

# Keysight U1272A DMM Fluke Alternative



Keysight U1272 DMM

## Keysight U1272 DMM (Agilent U1272A DMM)

Rugged 30K counts, IP54 water-and-dust resistant DMM. Includes Low Pass Filter, low input Z mode, and continuity visual/audio alerts.



Keysight U1272 DMM Unboxed

## Keysight U1272A Multimeter

I have recently considered replacing my trusty old Fluke 187 DMM. The reasons are a topic for another post. My research into a Fluke alternative led me away from Fluke and to a company called Keysight (formally known as Agilent). Keysight offers DMMs with the features I needed and features I wasn't aware I needed.

Unfortunately, I wasn't eager to spend \$700 plus on a brand I was previously unaware existed. Fortunately, one of my team asked if the company could buy him a new DMM to replace his 30-year-old Fluke meter, and I seized the opportunity and bought him a \$432 [Keysight U1272A Multimeter](#).

I haven't tried the U1272 meter yet, but I will test it soon, following up with a review.

The only thing I can comment on at this time is build quality. The Keysight U1272 multimeter feels on par with my Fluke DMMs. Let's see what happens in the field.

The **Keysight U1272A** digital multimeter is shaped perfectly to fit in your hand, with or without gloves on. Its nonslip ergonomic shape enables you to carry your DMM and perform measurements on the go easily. Additionally, the controls are easy to operate due to the large knob and buttons. Designed for maximum efficiency and productivity, these DMMs offer convenient functions such as **ZLOW** to eliminate stray voltages, **Smart  $\Omega$**  to minimize false readings due to leakage current, and **Qik-V** to determine the existence of AC and/or DC voltages.

### Shaped to fit

The **Keysight U1272A** is shaped perfectly to fit in your hand, with or without gloves on. Its non-slip ergonomic shape enables you to carry your DMM and perform measurements on the go easily.

### Tailored to perform

Agilent **U1270 series** comes with intelligent features such as LPF, which eliminates high-frequency noise and harmonics, and **Qik-V** to determine the existence of AC and DC voltage. The U1270 series incorporates visual alert blinks and a beeper for the Continuity test for measurements in noisy environments to improve safety.

### Built to last

With IP 54 certification, the U1270 Series is water- and dust-resistant for harsh working conditions.

### Get a better grip on your DMM

The U1270 series is shaped perfectly to fit in your hand, with or without gloves on. Its non-slip ergonomic shape enables you to carry your DMM and perform measurements on the go easily. Additionally, the controls are easy to operate due to the large knob and buttons.

### Improve productivity with intelligent features.

Designed for maximum efficiency and productivity in industrial settings, these DMMs offer convenient functions such as **Z LOW** to eliminate stray voltages, **Smart  $\Omega$**  to minimize false readings due to leakage current, and **Qik-V** to

determine the existence of AC and/or DC voltages.

Continuity detection in noisy and dark places is made easy with the U1270 series' loud beeper and **Backlight Alert** function, which flashes the backlight to indicate continuity and improve safety.

When it comes to Variable Frequency Drive (VFD) troubleshooting, the U1270 series has **Low Pass Filter** to handle the job with ease.

### **Water and Dust-Resistant**

The series' tightly sealed design helps protect against water, dust, and damage. Each DMM is IP 54 certified so that you can confidently carry out tests and measurements, even in harsh working conditions.

### **Key functions**

#### **Low Impedance ( $Z_{LOW}$ )**

The **Keysight U1272A** is a dual input impedance digital multimeter. The DMM's high input impedance is preferred in most electrical measurements because it would not load the circuit under test. However, the U1272A's 2 k $\Omega$  low impedance function comes in handy to obtain accurate measurements on circuits that may contain stray voltages. Stray voltages are usually found in non-energized electrical wiring adjacent to powered wires due to capacitive or inductive coupling between these wires.

When a pair of test leads is placed between the open circuit and neutral conductor, the circuit is then complete and forms a voltage divider in conjunction with the input impedance of the multimeter. A high input impedance multimeter is sensitive enough to measure voltage coupled into the disconnected conductor, thus giving an inaccurate indication of a live conductor. The low impedance function eliminates false readings by dissipating the stray voltages, thus improving safety and measurement efficiency during voltage.

## **Keysight U1270 DMM Highlights**

- 30,000-count resolution
- Measure up to 1000 V AC and DC
- Measure up to 10 A (20 A for 30 s)
- Resistance, diode test, temperature, capacitance
- Low Impedance mode and Low Pass Filter
- Peak detection of up to 250  $\mu$ s
- Continuity tests with visual and audio alerts
- Seven readings/s measurement rates for voltage and current
- Smooth function for accurately stable readings
- Up to 10,000 points of internal memory for data logging
- Bluetooth wireless connectivity with optional U1177A Bluetooth
- PC connectivity with optional U1173A IR-USB cable
- IP 54 certified – water and dust resistant
- CAT III 1000 V, CAT IV 600 V safe overvoltage protection
- 300 hours of battery life and Keysight Remote Link Solution enabled (wireless data logging via Bluetooth)
- Eliminate ghost voltage with low input impedance mode,  $Z_{LOW}$

- Quick VFD troubleshooting with built-in low pass filter
- Capture motor transients as fast as 250  $\mu$ s with 'peak detect.'

#### **What's included:**

- Standard 3-year warranty (90 days for un-serialized accessories)
- Test lead set
- K-type thermocouple and adapter
- Quick start guide
- Batteries
- Test report
- Certificate of calibration

Visit [Keysight](#)

You might also be interested in the [Keysight U1242B Digital Multimeter](#)

#### **Keysight U1272A DMM Manual Downloads**

- [Keysight U1270 Series Handheld Digital Multimeters Data Sheet](#)
- [Keysight U1271A-U1272A Handheld Digital Multimeter Instruction Manual \(English\)](#)
- [Keysight U1271A-U1272A Handheld Digital Multimeter Quick Start Guide \(Multilingual\)](#)

