

HIOKI

3453 DIGITAL MΩ HITESTER

Field measuring instruments



125 V/ 40MΩ

250 V/2000 MΩ

500 V/2000 MΩ

1000 V/4000 MΩ

4 ranges

Insulation resistance measurement



For general-purpose measurement

Insulation resistance, AC voltage, low
resistance (continuity) measurement

Actual-size



ISO 9001
JMI-0216

ISO14001
JQA-E-90091



<http://www.hioki.co.jp/>

HIOKI company overview, new products, environmental considerations and
other information are available on our website.

For efficient insulation measurement!

Myriad functions for various measurement needs.

Accurate digital display

Moving-average processing (averaging for two seconds) suppresses dispersion of display, ensuring more accurate and stable measurement. The logarithmic scale bar graph display from 0 to 4000 MΩ offers the feel of an analog meter. The bar graph displays the voltage level of the object being measured, showing either that the object is at a line voltage or how the object discharges after being charged during measurement.



Back-lighting liquid crystal display enables reading in dark areas.

Versatile uses in the field

- Insulation measurement through sight and sound! The reference value is set separately for each measurement range.

| Test voltage | Reference value (MΩ) |
|--------------|---|
| 125 V | 0.1 / 0.2 / 1 / 2 / 3 / 5 / 10 / 20 |
| 250 V/500 V | 0.1 / 0.2 / 0.4 / 1 / 2 / 3 / 5 / 10 / 20 / 30 / 50 / 100 / 200 / 500 / 1000 / 2000 |
| 1000 V | 1 / 2 / 3 / 5 / 10 / 20 / 30 / 50 / 100 / 200 / 500 / 1000 / 2000 |

- Memorizes on the spot! (Memorizes up to 20 data points.)
- Recognizes variations of resistance! Automatically displays the resistance value at one minute after commencing measurement.
- Ability to measure AC voltage and low resistance (continuity)! Optional 9185 TEST LEADS feel like conventional testers.
- Improved safety A line voltage warning lamp blinks when the voltage exceeds about 40 V.

3453 specifications Accuracy at 23°C±5°C (73°F±9°F), 90 % rh or less

| Insulation resistance | Insulation test voltage | 125 V DC | 250 V DC | 500 V DC | 1000 V DC | |
|-----------------------------|---|---|-----------------------------------|-----------------------------------|----------------------------------|---|
| | Measurement range*1 | 4.000 / 40.00 MΩ | | | | 4.000 / 40.00 / 400.0 / 2000 / 4000 (1000V range only) MΩ |
| | First effective range | 0.100 to 10.00 MΩ | 0.200 to 20.00 MΩ | 0.200 to 50.00 MΩ | 0.200 to 999 MΩ | |
| | Second effective range | 0 to 0.099 MΩ 10.01 to 40.00 MΩ | 0 to 0.199 MΩ 20.01 to 2000 MΩ | 0 to 0.199 MΩ 50.01 to 2000 MΩ | 0 to 0.199 MΩ 1000 to 4000 MΩ | |
| | Accuracy | First effective range: ±2%rdg. ±3 dgt. Second effective range: ±2 %rdg. ±6 dgt. (0 to first effective range), ±5 %rdg. (more than first effective range) | | | | |
| | Voltage with no load | Not more than 1.2 times rated measurement voltage | | | | |
| | Min. resistance measurement value*2 | 0.125 MΩ | 0.250 MΩ | 0.500 MΩ | 2.000 MΩ | |
| | Short circuit current | 1.2 mA max. | | | 0.6 mA max. | |
| Response time | ∞ to center, ∞ to 0 MΩ within 5 s (within accuracy range) | | | | | |
| Low resistance (continuity) | Measurement range: 0 to 400.0 Ω, aural warning below 30 Ω Accuracy: ±2% rdg. ±8dgt. Open terminal voltage: 4 V max. Response time: 2 s max. | | | | | |
| AC voltage | Measurement range: 0 to 600 V Accuracy: ±2% rdg. ±8dgt. Frequency range: 50 to 60 Hz Input impedance: 170 kΩ | | | | | |

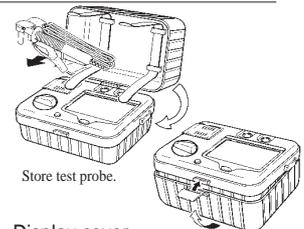
●Functions: Insulation resistance mode; comparator, memory (20 data), measurement value hold, auto discharge, bar graph display (measure switch ON: insulation resistance; measure switch OFF: voltage across measurement terminals), auto display of measurement value 1 minute after measurement start, other measurement modes, live wire warning (when voltage of 40 V±20 V exists across measurement terminals), battery indicators, auto power save ●Display: semi-transparent LCD, "4000" count, with backlight, bar graph 30 dots ●Display update rate: 2 times / second ●Load protection: 10 s: 600 Vrms (AC V range 720 Vrms) ●Safety standard: EN61010-1 measurement category III 600 V ●EMC standard: EN61326-1 ●Ambient temperature range for use: 0 to 40°C (32°F to 104°F), 90 %rh or less (no condensation) ●Ambient temperature range for storage: -20 to 50°C (-4°F to 122°F), 90 %rh or less (no condensation) ●Power source: R6P manganese battery X 4 or LR6 alkaline battery X 4 ●Dimensions and Mass: Approx. 155 (6.1") W X 98 (3.9") H X 80 (3.2") D mm; Approx. 500 g (17.7 oz.) (with display cover attached)

*1. Measurement range shifts automatically. *2. Resistance value to maintain rated voltage.

Accessories

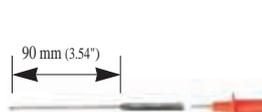


9294 TEST PROBE



Display cover
The body is stackable during measurement.

Options



* 9288 BREAKER PIN
To be attached on the top of 9294 (Red)



9289 TEST PROBE

3453 DIGITAL MΩ HI TESTER

(All include 9294 TEST PROBE, display cover and suspension band)

HIOKI

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