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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U1231A Handheld Digital Multimeter

Agilent Keysight U1231A Handheld Digital Multimeter The Agilent/Keysight U1231A is a 6000-count U1230 Series handheld DMM with 0.5 percent basic DCV accuracy, built-in LED flashlight, Zlow mode, and CAT III 600 V protection. OEM comparison tables list voltage to 600 V, resistance to 60 MOhm, capacitance to 10 mF, frequency to 99.99 kHz, IP42 sealing, and about 500 hours battery life. Residential and light industrial electrical troubleshooting, non-contact checks where Vsense is equipped, and dim-environment work with the integrated flashlight. The Agilent/Keysight U1231A is a 6000-count U1230 Series handheld DMM with 0.5 percent basic DCV accuracy, built-in LED flashlight, Zlow mode, and CAT III 600 V protection. OEM comparison tables list voltage to 600 V, resistance to 60 MOhm, capacitance to 10 mF, frequency to 99.99 kHz, IP42 sealing, and about 500 hours battery life. Residential and light industrial electrical troubleshooting, non-contact checks where Vsense is equipped, and dim-environment work with the integrated flashlight. Basic DCV Accuracy: 0.5 percent plus 2 counts



MODEL

**Agilent / Keysight
U1231A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

U1231A

LISTING

<https://aumictechlabs.com/products/u1231a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight U1231A is a handheld digital multimeter designed for versatile electrical testing applications, featuring a 6000-count display and True RMS measurements for accurate readings. Its design incorporates a built-in LED flashlight to aid visibility in low-light conditions, and it has a flashing backlight as a visual alert for continuity tests in noisy environments. This multimeter provides a suite of measurement functions, including resistance, capacitance, frequency, temperature (with an optional module), diode tests, and continuity tests. The U1231A is engineered for rugged field use and includes safety features such as CAT III 600V overvoltage protection. Data logging capabilities allow for the storage of up to 10 readings, with IR-to-USB connectivity for transferring data to a PC.

Technical Specifications

General Features

- Display:** 6000 counts, 3.5 digit True RMS multimeter
- Reading Rate:** Up to 5 readings/second
- Battery Life:** Up to 500 hours
- Power Source:** Four 1.5 V AAA alkaline batteries
- Built-in Flashlight:** LED illumination for testing in poorly lit areas
- Audible Alerts:** Beeps for continuity tests
- Visual Alerts:** Flashing backlight for continuity tests in noisy environments
- Data Logging:** Stores up to 10 readings
- Connectivity:** IR-to-USB connectivity for data transfer to PC (requires optional IR-USB cable U1173A)
- Optional Connectivity:** Optional U1117A Infrared (IR)-to-Bluetooth adapter for wireless Bluetooth connection
- Auto-Hold Function:** Yes
- Display Hold Function:** Yes
- Min/Max Recording:** Yes
- Null Function:** Yes
- Low Impedance Mode (ZLOW):** Eliminates ghost voltage and improves measurement accuracy
- Input Impedance (ZLOW):** 3 k Ω (nominal)
- Vsense Function:** Non-contact AC voltage detection
- Ergonomic Design:** Anti-slip rotary dial for easy function selection, suitable for single-handed operation
- Ingress Protection:** IP42 rating
- Altitude:** Suitable for use at altitudes up to 2,000 m
- Operating Environment:** Designed for indoor use in areas with low condensation

Electrical Specifications

- DC Voltage**
 - Ranges:** 600 mV, 6 V, 60 V, 600 V
 - Accuracy:** 0.5% + 2 counts (for 600 mV to 600 V ranges)
 - Input Impedance:** 10 M Ω (typical)
- Notes:** Accuracy for the 600 mV range is specified after using the Null function to subtract thermal effects. Auto-ranging is disabled when using VZLOW function; range is set to 600V in manual ranging mode.
- AC Voltage (True RMS)**
 - Ranges:** 600 mV, 6 V, 60 V, 600 V
 - Accuracy:** 1.0% + 3 counts (for 600 mV to 600 V ranges)
 - Frequency Bandwidth:** 45 Hz to 1 kHz
 - 45 Hz to 500 Hz: 1.0% + 3
 - 500 Hz to 1 kHz: 2.0% + 3
 - Input Impedance:** 10 M Ω (nominal) in parallel with < 100 pF
 - Overload Protection:** 600 Vrms
 - DC Current:** Not supported
 - AC Current:** Not supported
 - Resistance**
 - Ranges:** 600 Ω , 6 k Ω , 60 k Ω , 600 k Ω , 6 M Ω , 60 M Ω
 - Accuracy:** Specified based on measurement conditions; for 6 M Ω and 60 M Ω ranges, Relative Humidity (RH) is specified for < 60%.
 - Buzzer:** Beeps when resistance is < 23 Ω $\pm$ 10 Ω
 - Maximum Open Voltage:** < +3 V DC
 - Overload Protection:** 600 Vrms
 - Continuity Capture:** Can capture intermittent measurements longer than 1 ms
 - Capacitance**
 - Ranges:** 1 nF to 10 mF (various ranges including 1 μ F to 10000 μ F)
 - Accuracy:** Specified based on measurement conditions; accuracy is specified for film capacitor or better after Null function is used.
 - Maximum Display:** 1200 counts
 - Overload Protection:** 600 Vrms for short circuits with < 0.3 A current
 - Frequency**
 - Ranges:** 99.99 Hz, 999.9 Hz, 9.999 kHz, 99.99 kHz
 - Accuracy:** 0.1% + 2 counts
 - Minimum Input Frequency:** 5 Hz
 - Diode Test**
 - Forward Voltage Drop:** Measured between 0.3 V and 0.8 V
 - Open Voltage:** <

+3 V DC * **Buzzer:** Beeps once for forward-biased diode or semiconductor junctions *
Maximum Display: 2100 counts * **Over**

U1231A Characteristics / Specifications

PARAMETER	VALUE
Display Counts	6000
Basic DCV Accuracy	0.5 percent plus 2 counts
DC Voltage Ranges	600 mV to 600 V
AC Voltage Ranges	600 mV to 600 V
Current Measurement	No DCI ACI
Resistance Ranges	600 ohm to 60 MOhm
Frequency Ranges	99.99 Hz to 99.99 kHz
Capacitance Ranges	1000 nF to 10 mF
Temperature Measurement	No temperature
Vsense Non Contact Voltage	No
Zlow Mode	Yes
Safety Category	CAT III 600 V
Ingress Protection	IP42
Battery Life Typical	500 hours
Battery Type	4 × 1.5 V AAA class
Operating Temperature	minus 10 C to 55 C
Operating Altitude Maximum	2000 m
Display Maximum Reading	6600 counts
Flashlight Color Temperature Typical	5500 K
Connectivity Options	IR USB / Bluetooth
Internal Logging	10 readings
Continuity And Diode	Yes
Auto Manual Ranging	Yes

U1231A Specifications

PARAMETER	VALUE
Agilent Keysight U1231A Handheld Digital Multimeter	Overview
Built in cool white LED flashlight	Zlow low impedance mode
Optional IR USB or Bluetooth	6000 count autoranging display
Technical Specifications	Display Counts: 6000
Notes	From Keysight U1230 Series Handheld Digital Multimeters data sheet comparison table for U1231A.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	minus 10 C to 55 C
Operating Temperature	minus 10 C to 55 C
Operating Altitude Maximum	2000 m
Display Maximum Reading	6600 counts
Flashlight Color Temperature Typical	5500 K
Connectivity Options	IR USB / Bluetooth
Internal Logging	10 readings
Continuity And Diode	Yes
Auto Manual Ranging	Yes Notes From Keysight U1230 Series Handheld Digital Multimeters data sheet comparison table for U1231A.

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	
Specifications	
PARAMETER	VALUE
Display Counts	6000
Basic DCV Accuracy	0.5 percent plus 2 counts
DC Voltage Ranges	600 mV to 600 V
AC Voltage Ranges	600 mV to 600 V
Current Measurement	No DCI ACI
Resistance Ranges	600 ohm to 60 MOhm
Frequency Ranges	99.99 Hz to 99.99 kHz
Capacitance Ranges	1000 nF to 10 mF
Temperature Measurement	No temperature
Vsense Non Contact Voltage	No
Zlow Mode	Yes
Safety Category	CAT III 600 V
Ingress Protection	IP42
Battery Life Typical	500 hours
Battery Type	4 x 1.5 V AAA class
Operating Temperature	minus 10 C to 55 C
Operating Altitude Maximum	2000 m
Display Maximum Reading	6600 counts
Flashlight Color Temperature Typical	5500 K
Connectivity Options	IR USB / Bluetooth
Internal Logging	10 readings
Continuity And Diode	Yes
Auto Manual Ranging	Yes
Notes	
From Keysight U1230 Series Handheld Digital Multimeters data sheet comparison table for U1231A.	

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
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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.