

Tekneka 850M Insulation tester/TRMS multimeter is a versatile and dependable instrument designed for precise electrical testing. It supports a broad range of applications with multiple test voltage selections from 50V to 1000V and AC/DC voltage up to 1000V. This tester is excellent for testing insulation resistance (3GΩ), voltage (1000V) and current (300.0mA), resistance(30.00MΩ), Diode(2.000V), frequency(100.0KHz) and temperature(-200 to 850°C). The 65x30mm LCD with analog range scale and back light allows for easy-to-read readouts. The Tekneka 850M is portable and dependable, powered by 6 x 1.5V batteries. It is suitable for various working conditions due to its IP50 rating, which provides durability and protection against water and dust. Professionals wishing to test insulation, and other parameters with accuracy and efficiency should choose this instrument.

Features

- Test voltage selection includes 50 V, 100 V, 250 V, 500 V, and 1000 V for measuring insulation resistance up to 3GΩ.
- AC Measurement of current up to 300A using a clip-on sensor
- An analog scale that updates 20 times per second to track input variations
- Backlight display to take measures in low light
- The device will automatically shut off after 10 minutes of inactivity.
- Range selection is simple to use while taking measurements.
- AC/DC voltages up to 1000V can be measured.
- When a fuse blows, the device displays FUSE on the screen.
- Auto-blocking socket auto-terminal to avoid erroneous connections
- NULLZERO correction for resistance/capacitance
- Min/Max values are able to be continuously saved and changed.
- Low battery warnings and auto power off options might help you save battery life.

Application

Tekneka 850M is frequently utilized in the fields of equipment testing, motor and generator testing, cable and wire insulation testing, electrical substations, building maintenance, electrical workshops, manufacturing quality control, renewable energy systems, aircraft and aerospace, railway systems, oil and gas industry, research and development.



Insulation Resistance Measurement Specification

Test Voltage	Insulation Resistance Ranges	Accuracy
50V	0.100 to 155.0 MΩ	±5% ±15dgt.
100V	0.100 to 310.0 MΩ	
250V	0.100 to 0775 MΩ	
500V	0.100 to 1600 MΩ	±3% ±10dgt.
1000V	0.100 to 3100 MΩ	
Voltage AC/DC(MΩInsu) ¹	0 to 1000V	±1% ±10dgt.
VIMΩ(Resistance Discharge) ²	0 to 1000V	±1% ±10dgt.

1. In this switch position live circuit detection (VAD+DC) is done before insulation measurement. If voltage present is greater than 50V (AC+DC), insulation resistance measurement function is disabled and LCD displays value of voltage present on DUT.

2. Discharge the DUT through 1MΩ resistance, before insulation resistance measurement. LCD displays value of voltage present on DUT

General Specification	
Display	2.7-inch(65 x 30mm) LCD with Analog scale
Back light	Yes
Electrical Safety	300V CAT-III/600V CAT-II
Recall Memory	50 readings (10 values per range)
Auto Discharge	Yes (device under test)
Operating Temperature	-20 to 50°C (full range)
Reference Conditions for Accuracy	Temp: 23°C Humidity: 45 to 55%RH Voltage: 8V+0.1V (battery), AC (Sine), 50/60 Hz
Storage Temperature	-25 to 70°C
Protection Level	IP 50 (Instrument), IP 20(Terminal Socket)
Power Supply	230V AC / 9V DC, 500mA (optional)
Battery	6 x 1.5V Li-ion batteries (replaceable)
Service Life	min 600 hours on Vdc/Adc, 240 hours Vac, Aac
Fuse	500mA(F)/400V H.B.C 10kA min
Compliance Standards	IEC 61010-1, EMC: IEC 61557, IEC61326-1, DIN 43751
Dimension (W x H x D)	Device: 84 x 195 x 35mm, Package: 230 x 195 x 70mm
Weight	Device: 500g, Package: 1.0Kg

Multimeter Specification

Measuring Functions	Range	Resolution	Accuracy
Voltage (DC)	30.00mV	10μV	±0.5% ±3dgt.
	300.0mV	100μV	
	3.000V	1mV	±0.25% ±1dgt.
	30.00V	10mV	
	300.0V	100mV	
	1000V	1V	
Voltage (AC)	3.000V	1mV	±1.0% ±3dgt.
	30.00V	10mV	
	300.0V	100mV	
	1000V	1V	
Voltage (AC/DC)	3.000V	1mV	±1.0% ±3dgt.
	30.00V	10mV	
	300.0V	100mV	
	1000V	1V	
Current (AC Clamp)¹	30/300A	10/100A	±0.5%+5dgt.
Current (DC)	300.0μA	100nA	±0.5%+5dgt.
	3.000mA	1μA	±0.5%+2dgt.
	30.00mA	10μA	±0.5%+5dgt.
	300.0mA	100μA	
Current (AC+DC)	3.000	1μA	±1.5%+4dgt.
	300.0mA	100μA	

Measuring Functions	Range	Resolution	Accuracy
Resistance	30.00Ω	10mΩ	±0.5% ±3dgt.
	300.0Ω	100mΩ	
	3.000Ω	1Ω	±0.4% ±1dgt.
	30.00KΩ	10Ω	
	300.0KΩ	100Ω	
	3.000MΩ	1KΩ	
	30.00MΩ	10KΩ	±2.0% ±1dgt.
Diode	2.000 V	1mV	±0.25% ±1dgt.
Farad	30.00nF	10pF	±1.0% ±3dgt.
	300.0nF	100pF	
	3.000μF	1pF	
Frequency Hz	300.0Hz	0.1Hz	±0.5% ±1dgt.
	3.000KHz	1Hz	
	30.00KHz	10Hz	
	100.0KHz	100Hz	
Duty Cycle	2.0 to 98.0%	0.1%	±0.5dgt per kHz
Temperature	-200 to 850°C	0.1°C	±1.0% ±5dgt.

1. Measurement with clip-on current sensor with ratio 1mv/10mA

Package Includes

- Test lead set
- Crocodile clip set
- Rubber holster
- 6 nos. AA batteries
- Adjustable strap



Ordering Info.

850M.....Insulation Tester/TRMS Multimeter