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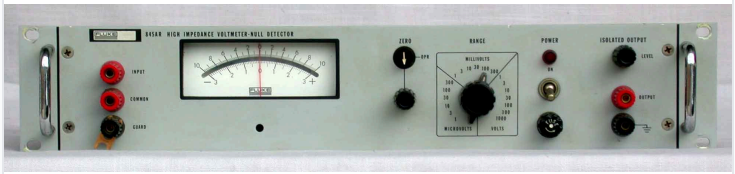
Data Sheet
August 14, 2026

FLUKE

Fluke 845AR

The Fluke 845AR isaclassic high impedance DC/AC voltmeter for low loading voltage measurements. OEM Fluke 845 literature emphasizes very high input impedance for measuring sensitive circuits without loading errors. High impedance DC voltage measurements, low loading circuit probing, and laboratory voltage measurements where ordinary DMM loading is unacceptable. Instrument Family: Fluke 845AR high impedance voltmeter Guard Terminal Class: available on highZvoltmeters High impedance DC voltage measurements, low loading circuit probing, and laboratory voltage measurements where ordinary DMM loading is unacceptable. Instrument Family: Fluke 845AR high impedance voltmeter Guard Terminal Class: available on highZvoltmeters Floating Measurements Class: within ratings



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

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Fluke 845AR is a high-impedance DC voltmeter and null detector engineered for precision measurement applications requiring exceptional input impedance, sensitivity, and isolation. This solid-state instrument delivers accurate DC voltage measurements across 19 ranges from 1 µV to 1000 V, making it essential for laboratory, test, and calibration work where source loading must be minimized and measurement fidelity is non-negotiable. Technical Specifications Measurement Ranges: 19 ranges, 1 µV to 1000 V DC with X1 and X3 progression. Input Resistance: Better than 10^{10} Ω at 80% RH and 35°C; improves to better than 10^{13} Ω with driven guard. Range-dependent

impedance: 100 MΩ (300 mV and above), 10 MΩ (3 mV to 100 mV), 1 MΩ (1 mV and below). Null detector mode on ranges 100 mV and below: 10 MΩ input impedance. Input Voltage Isolation: Input floatable to 1100 V above ground. Leakage isolation: better than 10^{12} Ω regardless of power, chassis ground, or guard connections; better than 10^{12} Ω at less than 50% RH and 25°C. Overload Protection: 1100 V on all ranges with approximately 4 second recovery time. Accuracy: ±(3% of end scale + 0.1 µV) for Fluke 845AR; ±(2% of end scale + 0.1 µV) for Fluke 845AB. Common Mode Rejection (DC): Better than 160 dB (short-circuited, 80% RH); better than 140 dB (open, 50% RH); better than 120 dB (open, 80% RH). Derates 20 dB across 0–50°C. AC rejection (below 100 kHz): 100 Vrms or 120 dB greater than end scale (whichever is less) with less than 2% end scale error. Normal Mode Rejection (AC, 60 Hz and above): AC voltages 60 dB above end scale with less than 2% end scale error. Maximum 750 Vrms. Zero Stability: Better than 0.15 µV/hour and 0.3 µV/day. Temperature coefficient: less than 0.1 µV/°C (15–35°C); less than 0.2 µV/°C (0–50°C). Zero control range: ±5 µV minimum. Recorder Output: 0–1 V DC, linear to 0.5% end scale. Isolated from input. Maximum gain: 120 dB. Source impedance: 5 kΩ to 7.5 kΩ. Power: 115/230 VAC ±10%, 50–440 Hz, approximately 3 W. Key Features Extreme input isolation eliminates source loading effects Isolated recorder output enables direct integration with data acquisition systems Driven guard option elevates input impedance to 10^{13} Ω Overload protection to 1100 V Sub-microvolt zero stability and drift Typical Applications Thermocouple and sensor bridge measurement Potentiometer calibration and comparison Null detection in precision test circuits Low-level DC signal acquisition in shielded environments Compatibility & Integration Standard EIA 19-inch relay rack mount with resilient benchtop feet. Isolated 0–1 V DC recorder output for chart recorders, data loggers, and instrumentation interfaces.

845AR Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	Fluke 845AR high impedance voltmeter
Measurement Quantity	voltage
Input Impedance Class	very highZclass
Ranges	multi range volts
Display	analog meter class
Form Factor	benchtop
AC Powered	yes
DC Voltage	yes
AC Voltage Path	configuration dependent
Overload Protection	yes class
Operating Temperature Class	laboratory
Series Family	Fluke 845
Zero Adjust	yes class
Polarity	indicated class
Guard Terminal Class	available on highZvoltmeters
Calibration	voltage tables
Floating Measurements Class	within ratings
Accuracy Class	percent of full scale class per datasheet
Bandwidth Class	DC and AC path per manual
Input Connector Class	banana/binding posts
Weight Class	benchtop laboratory
HighZVoltmeter Architecture	yes
Bandwidth	Class: DC and AC path per manual
Operating temperature	Class: laboratory

845AR Specifications

PARAMETER	VALUE
Fluke 845AR High Impedance Voltmeter	Overview
Benchtop laboratory form factor	Low circuit loading
Technical Specifications	Instrument Family: Fluke 845AR high impedance voltmeter
Notes	Identity and capability rows from Fluke 845AR literature. Confirm exact impedance ranges and accuracy on the operating manual.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: laboratory
Operating Temperature	Class: laboratory
Operating Temperature Class	laboratory
Series Family	Fluke 845
Zero Adjust	yes class
Polarity	indicated class
Guard Terminal Class	available on highZvoltmeters
Calibration	voltage tables
Floating Measurements Class	within ratings
Accuracy Class	percent of full scale class per datasheet
Bandwidth Class	DC and AC path per manual
Input Connector Class	banana/binding posts
Weight Class	benchtop laboratory
HighZVoltmeter Architecture	yes Notes Identity and capability rows from Fluke 845AR literature. Confirm exact impedance ranges and accuracy on the operating manual.

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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Input Connector Class	banana/binding posts
Weight Class	benchtop laboratory
HighZVoltmeter Architecture	yes

Notes
Identity and capability rows from Fluke 845AR literature. Confirm exact impedance ranges and accuracy on the operating manual.

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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