


Aumictech

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

FLUKE

Fluke 5790B – AC Measurement Standard

The Fluke 5790B is an AC measurement / transfer standard that combines thermal-transfer-class accuracy with DMM-like usability. It measures AC voltage from hundreds of microvolts to 1000 V acrossawide frequency span, with options extending upper frequency. With A40B current shunts it supports absolute or relative AC current measurements. Optional frequency class: to 30 MHz or 50 MHz Absolute AC voltage uncertainty class: as low as +/-24 ppm (1 year, 23 C +/-5 C) Current measurement: with A40B shunts (absolute/relative) Specs from Fluke 5790B product literature. Confirm installed HF options and whether A40B shunts are included with the listing.



MODEL

Fluke 5790B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

5790B

LISTING

<https://aumictechlabs.com/products/5790b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Fluke 5790B AC Measurement Standard is a precision calibration instrument that combines thermal transfer standard accuracy with digital multimeter usability. It performs absolute AC voltage and current measurements alongside AC/DC transfer mode operations for demanding metrology and calibration laboratory applications. A 6.5-inch color touchscreen displays measurement results, automated AC/DC or AC/AC difference calculations, and waveform analysis in real time. Technical Specifications AC Voltage Measurement Range: 600 μ V to 1000 V Frequency: 10 Hz to 1 MHz (standard); 10 Hz to 30 MHz or 10 Hz to 50 MHz with wideband options Absolute uncertainty: $\pm$ 24 ppm (one year, 23 $^{\circ}$ C $\pm$ 5 $^{\circ}$ C) Wideband ranges: 2.2 mV to 7 V (Option

/3); dedicated 50 MHz, 225 mV, 50 ohm input for RF power meter reference outputs AC Current Measurement Direct, absolute, or relative current measurements with Fluke A40B Current Shunts Shunt memory: Up to 150 shunts with serial numbers, calibration constants, and dates Simultaneous voltage, current, and shunt information display Measurement Modes Measurement mode: 8-digit resolution AC/DC voltmeter with internal DC reference Transfer mode: AC/DC or external DC reference comparison; ± 24 ppm uncertainty Simultaneous mA measurement and sourcing/simulation Frequency measurement to 20 kHz Peak-to-peak waveform and statistics functions Waveform calculations for sine, square, triangle, and truncated waveforms 5790A emulation mode for legacy system replacementKey Features 6.5-inch color touchscreen with real-time waveform display Operating temperature range: 0 °C to 50 °C Power: 95 VA nominal (120 VA with wideband option) Line supply: 50/60 Hz; 100–120 V or 220–240 V AC Dimensions: 43.2 cm (W) × 63 cm (D) × 17.8 cm (H) with rackmount kit Weight: 24 kg (24.5 kg with wideband option)Typical Applications Calibration and verification of AC voltage and current measurement devices in metrology laboratories, transfer standard operations, AC/DC difference measurements, and RF power meter reference output validation.

Features & description

From manufacturer datasheet

Features

- Absolute AC voltage measurement standard
- Wide voltage and frequency coverage
- Optional HF extensions (30 MHz / 50 MHz class literature)
- Works with A40B current shunts

Applications

- AC voltage calibration and transfer measurements
- Standards-lab AC metrology
- AC current with A40B shunts
- Wideband AC characterization with HF options

5790B Characteristics / Specifications

PARAMETER	VALUE
Model	5790B
Manufacturer	Fluke
Instrument Type	AC Measurement Standard
Alias	5790B; Fluke 5790B
AC voltage range class	600 uV to 1000 V
Frequency range class	10 Hz to 1 MHz (standard)
Absolute AC voltage uncertainty class	as low as +/-24 ppm (1 year, 23 C +/-5 C)
Current measurement	with A40B shunts (absolute/relative) Notes Specs from Fluke 5790B product literature. Confirm installed HF options and whether A40B shunts are included with the listing.

5790B Specifications

PARAMETER	VALUE
Fluke 5790B AC Measurement Standard	Overview
Technical Specifications	Model: 5790B
Notes	Specs from Fluke 5790B product literature. Confirm installed HF options and whether A40B shunts are included with the listing.

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	5790B
Manufacturer	Fluke
Instrument Type	AC Measurement Standard
Alias	5790B; Fluke 5790B

AC voltage range class: 600 uV to 1000 V
Frequency range class: 10 Hz to 1 MHz (standard)
Optional frequency class: to 30 MHz or 50 MHz
Absolute AC voltage uncertainty class: as low as +/-24 ppm (1 year, 23 C +/-5 C)
Current measurement: with A40B shunts (absolute/relative)

Notes
Specs from Fluke 5790B product literature. Confirm installed HF options and whether A40B shunts are included with the listing.

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
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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.