

## INSULATION TESTER IR4053

### Measure PV Insulation Resistance Safely, Accurately and Quickly



**Options**



TEST LEAD SET WITH REMOTE SWITCH L9788-11

Bundled with Test Lead with Remote Switch L9788-10 / earth lead and alligator clip, 1.2 m (3.94 ft)

- Safely and accurately measure PV insulation resistance even while generating solar power
- Built-in PV dedicated function, display measurements in 4 seconds
- Five ranges (50/125/250/500/1000 V) built in for normal insulation resistance measurement
- Built-in 1000 VDC voltage measurement for open voltage tests of PV systems that support 1000 V
- Built-in comparator function
- Drop proof design withstands drop onto concrete from a height of 1 meter

**Order Code: IR4053-10**

**Accessories**

TEST LEAD L9787(1.2 m)

Neck strap  
Instruction manual  
LR6 alkaline battery x 4

**Shared options**

MAGNETIC ADAPTER 9804-02

Note: Attaches to the tip of cord, black x1, φ11 mm (0.43 in)

**L9787 options**

For checking circuit-breaker terminals. Fits onto the L9787's red probe tip.

22 mm/φ3.7 mm  
48 mm/φ2.6 mm

BREAKER PIN L9787-91

**L9788-11 options** For checking circuit-breaker terminals. Fits onto the L9788-11's red probe tip.

8.0 mm/φ4.0 mm  
65 mm/φ2.6 mm

BREAKER PIN L9788-92

TEST LEAD WITH REMOTE SWITCH (Red) L9788-10

35 mm  
φ3.2 mm  
sleeve

TIP PIN L9788-90



**■ PVΩ measurement**

Output voltage (DC)	500 V		1000 V	
Maximum indicated value	2000 MΩ		4000 MΩ	
Measurement range [MΩ]	0.200 to 500	501 to 2000	0.200 to 1000	1010 to 4000
Accuracy	±4% rdg.	±8% rdg.	±4% rdg.	±8% rdg.
Other measuring range [MΩ]	0 to 0.199			
Accuracy	±2% rdg. ±6dgt.			

**■ Insulation resistance measurement**

Output voltage (DC)	50 V	125 V	250 V	500 V	1000 V
Effective maximum indicated value	100 MΩ	250 MΩ	500 MΩ	2000 MΩ	4000 MΩ
1st effective measuring range [MΩ]	0.200 to 10.00	0.200 to 25.0	0.200 to 50.0	0.200 to 500	0.200 to 1000
Accuracy	±4% rdg.				
2nd effective measuring range [MΩ]	10.1 to 100.0	25.1 to 250	50.1 to 500	501 to 2000	1010 to 4000
Accuracy	±8% rdg.				
Other measuring range [MΩ]	0 to 0.199				
Accuracy	±2% rdg. ±6 dgt.				
Lower limit resistance value to maintain nominal output voltage	0.05 MΩ	0.125 MΩ	0.25 MΩ	0.5 MΩ	1 MΩ

**■ Basic specifications** (Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year)

DC voltage measurement range	4.2 V (0.001 V resolution) to 1000 V (1 V resolution), 4 ranges, Accuracy: ±1.3% rdg. ±4 dgt., (Ranges in excess of 1000 V are not guaranteed for accuracy)
AC voltage measurement range	420 V (0.1 V resolution)/ 600 V (1 V resolution), 2 ranges, 50/60 Hz, Accuracy: ±2.3% rdg. ±8 dgt., (Ranges in excess of 600 V are not guaranteed for accuracy)
Display	Semi-transmissive FSTN LCD with back lighting, Backlight
Response time	Insulation resistance range: 1 second, PVΩ function: 4 seconds (based on in-house tests)
Functions	Live circuit indicator, automatic electric discharge, automatic DC/AC detection, comparator, drop proof, auto power save
Dustproof and waterproof	IP40 (EN60529)
Power supply	LR6 (AA) alkaline battery ×4, Continuous operating time: Approx. 20 hours (based on in-house tests)
Dimensions and mass	159 mm (6.26 in) W × 177 mm H (6.97 in) H × 53 mm (2.09 in) D, Approx. 600 g (21.2 oz) (including batteries, excluding test lead)

## HIGH VOLTAGE INSULATION TESTER IR3455



**■ Basic specifications** (Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year)

Testing voltage	250 V DC	500 V DC	1 kV DC	2.5 kV DC	5 kV DC
Resistance measurement range	0.00 MΩ to 500 GΩ	0.00 MΩ to 1.00 TΩ	0.00 MΩ to 2.00 TΩ	0.00 MΩ to 5.00 TΩ	0.00 MΩ to 10.00 TΩ
Short current	2 mA or less				
Accuracy	±5%rdg. ±5 dgt. Note: Resistance testing not exceeding V/100 nA				
Functions	Leak current measurement: 1.00 nA to 1.20 mA Voltage measurement: ±50 V to ±1.00 kV DC/ 50 to 750 V AC Temperature measurement: -10.0 °C to 70.0 °C (used with the 9631-01/-05 optional sensor) Temperature correction, Insulation diagnosis, Data memory, Timer, Averaging, Warning display, etc.				
Power supply	LR6 (AA) alkaline battery × 6, Battery Pack 9459, or AC Adapter 9753				
Dimensions and mass	260 mm (10.24 in) W×251 mm (9.88 in) H×120 mm (4.72 in) D, 2.8 kg (98.8 oz)				

### Maximum 5 kV Test Voltage - Up to 10 TΩ of Insulated Resistance Testing

- Measure insulation of high-voltage equipment (such as transformers, cables, and motors)
- Wide testing voltage range, up to 5,00 kV from 250 V DC
- Wide measurement insulation range, up to 10 TΩ
- PI (Polarization Index) and DAR (Dielectric Absorption Ratio) automatically calculated / display
- Data memory function to reduce handwritten notes
- Bright LED luminous scale
- Extended operating temperature range of -10 °C to 50 °C

**Order Code: IR3455**

<b>Accessories</b>	<b>Options</b>		
<p>TEST LEAD 9750-01/-02/-03 (Red/ Black/ Blue, 3 m)</p> <p>ALLIGATOR CLIP 9751-01/-02/-03 (Red/ Black/ Blue)</p> <p>USB cable PC application software (CD-R) LR6 (AA) alkaline batteries × 6 Instruction manual</p>	<p>TEST LEAD 9750-11 (Red one, 10 m)</p> <p>TEST LEAD 9750-12 (Black one, 10 m)</p> <p>TEST LEAD 9750-13 (Blue one, 10 m)</p>	<p>TEMPERATURE SENSOR 9631-01 (1 m)</p> <p>TEMPERATURE SENSOR 9631-05 (50 mm)</p>	<p>AC ADAPTER 9753</p> <p>BATTERY PACK 9459</p>