INSULATION TESTER
IR4056, IR4057, IR4058

5-range INSULATION & CONTINUITY
CAT III 600V
IEC/EN 61557

Stable Digital Readings are Easy to Read
- Identify the Insulation and Low Resistance Conditions with the PASS/FAIL Icon
- FAIL Alert with Red LCD and Audio Buzzer

Comparator Function Improves Work Efficiency

Excluding IR4056-21
For IR4058-20 only

Please see www.hioki.com for list of supported regions.
Comparator function provides PASS/FAIL decisions at a glance

• Compare measured values to pre-set reference values to generate a pass or fail judgment with the Comparator function. (also pair with insulation resistance measurement and low-resistance measurement)
• Stable display delivers quick and easy-to-read results, increasing work efficiency.

Instantaneous judgment

The insulation testers deliver results as soon as the test lead makes contact, letting you finish your work rapidly similar to a continuity check.

Identify PASS/FAIL using light and sound

The insulation testers give you pass/fail results using a beeping sound, LCD light, and indication right on the test lead with remote control switch*1, letting you check for insulation integrity without needing to look at the instrument.

PASS
When the measured value is greater than or equal to the reference value*2
Short beep

FAIL
When the measured value is less than the reference value*2
Continuous tone

*1 Standard with the IR4056-21
*2 Insulation resistance measurement

In some cases, the capacitance component may prevent a judgment from being made until charging completes.

Smooth measurement and data recording with Bluetooth® wireless technology

IR4058-20 only

• Measured values held on the display are sent immediately to a smartphone or tablet via Bluetooth® wireless technology.
• Easily manage measured data and create simple PDF reports in the field.

Smooth measurement and data recording with Bluetooth® wireless technology

GENNECT Cross specifications

<table>
<thead>
<tr>
<th>Interface</th>
<th>Bluetooth® 4.0LE</th>
</tr>
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<tbody>
<tr>
<td>Communication distance</td>
<td>5 m (line of sight)</td>
</tr>
<tr>
<td>Supported Android™ devices</td>
<td>Android™ 4.3 or later (Bluetooth® low energy enabled devices)</td>
</tr>
<tr>
<td>Supported iOS devices</td>
<td>iOS 10.0 or later (Bluetooth® low energy enabled devices)</td>
</tr>
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Useful when there are numerous test locations

In some cases, the capacitance component may prevent a judgment from being made until charging completes.

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**Designed for safety and peace of mind**  
Featuring improved convenience and ease of use

**DROP PROOF**  
Built tough to withstand a 1-meter drop onto a concrete floor.

**MEASURE key**  
Press to measure insulation resistance.  
Release to hold the measured value.

**AC/ DC voltage measurement**  
(With AC/ DC automatic detection function)  
Use as a tester replacement thanks to DC voltage measurement functionality, which is useful in applications involving solar power and electric vehicles (EVs).

**200 mA grounding line continuity check function**  
The Insulation testers can perform EV and HEV continuity checks as well as resistance measurement of safety conductors in building electrical equipment as defined by IEC 60364.

**Safety-oriented double-action**  
500 V/1000 V range only

**Effective maximum display value**  
A “>” mark is displayed when the measured value is greater than the effective maximum display value for the function in use.

**Easy-to-see LCD**  
An FSTN LCD ensures the instrument’s display is easy to read from any angle.

**Backlight (White LED)**  
A backlight lets you work in dark or poorly lit locations.

**Integrated hard case with sliding cover**  
With cover closed

**200 mA grounding line continuity check function**

**Economic model**  
**IR4056-20: With L9787**  
**IR4056-21: With L9788-11**  
(Not CE marked)

**Bar graph for visual judgments**  
High-speed model

**IR4057-20**  
**IR4058-20**

<table>
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<th>Functionality</th>
<th>Economic model</th>
<th>Bar graph for visual judgments</th>
</tr>
</thead>
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<tr>
<td>5 ranges</td>
<td>50/125/250/500/1000 V</td>
<td>5 ranges</td>
</tr>
<tr>
<td>Rated output voltage (DC)</td>
<td>✓ Voltage measurement</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓ Low resistance measurement</td>
<td>✓</td>
</tr>
<tr>
<td>Approx. 0.8 s</td>
<td>✓ Comparator judgment result response time</td>
<td>Approx. 0.3 s</td>
</tr>
<tr>
<td></td>
<td>✓ 200 mA continuity</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓ Bar graph</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓ Displaying 1-min.Values</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓ Bluetooth*</td>
<td>✓ (IR4058)</td>
</tr>
</tbody>
</table>

**IR4057-20**  
**IR4058-20**  
Functionality

**Bar graph**  
Useful in determining compliance of circuits with a large capacitance component, for example solar panels, due to the ability to illustrate charging status behavior.

**Displaying 1-min.Values**  
The instruments automatically hold the measured value being displayed 1 min. after the start of measurement (the 1 min. value).  
This functionality is convenient when you need to measure targets that include a capacitance component.
Specifications

Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year.

Insulation resistance measurement

<table>
<thead>
<tr>
<th>Rated output voltage (DC)</th>
<th>50 V</th>
<th>125 V</th>
<th>250 V</th>
<th>500 V</th>
<th>1000 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective maximum indicated value</td>
<td>100 MΩ</td>
<td>250 MΩ</td>
<td>500 MΩ</td>
<td>2000 MΩ</td>
<td>4000 MΩ</td>
</tr>
<tr>
<td>1st effective measuring range</td>
<td>0.200 to 10.00</td>
<td>0.200 to 25.00</td>
<td>0.200 to 50.0</td>
<td>0.200 to 500</td>
<td>0.200 to 1000</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±2 % rdg. ±6 dgt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd effective measuring range</td>
<td>0.25 to 100.0</td>
<td>25.1 to 250</td>
<td>50.1 to 500</td>
<td>501 to 2000</td>
<td>1010 to 4000</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±5 % rdg.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other measuring range</td>
<td>0 to 0.199</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>±2 % rdg. ±6 dgt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower limit resistance value to maintain nominal output voltage</td>
<td>0.05 MΩ</td>
<td>0.125 MΩ</td>
<td>0.25 MΩ</td>
<td>0.5 MΩ</td>
<td>1 MΩ</td>
</tr>
</tbody>
</table>

Basic specifications

- Indicator: Semi-transmissive FSTN LCD, Positive backlight
- Functions: Live circuit indicator, Automatic electric discharge, Automatic DC/AC detection, Comparator, Built-in battery power indicator etc.
- Power supply: LR6 alkaline battery × 4
- Continuous operating time: Approx. 20 hours (Comparator off, backlight off, 500 V range, no load, Bluetooth® off)
- Auto power save: The power will go off automatically 10 minutes after the last operation
- Operating temperature and humidity: -25 to 40°C (-13 to 104°F), 90% rh or lower (non-condensing) 40 to 65°C (104 to 149°F), at 65°C and below relative with linear decrease up to 25% rh
- Storage temperature and humidity: -25 to 65°C (-13 to 149°F), 90% rh or lower (non-condensing)
- Maximum rated voltage to earth: 600 V AC/DC, Measurement category III, Anticipated transient overvoltage: 6000 V
- Dustproof and waterproof: IP40 (EN60529)
- Standards: EN61326 (EMC), EN61557-1/ -2/ -4* 1/ -10
- Drop proof: On concrete: 1 m
- Dimensions: 35mm × 22mm × 8.0mm (48mm/φ3.2mm)
- Mass: IR4056-20/IR4056-21: Approx. 600 g (21.2 oz) (including battery, excluding test lead)
- Measuring range (Auto range): 0.05 MΩ to 1 MΩ, ±5 % rdg.

Voltage measurement

- DC: Display range: 10 Ω, 100 Ω, 1000 Ω
- AC: Display range (Auto range): 420 V

Low resistance measurement

- Display range (Auto range): 10.00 Ω, 100.0 Ω, 1000 Ω
- Resolution: 0.01 Ω, 0.1 Ω, 1 Ω
- Accuracy (after zero adjustment): 0 to 0.19 Ω: ±3dgt. ±3%rdg. ±2dgt. ±3%rdg. ±2dgt. ±3%rdg. ±2dgt.
- Measuring current: 200 mA or more (at 6 Ω or less )
- Overload protection: 600 VAC (10s, using fuse)

Options

- MAGNETIC ADAPTER 9804-02
- BREAKER PIN L9787-91
- BREAKER PIN L9787-92
- TEST LEAD SET WITH REMOTE SWITCH L9788-11
- TEST LEAD SET WITH REMOTE SWITCH (RED) L9788-10
- NECK STRAP L9788-11
- L9788-11 options

Distributed by

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All information correct as of Sept. 9, 2019. All specifications are subject to change without notice.

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