

ranges

Insulation resistance measurement

CE

JIS C 1302

V

LINE

100 500 1000 4000

PRESS 2s-MEMORY

1000

1

3453 DIGITAL M\Omega Hitester

Field measuring instruments

125 V/ 40MΩ
250 V/2000 MΩ
500 V/2000 MΩ
1000 V/4000 MΩ

CAT III

5

500mg

1

HIOKI 3453 DIGITAL MA HITESTER

10 50

LIGHT

CE

Actual-size

ISO14001

.IOA-F-90091

ISO 9001

JMI-0216

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

For general-purpose measurement

LOCK

6.6.1

2500 5000

125V

~1.

OFF•

Ω.Ξ.•

TAL AND

EARTH

MR

PRESSING COMP KEY

1000V

0_0.1 0.5

Lo

COMP

COMP

PRESS 2s-OFF

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

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

For efficient insulation measurem

Myriad functions for various measurement needs.



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 $M\Omega$ 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.

uses in the field

1000

500MA

Insulation measurement through sight and sound!

The reference value is set separately for each measurement range.							
	Test voltage	Reference value (MΩ)					
		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

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	Insulation test voltage	125 V DC	250 V DC	500 V DC	1000 V DC	
	Measurement range*1	$4.000 / 40.00 \text{ M}\Omega \qquad \qquad 4.000 / 40.00 / 400.0 / 2000 / 4000 (1000V range only) \text{ M}\Omega$				
	First effective range	0.100 to $10.00~\text{M}\Omega$	0.200 to 20.00 MΩ	0.200 to 50.00 MΩ	0.200 to 999 MΩ	
Insulation	Second effective range	$0 \text{ to } 0.099 \text{ M}\Omega$ 10.01 to 40.00 M Ω	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	
resistance	Accuracy	First effective range: $\pm 2\%$ rdg. ± 3 dgt. Second effective range: $\pm 2\%$ rdg. ± 6 dgt. (0 to first effective range), $\pm 5\%$ 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 ΜΩ	0.250 ΜΩ	0.500 ΜΩ	2.000 ΜΩ	
	Short circuit current	1.2 mA max.			0.6 mA max.	
	Response time	∞ to center, ∞ to 0 M Ω within 5 s (within accuracy range)				
Low resistance (continuity)	Measurement range: 0 to 400.0 Ω , aural warning below 30 Ω Accuracy: $\pm 2\%$ rdg. ± 8 dgt. Open terminal voltage: 4 V max. Response time: 2 s max.					
AC voltage	Measurement range: 0 to 600 V Accuracy: $\pm 2\%$ rdg. ± 8 dgt. Frequency range: 50 to 60 Hz Input impedance: 170 k Ω					

•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 ODisplay: semi-transparent LCD, "4000" count, with backlight, bar graph 30 dots ODisplay update rate: 2 times / second OLoad 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 × 4 or LR6 alkaline battery X 4 ●Dimensions and Mass: Approx. 155 (6.1") W X 98 (3.9") H \times 80 (3.2") D mm; Approx. 500 g $\,$ (17.7 oz.) (with display cover attached)

Lead length approx. 1.2 m (47.2") 9294 TEST PROBE Display cover The body is stackable during measurement Options 90 mm (3.54"

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

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

Accessories

DISTRIBUTED BY

3453 DIGITAL MΩ HITESTER (All include 9294 TEST PROBE, display cover and suspension band)



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Lead length approx. 1.2 m (47.2")

9289 TEST PROBE