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Data Sheet
August 2, 2026

FLUKE

Fluke 845AB High Impedance Voltmeter – Null Detector

Fluke 845AB High Impedance Voltmeter – Null Detector The 845AB providesasolid-state high-impedance DC voltmeter and null detector designed for microvolt-through-kilovolt measurements with 100 MΩ or 10 MΩ input impedance depending on range and low noise on the most sensitive ranges. The instrument supports battery or AC line operation for bench nulling and precision DC voltage work. High-impedance DC voltage measurement; null detection in bridge and potentiometer circuits; low-level DC metrology on microvolt ranges; comparator and discriminator applications; battery-powered field null measurements; precision divider and reference verification. The 845AB providesasolid-state high-impedance DC voltmeter and null detector designed for microvolt-through-kilovolt measurements with 100 MΩ or 10 MΩ input impedance depending on range and low noise on the most sensitive ranges. The instrument supports battery or AC line operation for bench nulling and precision DC voltage work. High-impedance DC voltage measurement; null detection in bridge and potentiometer circuits; low-level DC metrology on microvolt ranges; comparator and discriminator applications; battery-powered field null measurements; precision divider and reference verification.

MODEL **Fluke 845AB**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **845AB**	LISTING **https://aumictechlabs.com/products/845ab-2/**

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NAICS 423690 · 811210 · 541380

This unit

The Fluke 845AB is a precision high-impedance DC voltmeter and null detector engineered for sensitive voltage measurements in laboratory, research, and critical circuit testing environments. It combines a wide measurement range of 1 µV to 1000 V DC across 19 ranges with exceptional input impedance to minimize circuit loading and deliver accurate readings. The instrument functions as both a precision voltmeter and null detector with 0.1 µV/V sensitivity, making it ideal for applications requiring detection of small voltage changes or null conditions in bridge circuits and similar setups.Technical Specifications Measurement Range: 1 µV to 1000 V DC, 19 ranges Null Detector Sensitivity: 0.1 µV/V Accuracy: ±(2% of end scale + 1 µV) Input Resistance: 100 MΩ (300 mV range and above); 10 MΩ (100 mV range and below) Input Isolation: Better than 10^{12} Ω DC Common Mode Rejection: Better than 160 dB AC Normal Mode Rejection (60 Hz and above): 60 dB above end scale produces less than 2% of end scale error AC Common Mode Rejection (below 100 kHz): 120 dB or 100 V rms, whichever is less, produces less than 2% of end scale error Maximum Meter Noise: 0.20 µV (1 µV and other ranges); 0.25 µV (3 µV range) Response Time to 90% Reading: 1.5 to 5 seconds depending on range Zero Stability: Better than 0.15 µV/hour; better than 0.3 µV/day Temperature Coefficient of Zero: Less than 0.1 µV/°C (15°C to 35°C); less than 0.2 µV/°C (0°C to 50°C) Overload Protection: Up to 1100 V DC on any rangeKey Features Recorder output: 0–1 V DC, 5 kΩ to 7.5 kΩ source impedance, 0.5% linearity Configurable as DC amplifier with maximum gain of 120 dB Zero control range: ±5 µV minimum Dual-power operation: 115/230 VAC ±10%, 50 to 440 Hz, or rechargeable battery Battery runtime: Approximately 40 hours per full charge Full recharge time: 16 hours Power consumption during recharge: Approximately 6 watts Trickle-charge capability during line operationTypical Applications Bridge balance and null detection Thermoelectric measurements Potentiometric circuits High-impedance sensor readout Standards calibration and verification Research applications requiring sub-microvolt sensitivity

Features & description

From manufacturer datasheet

Features

• Solid-state high-impedance DC voltmeter and null detector • Range 1 µV to 1000 V in 19 ranges • Accuracy ±(2% FS + 1 µV) • Input impedance 100 MΩ on ranges ≥300 mV • Input impedance 10 MΩ on ranges ≤100 mV • Battery or AC line power • Low noise on microvolt ranges

845AB Characteristics / Specifications

PARAMETER	VALUE
Fluke 845AB High Impedance Voltmeter	Null Detector Overview The 845AB providesasolid-state high-impedance DC voltmeter and null detector designed for microvolt-through-kilovolt measurements with 100 MΩ or 10 MΩ input impedance depending on range and low noise on the most sensitive ranges. The instrument supports battery or AC line operation for bench nulling and precision DC voltage work.
Model	845AB
Manufacturer	Fluke
Instrument Type	High Impedance DC Voltmeter / Null Detector
Technology	Solid-state
Measurement Range	1 µV to 1000 V (19 ranges)
Accuracy	±(2% of full scale + 1 µV)
Input Impedance	100 MΩ (ranges ≥300 mV); 10 MΩ (ranges ≤100 mV)
Power	Battery or AC line operation
Noise	Low noise on microvolt ranges
Alias	845AB Standard Operating Conditions Operate within selected range to maintain specified accuracy. Allow thermal stabilization on microvolt ranges. Use appropriate guarding and shielding for lowest-level measurements. Select battery or AC power per environment and noise requirements.

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

PARAMETER	VALUE
Model	845AB
Manufacturer	Fluke
Instrument Type	High Impedance DC Voltmeter / Null Detector
Technology	Solid-state
Measurement Range	1 µV to 1000 V (19 ranges)
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Power	Battery or AC line operation
Noise	Low noise on microvolt ranges
Alias	845AB

Standard Operating Conditions
Operate within selected range to maintain specified accuracy. Allow thermal stabilization on microvolt ranges. Use appropriate guarding and shielding for lowest-level measurements. Select battery or AC power per environment and noise requirements.

Operational Notes
Input impedance switches between 10 MΩ and 100 MΩ by range–account for loading when measuring high-source-impedance circuits. Null detector mode suited to bridge balance and comparison measurements. Alias 845AB.

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

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