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Data Sheet

August 2, 2026

KEITHLEY

Keithley DMM7510 7.5 Digit Graphical Sampling Multimeter

Keithley DMM7510 7.5 Digit Graphical Sampling Multimeter The DMM7510 provides a 7.5-digit graphical sampling digital multimeter designed for high-sensitivity DC and AC measurements, combining a touchscreen interface with a 1 MS/s digitizer class and 32-bit ADC architecture for low-level voltage, current, and resistance characterization. Precision DC and AC voltage and current measurement in R&D and production; low-level leakage and insulation resistance testing; four-wire micro-ohm and contact resistance measurement; waveform capture and transient analysis via digitizer mode; automated test via GPIB, USB, or LAN (LXI). The DMM7510 provides a 7.5-digit graphical sampling digital multimeter designed for high-sensitivity DC and AC measurements, combining a touchscreen interface with a 1 MS/s digitizer class and 32-bit ADC architecture for low-level voltage, current, and resistance characterization. Precision DC and AC voltage and current measurement in R&D and production; low-level leakage and insulation resistance testing; four-wire micro-ohm and contact resistance measurement; waveform capture and transient analysis via digitizer mode; automated test via GPIB, USB, or LAN (LXI).



MODEL

Keithley DMM7510

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

DMM7510

LISTING

<https://aumictechlabs.com/products/dmm7510-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley DMM7510 is a 7.5-digit graphical sampling multimeter that combines precision DC/AC measurement capabilities with high-speed waveform digitization and touchscreen visualization. Built around an 18-bit digitizer sampling at 1 MS/s, the instrument captures transient events and dynamic signals with 10 nV DC voltage sensitivity and 1 pA DC current sensitivity. The 5-inch color touchscreen with pinch-and-zoom functionality enables intuitive analysis of captured waveforms, making it ideal for characterizing low-power devices and time-domain behavior. With 14 ppm basic one-year DCV accuracy, selectable 3.5- to 7.5-digit resolution, and internal memory for over 11 million readings (standard mode) or 27.5 million (compact mode), the DMM7510 bridges traditional multimetry and digitization in a single portable platform.

Technical Specifications

Resolution & Display: 3.5- to 7.5-digit selectable. 5-inch capacitive touchscreen, color TFT WVGA (800 × 480) with LED backlight. **Digitizer:** 1 MS/s sampling rate. 18-bit resolution. **Internal memory:** >11 million readings (standard) or 27.5 million readings (compact mode). **DC Voltage:** 10 nV sensitivity. Maximum 1000 V. Selectable input impedance ($>10\text{ G}\Omega$ || $<400\text{ pF}$ or $10\text{ M}\Omega \pm 1\%$). 14 ppm basic one-year DCV accuracy. **AC Voltage:** True RMS. 0.1 μV ac resolution. Maximum 700 V ac. **DC Current:** 1 pA sensitivity. Maximum 10 A dc. **AC Current:** True RMS. 1 nA resolution. Maximum 10 A ac. **Resistance:** 0.1 $\mu\Omega$ sensitivity. 2- and 4-wire measurement, offset-compensated ohms, dry circuit. Maximum 1 G Ω . **Additional Functions:** Frequency to 500 kHz. Temperature (RTD, thermistor, thermocouple). Capacitance (1 nF to 1000 μF). Diode and continuity testing. DC voltage ratio. Voltage and current waveform digitization. **Environmental:** Operating 0°C to 50°C. Relative humidity 0% to 80% non-condensing. 90-minute warmup for specified accuracy. Auto-calibration minimizes temperature and time drift. **Power:** Battery-powered. Typical battery life 3 years.

Key Features

- High-resolution 18-bit digitizer with 1 MS/s capture rate for transient and waveform analysis
- Dual-impedance selectable input for DC voltage (high-impedance or precision 10 M Ω)
- Picoampere-level DC current sensitivity for leakage and low-power device characterization
- 27.5 million reading capacity in compact mode for extended automated test sequences
- Auto-calibration for drift reduction across operating temperature range
- Pinch-and-zoom touchscreen interface for signal exploration

Typical Applications

- Battery and power supply characterization
- Leakage current measurement in semiconductor devices
- Transient capture during power transitions
- Impedance and frequency response analysis
- Temperature monitoring with multiple sensor types
- High-volume production testing with extended data logging

Compatibility & Integration

The DMM7510 operates as a standalone portable instrument. Its graphical interface and local storage eliminate dependency on external logging systems for short-duration test campaigns.

Features & description

From manufacturer datasheet

Features

- 7.5-digit resolution graphical sampling DMM
- Capacitive touchscreen front panel
- 1 MS/s digitizer mode (18-bit class)
- 32-bit ADC architecture
- Sensitivity class: 10 nV, 1 pA, 0.1 $\mu\Omega$
- DC voltage, DC current, resistance, and AC measurement functions
- GPIB, USB, and LAN (LXI) remote interfaces

DMM7510 Characteristics / Specifications

PARAMETER	VALUE
Model	DMM7510
Manufacturer	Keithley (Tektronix)
Instrument Type	7.5-Digit Graphical Sampling Multimeter
Display	Touchscreen graphical interface
Resolution	7.5 digits
Digitizer Rate	1 MS/s (18-bit class)
ADC	32-bit
Sensitivity Class	10 nV (voltage), 1 pA (current), 0.1 μΩ (resistance)
Measurement Functions	DCV, DCI, ohms, AC
Remote Interfaces	GPIB, USB, LAN (LXI)
Alias	DMM7510 Standard Operating Conditions Allow warm-up per manufacturer guidance before precision measurements. Use appropriate sense leads and guard techniques for nano-volt and pico-amp ranges. Maintain stable ambient conditions for low-thermal EMF work.
Digitizer and graphical trace features complement traditional DMM readings	confirm measurement function and range before interpreting high-speed captured waveforms. Alias DMM7510.

DMM7510 Specifications

PARAMETER	VALUE
Keithley DMM7510 7.5 Digit Graphical Sampling Multimeter	Overview
Key Features	- 7.5-digit resolution graphical sampling DMM
Technical Specifications	Model: DMM7510

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

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Standard Operating Conditions

Allow warm-up per manufacturer guidance before precision measurements. Use appropriate sense leads and guard techniques for nano-volt and pico-amp ranges. Maintain stable ambient conditions for low-thermal EMF work.

Operational Notes

Digitizer and graphical trace features complement traditional DMM readings—confirm measurement function and range before interpreting high-speed captured waveforms. Alias DMM7510.

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.