

45 Dual Display Multimeter

Maximum versatility in a single instrument

True-rms



The Fluke 45 is a feature-rich 5-digit, 100 000 count meter that truly fits all applications and virtually any measurement need - on the workbench or in the field. Two multifunction displays and 16 different measurement capabilities allow wide ranging versatility at an affordable price.

The Fluke 45 delivers high performance and flexibility for manufacturing test, depot and field service, as well as R&D applications.

- Multifunction vacuum fluorescent dual display allowing the user to measure two different parameters of the same signal from one test connection, and view both measurements at the same time.
- True-RMS voltage and current, including ac + dc
- RS-232 interface standard, IEEE-488.2 option
- Frequency measurement to 1 MHz

- dB measurements: 21 selectable reference impedances. From 2 to 8000, and audio power from 2Ω to 16Ω
- Compare (Hi/Lo/Pass) function for quick in-tolerance tests
- 0.05% dc current accuracy for 4-20 mA current loop service
- Closed-Case Calibration: Calibration can be performed via the RS-232 (or optional IEEE-488.2) interface or manually from the front panel. No internal adjustments are required
- Quickstart™ accessory software package; allows quick set-up and effortless communication between the Fluke 45 and an IBM PC or compatible. Custom test procedures are easily created, saved, and recalled

Safety Conformance

All inputs are protected to EN61010-1 CAT II 600V and CAT I 1000V. UL listed.

Features

Multifunction Vacuum Fluorescent Dual Display
True-RMS Voltage and Current Measurement, Including AC + DC
0.05% DC Current Accuracy for 4-20 mA Current Loop Service
Standard RS-232 Interface
Optional IEEE-488.2 Interface
Frequency Measurement to 1 MHz
dB Measurements
Min/Max Mode
Relative Mode
Compare (Hi/Lo/Pass) for Quick In-Tolerance Tests
Closed Case Calibration
Optional: Rack-Mount Kit
Touch Hold*
Diode Test/Continuity

Specifications

Display: 3000 Counts, 30 000 Counts, 100 000 Counts			
Reading Rates: Fast (20 times per second), Medium (5 times per second), Slow (2.5 times per second)			
Function	Range	Best Accuracy (medium reading rate)	Resolution
VDC	300mV-1000V	±0.025% + 2	1 µV-0.01V
VAC (True-RMS, AC Coupled) Freq. 20 Hz-100 kHz	300mV-750V	±0.2% + 10	1 µV-0.01V
dB Readout (600 Ω Ref.) [Ref. Z 2Ω -8000Ω]	-34-+60	±0.08 dBm	0.01 dB-0.1 dB
ADC	30 mA-10A	±0.05% + 2	0.1 µA-10 mA
AAC (True-RMS, AC Coupled) Freq. 20 Hz-20 kHz	10 mA-10A	±0.5% + 10	0.1 µA-10 mA
Resistance	300Ω-100 MΩ	±0.05% + 2	0.001Ω-1 MΩ
Frequency	5 Hz->1 MHz	±0.05% + 1	0.01 Hz-1 kHz

Range & Resolution: If selected range is 100.000mV the resolution is 0.001mV in that range

Size (h x b x d): 216 mm x 93 mm x 286 mm

Weight: Net 2.4 kg; with battery 3.2 kg

One Year Warranty: One year calibration interval

Accessories and Ordering Information

Included Accessories

Line cord, TL 71 test leads, operator's manual, and Quick Reference Guide.

Options

Field/customer installable: Fluke 45-01K Rechargeable Lead-Acid Battery Kit
 Fluke 45-05K IEEE-488.2 Interface Kit

Optional Accessories

- C40 Soft Carrying Case
- M00-200-634 Rack Mount Kit
- RS40 6' RS-232 Terminal Cable
- RS41 6' RS-232 Modem Cable
- S45 QuickStart™ 45 Software

Ordering Information

- Fluke 45 Dual Display Multimeter with Factory-Installed Battery
- Fluke 45-05 with Factory-Installed IEEE-488.2 Interface
- Fluke 45-15 with Factory-Installed Battery and IEEE-488.2 Interface