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Data Sheet

July 30, 2026

TEKTRONIX

Tektronix DMM4050 Precision Multimeter, 6.5 Digit

Tektronix DMM4050 Precision Multimeter, 6.5 Digit The Tektronix DMM4050 is a 6.5-digit bench digital multimeter designed for precision measurement in bench-top, field service, and automated system applications. Public Tektronix datasheet and technical reference material describe the instrument as combining high basic DC voltage accuracy, broad function coverage, dual-display operation, graphical analysis tools, and multiple remote interfaces in a compact half-rack instrument. The DMM4050 is suited for precision voltage, current, resistance, frequency, period, continuity, and diode measurements in design verification, troubleshooting, calibration support, production test, and automated instrumentation systems. The DMM4050 also adds temperature and capacitance measurement capability, allowing it to replace multiple dedicated bench instruments in one platform. The Tektronix DMM4050 is a 6.5-digit bench digital multimeter designed for precision measurement in bench-top, field service, and automated system applications. Public Tektronix datasheet and technical reference material describe the instrument as combining high basic DC voltage accuracy, broad function coverage, dual-display operation, graphical analysis tools, and multiple remote interfaces in a compact half-rack instrument. The DMM4050 is suited for precision voltage, current, resistance, frequency, period, continuity, and d



MODEL Tektronix DMM4050	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU DMM4050	LISTING https://aumictechlabs.com/products/dmm4050-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Tektronix DMM4050 is a 6.5-digit precision benchtop multimeter engineered for research, development, and manufacturing environments requiring high-accuracy DC and AC measurements. This instrument consolidates multiple measurement functions into a single platform: DC voltage (100 mV to 1000 V), AC voltage to 1000 V, DC current (100 μ A to 10 A), AC current to 10 A, resistance (10 Ω to 1 G Ω), frequency, period, capacitance, temperature, diode testing, and continuity. True RMS measurement capability handles both AC and AC + DC signals. The dual display permits simultaneous monitoring of two parameters from a single test connection, eliminating setup reconfiguration.

Technical Specifications

Measurement Resolution & Accuracy 6.5-digit resolution across all measurement types

Basic DC voltage accuracy: up to 0.0024% (1 year)

DC voltage resolution: 100 nV minimum

DC current resolution: 100 pA minimum

Resistance resolution: 10 $\mu\Omega$ minimum; 4-wire ($2\times 4\ \Omega$) technique supported

Input impedance: 10 M Ω (default)

Warm-up requirement: 1 hour minimum with Auto Zero enabled for specification compliance

Measurement Functions

Voltage: DC (100 mV–1000 V), AC (to 1000 V, valid >5% of range for sinewaves)

Current: DC (100 μ A–10 A), AC (to 10 A)

Resistance: 10 Ω to 1 G Ω

Frequency and period measurements Capacitance and temperature (DMM4050 only)

Diode test and continuity

Safety & Data Management

Safety rating: CAT I 1000 V, CAT II 600 V

Measurement statistics and histogram analysis

TrendPlot™ paperless data recorder for trend analysis

Key Features

Dual display for parallel measurement acquisition

USB host port (front panel) for direct data and setup export to external storage

Graphical analysis modes: histogram and TrendPlot™ for signal stability assessment

Dedicated front-panel controls for rapid function access

Typical Applications

Precision component characterization, circuit validation, thermal and capacitive measurements in electronics development and production testing.

Compatibility & Integration

RS-232C (DTE 9-pin, 1200–230400 baud)

IEEE 488.2 interface

LAN: Ethernet 10/100Base-T with DHCP

USB-to-RS-232 adapter cable included

LabVIEW SignalExpress™ TE Limited Edition software included

Features & description

From manufacturer datasheet

Features

- 6.5 digit resolution
- Basic VDC accuracy up to 0.0024% (1 year)
- Voltage range from 100 mV to 1000 V
- Current range from 100 μ A to 10 A
- Resistance range from 10 ohm to 1 Gohm
- True RMS AC and AC+DC measurements
- Frequency and period measurements
- Temperature and capacitance measurements
- 2 $\times$ 4 ohms 4-wire measurement technique
- TrendPlot paperless recorder mode
- Histogram mode and measurement statistics
- RS-232, Ethernet, and IEEE-488 (GPIB) interfaces

DMM4050 Characteristics / Specifications

PARAMETER	VALUE
Model	DMM4050
Instrument Type	6.5 Digit Bench Digital Multimeter
Resolution	6.5 digits
Basic VDC Accuracy	Up to 0.0024% (1 year)
Voltage Range	100 mV to 1000 V
Voltage Resolution	Up to 100 nV
Current Range	100 uA to 10 A
Current Resolution	Up to 100 pA
Resistance Range	10 ohm to 1 Gohm
Resistance Resolution	Up to 10 uOhm
Safety Category	CAT I 1000 V, CAT II 600 V
Measurement Functions	Volts, ohms, amps, true RMS AC, AC+DC, diode, continuity, frequency, period
DMM4050 Additional Functions	Temperature and capacitance measurements
Math Functions	Zero, dBm, dB, MX+B, Offset, DCV ratio, TrendPlot, Histogram, Statistics, Limit
Remote Interfaces	RS-232, Ethernet, IEEE-488 (GPIB)
Display Type	Dual display
Front USB Support	Optional memory storage through front-panel USB support
Internal Data Storage	10000 measurements internal, with expansion through USB memory module
Portability	Carrying handle and bench bail included
Input Terminals	Front and rear panel measurement terminals
Form Factor	Half-rack width Functional Highlights The DMM4050 combines bench multimeter functions with recorder and statistical analysis modes for higher productivity in validation and service environments. Compared with the DMM4040, the DMM4050 adds temperature and capacitance support for broader general-purpose lab use.

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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Functional Highlights	
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Notes	
This manual OEM source was compiled from official Tektronix datasheet and technical reference material for	

the DMM4050 and DMM4040 family.

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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<https://aumictechlabs.com>

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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.