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Data Sheet

August 13, 2026

AGILENT / HP / KEYSIGHT

Agilent HP Keysight U1453A

Keysight U1453A Insulation Multimeter / Insulation Resistance Tester The Keysight U1453A is a handheld insulation resistance tester with a full-featured 4.5-digit OLED DMM (True RMS). It provides selectable and adjustable insulation test voltages, Timed/PI/DAR tests, earth-bond resistance, and wireless reporting via optional Bluetooth adapter for predictive and preventive maintenance. The Keysight U1453A is a handheld insulation resistance tester with a full-featured 4.5-digit OLED DMM (True RMS). It provides selectable and adjustable insulation test voltages, Timed/PI/DAR tests, earth-bond resistance, and wireless reporting via optional Bluetooth adapter for predictive and preventive maintenance.

**MODEL****Agilent / HP /
Keysight U1453A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****U1453A****LISTING**[https://aumictechlabs.c
om/products/u1453a-2/](https://aumictechlabs.com/products/u1453a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight U1453A is a handheld insulation resistance tester engineered for predictive and preventive maintenance across electrical and industrial environments. It combines high-voltage insulation testing with full DMM functionality, wireless connectivity, and field-hardened construction - delivering comprehensive electrical diagnostics in a single instrument. Technical Specifications Insulation resistance measurements span 50 V to 1000 V preset test voltages, with adjustable output from 10 V to 1.1 kV in 1 V increments. The instrument measures insulation resistance up to 260 GΩ and supports timed, polarization index (PI), and dielectric absorption ratio (DAR) test functions. Multimeter capabilities include AC/DC voltage, resistance, capacitance,

diode, and continuity measurements. An OLED display provides real-time readout in field conditions. Data logging stores up to 2000 readings with automatic tabulated or graphical report generation. The U1453A operates across -40 °C to +55 °C and runs on four AA batteries. Physical dimensions are 179 mm × 88 mm × 41 mm; weight is 350 g.

Key Features

- IP67 ingress protection - fully waterproof and dustproof
- Drop-tested to 3 m (10 feet) with overmold enclosure
- Safety-rated CAT III 1000 V / CAT IV 600 V per IEC/EN 61010-1
- Wireless testing via optional U1117A Bluetooth adapter to Windows PC, iOS, and Android devices
- Wired data transfer using IR-to-USB cable (U1173B)
- Measurement range extends to 260 GΩ for high-impedance applications

Typical Applications

- Predictive maintenance programs for motors, transformers, and cable systems.
- Preventive testing in substations, manufacturing facilities, and service environments.
- High-voltage equipment diagnostics where field portability and durability are essential.

Compatibility & Integration

Complies with IEC/EN 61010-1, IEC/EN 61557-1, IEC/EN 61557-2, IEC/EN 61557-4, IEC 61326-1, CISPR 11/EN 55011, ICES/NMB-001, and AS/NZS CISPR 11. Remote operation requires U1117A wireless adapter for PC and mobile platform support.

Features & description

From manufacturer datasheet

Features

• OLED display with up to 66000 counts DMM resolution • Standard IR test voltages 50 100 250 500 1000 V • Adjustable IR test voltage 10 V to 1.1 kV in 1 V steps • Insulation resistance measurement to 260 GOhm • Timed PI and DAR insulation tests • IP67 enclosure and 3 m drop proof construction • CAT III 1000 V / CAT IV 600 V safety rating • True RMS AC measurements on U1453A

Applications

• Insulation resistance testing on motors cables switchgear and wiring • Polarization Index and Dielectric Absorption Ratio trending • Field True RMS voltage resistance capacitance diode and continuity checks • Remote IR testing and automated report generation with U1117A adapter

U1453A Characteristics / Specifications

PARAMETER	VALUE
Model	U1453A
Manufacturer	Keysight
Instrument Type	Insulation Multimeter / Insulation Resistance Tester
Alias	U1453A; Keysight U1453A; Agilent U1453A
Display type	OLED
Display counts DMM	66000 / 6600 counts
Insulation test voltages standard	50 V / 100 V / 250 V / 500 V / 1000 V
Insulation test voltage adjustable	10 V to 1.1 kV in 1 V steps
Insulation resistance maximum	260 GOhm
Earth bond resistance range	6 Ohm to 60 kOhm
Timed PI DAR tests	yes
DMM AC type	True RMS
DMM functions	AC/DC voltage, resistance, capacitance, diode, continuity
Safety category	CAT III 1000 V / CAT IV 600 V
Ingress protection	IP67
Drop proof height	3 m (10 ft)
Operating temperature	-40 C to +55 C
Battery type	AA
Battery life typical	160 h class
Test current IR class	1 mA class
Dimensions HxWxD	218 mm x 100 mm x 58 mm
Weight	686 g
Wireless adapter option	U1117A IR to Bluetooth
Report software	complimentary Keysight reporting / Meter Logger class
Remote platforms	Windows PC, iOS, Android with adapter

PARAMETER	VALUE
Series	U1450A / U1460A Notes Specs from Keysight U1450A/U1460A datasheet 5991-4290EN and U1453A user guide. Confirm firmware, battery type installed, and optional U1117A adapter.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.