

HIOKI

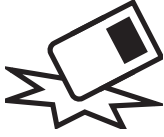
INSULATION TESTER Series



INSULATION TESTERS

Digital

DROP PROOF



Built tough to withstand a 1-meter drop onto a concrete floor



5 ranges

Rated output voltage (DC)
Effective maximum indicated value

50 V / 100 MΩ

125 V / 250 MΩ

250 V / 500 MΩ

500 V / 2000 MΩ

1000 V / 4000 MΩ

Manage measurement data using Bluetooth® communication (IR4057-50 with Z3210 Only)



WIRELESS ADAPTER
Z3210 (Option)
Attach to enable
Bluetooth® wireless
technology



Learn More

Transport to the Excel® file



*It will be supported by the 2021 upgrade.

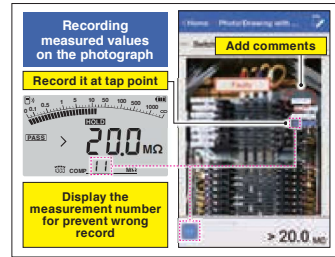
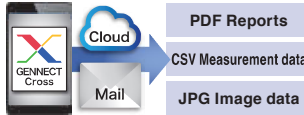


Open an Excel® file and select a cell. The measured value being held on the instrument's display will be transferred to the computer and entered into the selected cell.

Transport to GENNECT Cross

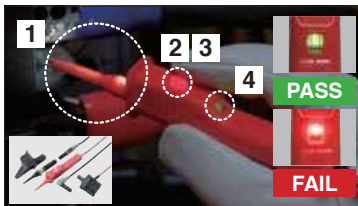


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GENNECT Cross, a free app designed specifically for use with Hioki measuring instruments, lets you check and manage measurement results and create reports. The software provides a range of functionality that helps manage data in the field, including photographing measurement sites, placing measurement results on photographs, and saving handwritten memos.

Significantly improve testing speed using test lead with remote switch



- 1 LED light shines a spotlight on the target
- 2 Red light warns of live voltage detection
- 3 Measurement start switch
- 4 Identify pass/fail decisions with red or green light

TEST LEAD SET WITH REMOTE SWITCH L9788-11 (Option)

*Standard with the IR4056-21, Not CE Marked

Identify PASS / FAIL using light and sound



Compare measured values to pre-set reference values to generate a pass or fail decision with the Comparator function.

Convenient for inspections

Low resistance measurement^{*1}

Perform EV and HEV continuity checks as well as resistance measurement of protective conductors in facility electrical equipment as defined by IEC 60364.

AC/DC voltage measurement

Automatically detect AC or DC for testing. Use as a tester thanks to DC voltage measurement functionality.

PV Ω dedicated function^{*2}

Measurement is not affected even when the PV system is online.

^{*1} Excludes IR4053 ^{*2} IR4053 Only

One-touch Start and Stop

Single test



Measurement voltage is applied while MEASURE key is pressed

Continuous test



Lift and lock the MEASURE key to apply a continuous stream of voltage

Prevent Accidental High Voltage Generation

Flashing light







Under [500V], [1000V], or [PVΩ] settings, the RELEASE button will blink. Press to unlock the release of high voltages as an extra safety measure.

Release lock



Lineup

 *Excludes IR4056-21
 Product warranty for 3 years
 Accuracy guaranteed for 1 year

Measurement type	Standard	High-speed	PV	High-voltage
Model	IR4056-20 IR4056-21	IR4057-50	IR4053-10	IR3455
Appearance				
Number of ranges	5	5	5	5
Testing voltage (DC) / Effective maximum indicated value	50 V /100 MΩ 125 V /250 MΩ 250 V /500 MΩ 500 V /2000 MΩ 1000 V /4000 MΩ			250 V /500 GΩ 500 V /1.00 TΩ 1000 V /2.00 TΩ 2500 V /5.00 TΩ 5000 V /10.0 TΩ
1st effective measuring range	0.200 to 10.00 MΩ (50 V) 0.200 to 25.0 MΩ (125 V) 0.200 to 50.0 MΩ (250 V) 0.200 to 500 MΩ (500 V) 0.200 to 1000 MΩ (1000 V)			0.00 to 500 GΩ (250 V) 0.00 to 1.00 TΩ (500 V) 0.00 to 2.00 TΩ (1000 V) 0.00 to 5.00 TΩ (2500 V) 0.00 to 10.0 TΩ (5000 V)
PV Ω measurement	N / A	N / A	✓	N / A
Leakage current	N / A	N / A	N / A	1.00 nA to 1.20 mA
DC voltage	600 V	600 V	1000 V	1.00 kV
AC voltage	600 V	600 V	600 V	750 V
Low resistance measurement	✓	✓	N / A	N / A
Displaying 1-min. values	N / A	✓	N / A	N / A
Comparator decision response time	✓ 0.8 second	✓ 0.3 second	✓ 0.8 second (PV : 4 s)	N / A
AUTO power save	✓	✓	✓	✓
AUTO range	✓	✓	✓	✓
Data hold	MANUAL	MANUAL	MANUAL	MANUAL
Bluetooth® communication	N / A	✓ (With Z3210)	N / A	N / A
Bar graph	N / A	✓	N / A	✓
Backlight	✓	✓	✓	✓
Safety standard category	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT IV 600 V CAT III 1000 V
CE	✓	✓	✓	✓
Dustproof and waterproof	IP40	IP40	IP40	IP40
Drop proof	✓	✓	✓	N / A
Power supply	LR03 × 4 alkaline	LR03 × 4 alkaline	LR03 × 4 alkaline	LR03 × 6 alkaline
Dimensions (W × H × D)	159 × 177 × 53 mm 6.26 × 6.97 × 2.09 in	159 × 177 × 53 mm 6.26 × 6.97 × 2.09 in	159 × 177 × 53 mm 6.26 × 6.97 × 2.09 in	260 × 250.6 × 119.5 mm 10.24 × 9.87 × 4.70 in
Mass	600 g (21.2 oz)	640 g (22.6 oz)	600 g (21.2 oz)	2.8 kg (98.8 oz)

INSULATION TESTER IR4056-20, IR4056-21

CE * IR4056-20 only
Product warranty for 3 years
Accuracy guaranteed for 1 year



With
• TEST LEAD L9787
• Neck strap
• LR6 alkaline battery x4
• Instruction manual

IR4056-20



With
• TEST LEAD SET WITH REMOTE SWITCH L9788-11
• Neck strap
• LR6 alkaline battery x4
• Instruction manual

IR4056-21 Not CE marked



5 ranges

Comparator decision response time : 0.8 s

CAT III 600 V

INSULATION TESTER IR4057-50, IR4057-90

CE Product warranty for 3 years
Accuracy guaranteed for 1 year



New



L4930



L4938



L4935

With
• CONNECTION CABLE L4930
• ALLIGATOR CLIP SET L4935
• TEST PIN SET L4938
• Neck strap
• LR6 alkaline battery x4
• Instruction manual

**IR4057-50
IR4057-90***

*Bundled with the wireless adapter Z3210



WIRELESS ADAPTER
Z3210 (Option)
Attach to enable
Bluetooth®
wireless technology



Please see www.hioki.com
for list of supported regions.



5 ranges

Comparator decision response time : 0.3 s

Digital bar graph

CAT III 600 V

INSULATION TESTER (For Photovoltaic Generation Systems) IR4053-10

CE Product warranty for 3 years
Accuracy guaranteed for 1 year



With
• TEST LEAD L9787
• Neck strap
• LR6 alkaline battery x4
• Instruction manual

IR4053-10



5 ranges

Comparator decision response time : 0.8 s

Comparator decision response time (PV) : 4 s

CAT III 600 V

Model	IR4056, 57-50	IR4053							Basic accuracy	
Measurement parameters	Insulation resistance	✓	✓	Testing voltage (DC)	50 V	125 V	250 V	500 V	1000 V	-
				Effective maximum indicated value (MΩ)	100	250	500	2000	4000	-
				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	±2% rdg ±2 dgt
				2nd effective measuring range (MΩ)	10.1 to 100.0	25.1 to 250	50.1 to 500	501 to 2000	1010 to 4000	±5% rdg
	PV Ω measurement	N / A	✓	Testing voltage (DC)	500 V		1000 V		-	-
				Effective maximum indicated value (MΩ)	2000		4000		-	-
				1st effective measuring range (MΩ)	0.200 to 500		0.200 to 1000		±4% rdg	
				2nd effective measuring range (MΩ)	501 to 2000		1010 to 4000		±8% rdg	
	DC Voltage	N / A	✓	4.200 V/42.00 V/420.0 V/1000 V						±1.3% rdg ±4 dgt ^{*1}
		✓	N / A	4.200 V/42.00 V/420.0 V/600 V						±1.3% rdg ±4 dgt ^{*1}
AC Voltage	✓	✓	420.0 V ^{*2} /600 V						±2.3% rdg ±8 dgt ^{*1}	
Low resistance measurement	✓	N / A	10.00 Ω/100.0 Ω/1000 Ω						±3% rdg ±2 dgt	

Operating temperature IR4056, 57-50: -25°C to 65°C, 90% rh or less (non-condensating)
IR4053: 0°C to 50°C, 90% rh or less (non-condensating)

Storage temperature IR4056, 57-50: -25°C to 65°C, 90% rh or less (non-condensating)
IR4053: -10 °C to 50°C, 90% rh or less (non-condensating)

Dustproof and waterproof IP40

Standards EN61326 (EMC)
EN61557-1/-2/-4⁻³/10

Power supply LR6 alkaline battery x4
Continuous operating time 20 hours

Dimensions (W × H × D) 159 × 177 × 53 mm (6.26 × 6.97 × 2.09 inch)

Mass IR4056, 53: 600 g (21.2 oz)
IR4057-50: 640 g (22.6 oz)

Order code **IR4056-20**

Order code **IR4056-21**

Order code **IR4057-50**

Order code **IR4057-90**

Order code **IR4053-10**

Order code **Z3210**

^{*1} Ranges in excess of 600 V/1000 V are outside the accuracy guarantee

^{*2} Minimum indicated value: 30.0 V

^{*3} Subclause 4.3 of Part 4 (interchanging of test leads) is not applicable when L9788-10 is used

Model IR4057-90 includes Z3210 as a set