HIOKI

ANALOG MΩ HiTESTER SERIES

Models IR4016-20, IR4017-20, IR4018-20, 3490

Field measuring instruments

Single range: IR4010 SERIES
3-range: 3490

CE

Flip the Cover

Quick and easy storage without disconnecting the leads

3 years
Guaranteed for 3 years

ISO 9001 JMI-0216

ISO14001 JQA-E-90091

INTERNET HIOKI Website

www.hioki.com

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

Built for the Field

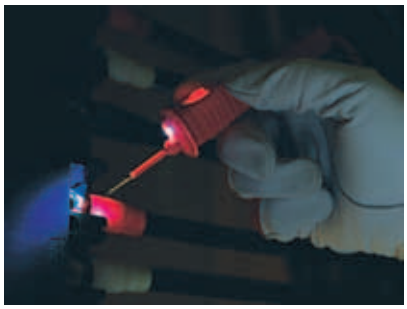
LIGHT

See better in the dark

Luminous Scale

Bright LED

- Work safely knowing that when the RED is lit, live wires, high voltage or electrical discharge is present
- The super bright light at the tip of the optional 9788 Test Leads adds to efficiency



Check the Battery Status

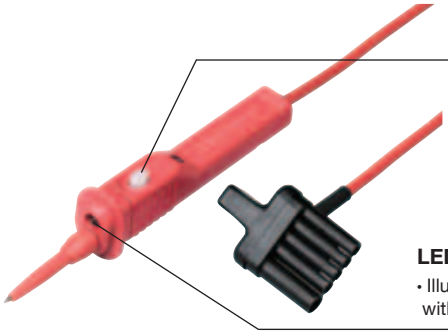
Be well-informed about the condition of your batteries. Green signals that the battery level is sufficiently high, and red warns of low battery power. Replace the batteries before the LED turns completely off.

BATT : Hi **BATT : Lo** **BATT : Dead**

Check for Live Circuits

The LIVE CIRCUIT LED will light up in red whenever the voltage exceeds 20V AC between the LINE and EARTH terminals, and when at least 20V DC is still remaining during the auto discharge.

TEST LEAD WITH REMOTE CONTROL SWITCH



REMOTE CONTROL SWITCH

- Start and stop the test at the touch of a button
- Test for insulation resistance single-handedly

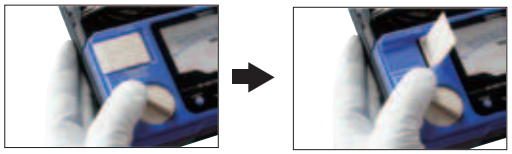
LED LIGHT

- Illuminate the test location with a bright white LED

MEASURE SWITCH

- Ergonomic design lets you start and stop tests with a single press

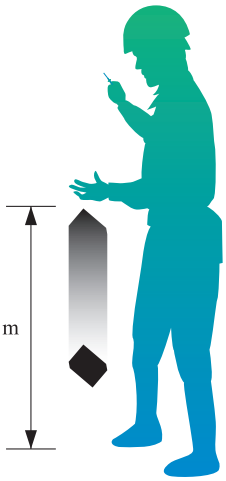
- Simply flip the switch to measure continuously



DROP PROOF

DROP PROOF

Testers are built tough to withstand a 1-meter drop onto a concrete floor



Model Line-up At A Glance

MODEL	Insulation Resistance			Resistance Measurement	AC voltage Measurement
	250V	500V	1000V		
IR4016-20	—	100MΩ	—	—	600V AC
IR4017-20	—	1000MΩ	—	—	600V AC
IR4018-20	—	—	2000MΩ	—	600V AC
3490	100MΩ	100MΩ	4000MΩ	3Ω, 30Ω	600V AC

Single range Models IR4016-20, IR4017-20, IR4018-20

Rated output voltage
Effective maximum indicated value

3-range Model 3490 INSULATION & CONTINUITY

Rated output voltage 250V / 500V / 1000V

Easy-to-Read Scale

The 250V and 500V ranges share a common 100MΩ, making the display completely clean and uncluttered

SCALE
250V/ 50MΩ
500V/100MΩ ➡ 100MΩ

4000MΩ Scale at the 1000V Range

3Ω range, 200mA EN 61557

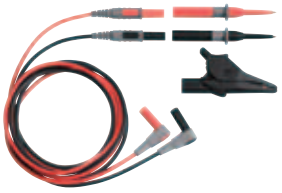
Checks ground wire continuity with current of 200mA

Also capable of testing the continuity of electrical grounds in accordance with EN 61557

Accessories

TEST LEAD
L9787 (1.2m)

Conforms to safety standard
IEC61010-031 (revised) for hand-held probes

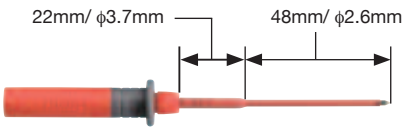


included as a standard accessory
(This sleeve cannot be attached to previous products)

When measuring in a CAT III environment,
be sure toattach the sleeve to the test leads.

Options

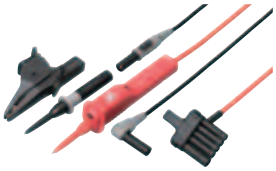
BREAKER PIN
L9787-91 (for Model L9787)



Extra long tips extend deep into the breaker openings for more reliable testing

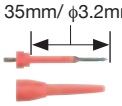
BREAKER PIN
L9788-92 (for Model L9788-10)

COMPLETE TEST LEAD WITH REMOTE CONTROL SWITCH
L9788-11 (1.2m)



TEST LEAD WITH REMOTE CONTROL SWITCH
L9788-10 (1.2m)

TIP PIN
L9788-90
(for Model L9788-10)



When measuring in a CAT III environment, be sure to attach the sleeve to the test leads.

MAGNETIC ADAPTER
9804-02

Magnetic tip for use with the standard Models L9788-11, L9788-10, L9787 (generally compatible with M6 pan screws)

General Specifications

Power supply	Rated power voltage: 1.5 VDC × 4, LR6 alkaline battery × 4
Continuous operating time	Approx. 20 hours (at 500V range, no load) *1
Auto Power Save	Approx. 15 minutes
Operating Temperature & Humidity	0 to 40°C (32 to 104°F), 90% rh or lower (non-condensating) 40 to 50°C (104 to 122°F), at 50°C and below relative with linear decrease up to 50% rh
Storage Temperature & Humidity	-10 to 50°C (14 to 122°F), 90% rh or lower (non-condensating)
Maximum rated voltage to earth	600 VAC, Measurement Category III, Anticipated Transient Overvoltage: 6000V
Dielectric strength	7060 VAC, 50/60Hz, Measurement terminals - electrical enclosure, current sensitivity 1 mA
Standards	Safety EN61010, EMC EN61326 *3490 only: EN61557-1/-2/-4 *IR4016-20, IR4017-20, IR4018-20: EN61557-1/-2
Drop Proof	On concrete: 1m/1 time
Dimensions (excluding protrusions)	Approx. 159W × 177H × 53D mm (6.26"W × 6.97"H × 2.09"D)
Mass	Approx. 610g (21.5 oz.) (including battery, not including test lead)
Accessories	Test lead L9787 ×1, Instruction manual ×1, Shoulder strap ×1, LR6 alkaline battery ×4

*1 IR4018-20 :15 hours

❑ 3490 specifications

Guaranteed for one year at 23°C±5°C (73°F±9°F) and 90% rh

Insulation resistance measurement	Rated output voltage	250 V DC	500 V DC	1000 V DC
	Effective maximum indicated value	100 MΩ		4000 MΩ
	Center scale value	1 MΩ		50 MΩ
	1st effective measuring range	0.05 to 50 MΩ		2 to 1000 MΩ
		±5% of indicated value		
	2nd effective measuring range	0.01 to 0.05 MΩ 50 to 100 MΩ		0.5 to 2 MΩ 1000 to 4000 MΩ
		±10% of indicated value		
	Open circuit voltage	1 to 1.2 times of rated output voltage		
	Lower limit measurement resistance value to be maintained reted output voltage	0.25 MΩ	0.5 MΩ	1 MΩ
	Rated current	1mA (Tolerance: 1 to 1.2 times of the rating value)		
	Overload protection	660 V AC (10 sec.)		
Resistance measurement	Ranges	3 Ω		30 Ω
	Center scale value	1.5 Ω		15 Ω
	Accuracy	±0.09 Ω		±0.9 Ω
	Open-circuit voltage	4.1 to 6.9 V		
	Measuring current	200 mA DC or more		20 mA DC or more
	Overload protection	720 V AC (10 sec., by Fuse)		
AC voltage measurement	Measuring range	0 to 600 V (50/60 Hz)		
	Accuracy	±5% of maximum scale value		
	Input resistance	100 kΩ or more (50/60 Hz)		
	Overload protection	660 V AC (10 sec.)		

❑ IR4016-20, IR4017-20, IR4018-20 specifications

Guaranteed for one year at 23°C ±5°C (73°F ±9°F) and 90% rh

Model		IR4016-20	IR4017-20	IR4018-20
Insulation resistance measurement	Rated output voltage	500 V DC	500 V	1000 V DC
	Effective maximum indicated value	100 MΩ	1000 MΩ	2000 MΩ
	Center scale value	2 MΩ	20 MΩ	50 MΩ
	1st effective measuring range	0.1 to 50 MΩ	1 to 500 MΩ	2 to 1000 MΩ
		±5% of indicated value		
	2nd effective measuring range	0.01 to 0.1 MΩ 50 to 100 MΩ	0.5 to 1 MΩ 500 to 1000 MΩ	1 to 2 MΩ 1000 to 2000 MΩ
		±10% of indicated value		
	Open circuit voltage	1 to 1.2 times of rated output voltage		
	Lower limit measurement resistance value to be maintained reted output voltage	0.5 MΩ	0.5 MΩ	1 MΩ
	Rated current	1mA (Tolerance: 1 to 1.2 times of the rating value)		
	Overload protection	600V AC (10 sec.)		660V AC (10 sec.)
AC voltage measurement	Measuring range	0 to 600 V (50/60 Hz)		
	Accuracy	±5% of maximum scale value		
	Input resistance	500 kΩ or more (50/60Hz)		
	Overload protection	600V AC (10 sec.)		660V AC (10 sec.)