\ 1.00 \text{G}\Omega \end{array}$	$0.01 \text{M}\Omega$ to $2.50 \text{G}\Omega$	0.01MΩ to 5.00GΩ	$\begin{array}{c} 0.01 \text{M}\Omega \\ \text{to} \\ 10.0 \text{G}\Omega \end{array}$	$0.01 \text{M}\Omega$ to $25.0 \text{G}\Omega$	$0.01 \mathrm{M}\Omega$ to $50.0 \mathrm{G}\Omega$	0.01MΩ to 400GΩ	±3% ±1dgt.
	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	400GΩ to 20TΩ	±15% ±1dgt.

Description	Range	Resolution	Accuracy	
Insulation Resistance	$10 \text{K}\Omega$ to $20 \text{T}\Omega$	$0.01 \text{M}\Omega$		
Test Voltage	100 to 10000V	0.1V	+0.5% ±1dgt	
IR Test Time	45s to 99m 59s	-	-	
Capacitance Range	0.010μF 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			

# 8865 Insulation Tester 10kV



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## **General Specification**

Testing Functions	Insulation Test	IR
	Polarization Index (Calculated)	PI
	Dielectric Absorption Ratio (Calculated)	DAR
	Dielectric Discharge Test	DD
	Step Voltage Test	SV
	External Voltage Testing	V
Display	5.6-inch colour LCD	
Display Back light	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 lead	ds.
Test Hold Option	Yes	
Ambient Temperature	Yes	
<b>Device Communication</b>	USB port (optional)	
Operating Temperature & Humidity	-10 to 40°C @ <80%RH	
Storage Temperature	-20 to 60°C @ <70%RH	
Protection Level	IP 67 (Lid closed), IP 52 (Lid open)	
Power Supply	100~240Vac 50/60Hz	
Rechargeable Battery	DC 14.8 V, 2600mAh rechargeable Li-Battery	
Continuous Operating Time	4.5 hrs	
Charging Time	8 Hrs	
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 three months.

Applicable Sta	andards
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 AC1000V & 1500V

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

### Package Includes

- · Carrying bag
- Test leads with clamp (3m)
- High voltage test rod (3m)
- Charger
- USB cable(Optional)



### Ordering Info.

8865.....Insulation Tester 5kV Kit

8865P-TP.....Test lead set with 3 meter length clamp clip

8865P-HP......High voltage probe set of 3 meter length