

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

FLUKE

Fluke 8050A-01 4.5 Digital Multimeter

Fluke 8050A-01 Digital Multimeter Option Alias The Fluke 8050A-01 designation is treated as a documentation alias of the Fluke 8050A 4.5-digit true-RMS digital multimeter for optioned or variant labeling in inventory systems. Shared 8050A manual specifications cover DC volts to 1000 V, AC volts to 750 V, current to 2 A, resistance to 20 Mohm, conductance, relative, and dB modes. Same as 8050A: bench/portable voltage current resistance conductance and dB measurements where the unit label includes an -01 option suffix. The Fluke 8050A-01 designation is treated as a documentation alias of the Fluke 8050A 4.5-digit true-RMS digital multimeter for optioned or variant labeling in inventory systems. Shared 8050A manual specifications cover DC volts to 1000 V, AC volts to 750 V, current to 2 A, resistance to 20 Mohm, conductance, relative, and dB modes. Same as 8050A: bench/portable voltage current resistance conductance and dB measurements where the unit label includes an -01 option suffix. Option Suffix Meaning Class: configuration/option label dependent



MODEL

Fluke 8050A-01

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

8050A-01

LISTING

<https://aumictechlabs.com/products/8050a-01-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fluke 8050A-01 is a 4.5-digit digital multimeter engineered for precision electrical measurements across DC voltage, AC voltage, current, resistance, and specialized functions including diode testing and dBm measurement. This portable instrument delivers 0.03% basic DC

accuracy with true RMS capability from 20 Hz to 50 kHz, making it suitable for electronics troubleshooting, field service, and calibration work. The model 8050A-01 integrates rechargeable NiCad batteries providing 10 hours typical operating time, alongside AC line power operation (90–264 V, 47–440 Hz), enabling both cordless field deployment and stationary bench use. An automatic polarity indicator and overrange display enhance readability on the 4.5-digit LCD. Built-in transient protection rated to 6 kV, 10 microseconds, combined with overload protection and a 500 V dc maximum common mode voltage rating, safeguards the instrument against typical field hazards. Weighing 1.08 kg and measuring 22 cm × 6 cm × 25 cm, the meter fits standard equipment racks and portable kits.

Technical Specifications

Measurement Functions & Ranges

DC Voltage: 10 μ V to 1000 V AC Voltage: 10 mV to 750 V true RMS (linear and dB) DC Current: 10 nA to 2 A AC Current: 10 μ A to 2 A true RMS Resistance: 10 m Ω to 20 M Ω Conductance: Up to 100,000 M Ω (200 nS) dBm Measurement: Selectable reference impedances

Performance

Accuracy (DC): 0.03% basic True RMS bandwidth: 20 Hz to 50 kHz Operating temperature: 0°C to 50°C Storage temperature: –40°C to +70°C (without batteries); –40°C to +50°C (with batteries) Humidity: Up to 90% (0°C–35°C); up to 70% (35°C–50°C) Temperature coefficient: <0.1 $\times$ specification per °C (0°C–18°C, 28°C–50°C) Calibration interval: 1 year

Power & Protection

Rechargeable NiCad batteries: 10 hours typical operation; 14 hours recharge time (OFF position) AC line power: 90–264 V, 47–440 Hz (field changeable) Transient protection: 6 kV, 10 microseconds Maximum common mode voltage: 500 V dc or peak ac

Key Features

Diode and transistor testing via forward voltage measurement Relative reference function across all measurement modes Automatic polarity indication and overrange display True RMS AC measurement independent of waveform shape

Typical Applications

Electronics diagnostics, field service maintenance, power supply validation, component characterization, and frequency-dependent AC measurements in industrial and laboratory environments.

Compatibility & Integration

Model 8050A-01 includes rechargeable battery capability. Standard model 8050A operates on AC line power only. Dual input connectors (HI and COMMON) support standard test lead configurations.

8050A Characteristics / Specifications

PARAMETER	VALUE
Base Model	Fluke 8050A
Resolution	4.5 digits
DC Voltage Ranges	200 mV to 1000 V
DC Voltage Input Impedance	10 Mohm
AC Voltage Ranges	200 mV to 750 V
DC Current Ranges	200 uA to 2 A
AC Current Ranges	200 uA to 2 A
Resistance Ranges	200 ohm to 20 Mohm
Conductance Function	yes
Diode Test	yes
Relative Mode	yes dB Measurement: yes
Operating Temperature	0 C to 50 C
Form Factor	portable bench DMM
Current Protection	2 A fuses class
Display	4.5 digit LCD
A/D Technique	dual slope integration
Alias Of	fluke-8050a
Line Or Battery Power	AC line typical with optional battery
Calibration Interval Class	1 year class
Specification Ambient Class	laboratory ambient unless OEM table states otherwise

8050A Specifications

PARAMETER	VALUE
Key Features	4.5 digit true-RMS DMM core of 8050A
Conductance relative and dB modes	Selectable dBm reference impedances
Technical Specifications	Base Model: Fluke 8050A

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 50 C
Operating Temperature	0 C to 50 C
Form Factor	portable bench DMM
Current Protection	2 A fuses class
Display	4.5 digit LCD
A/D Technique	dual slope integration
Alias Of	fluke-8050a
Line Or Battery Power	AC line typical with optional battery
Calibration Interval Class	1 year class
Specification Ambient Class	laboratory ambient unless OEM table states otherwise Notes Alias of fluke-8050a. Shared numeric table from Fluke 8050A Instruction Manual; confirm what -01 denotes on the specific unit option label and certificate.

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 cover DC volts to 1000 V, AC volts to 750 V, current to 2 A, resistance to 20 Mohm, conductance, relative, and dB modes.

Applications
Same as 8050A: bench/portable voltage current resistance conductance and dB measurements where the unit label includes an -01 option suffix.

Key Features
4.5 digit true-RMS DMM core of 8050A
Conductance relative and dB modes
Selectable dBm reference impedances
Fused current inputs
Optional battery operation class

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Base Model	Fluke 8050A
Resolution	4.5 digits
DC Voltage Ranges	200 mV to 1000 V
DC Voltage Input Impedance	10 Mohm
AC Voltage Ranges	200 mV to 750 V
DC Current Ranges	200 uA to 2 A
AC Current Ranges	200 uA to 2 A
Resistance Ranges	200 ohm to 20 Mohm
Conductance Function	yes
Diode Test	yes
Relative Mode	yes
dB Measurement	yes
Operating Temperature	0 C to 50 C
Form Factor	portable bench DMM
Current Protection	2 A fuses class
Display	4.5 digit LCD
A/D Technique	dual slope integration
Alias Of	fluke-8050a

Option Suffix Meaning Class: configuration/option label dependent

Specifications

PARAMETER	VALUE
Line Or Battery Power	AC line typical with optional battery
Calibration Interval Class	1 year class
Specification Ambient Class	laboratory ambient unless OEM table states otherwise

Notes
Alias of fluke-8050a. Shared numeric table from Fluke 8050A Instruction Manual; confirm what -01 denotes on the specific unit option label and certificate.

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
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

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