

**Aumictech**

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Data Sheet

August 12, 2026

HP / AGILENT

HP / Agilent 4440B DECADE CAPACITOR

The 4440B is a precision decade capacitor standard used for calibration and substitution of capacitance values. Public OEM tables list a total capacitance range of about 40 pF to 1.2 μ F, with a vernier providing continuous fine adjustment in the tens-of-pF region. Vernier range class: 40 pF to 140 pF continuous. Specs from HP 4440B decade capacitor literature summaries. Confirm decade switch markings, maximum voltage rating, and residual inductance notes on the faceplate/manual shipped with the unit.



MODEL

HP / Agilent 4440B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

4440B

LISTING

<https://aumictechlabs.com/products/4440b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 4440B is a precision decade capacitor designed for accurate capacitance measurements, calibration, and circuit testing in laboratory and research environments. It delivers selectable capacitance values across a wide range with silvered-mica decade steps and air capacitor vernier control, operating in both two-terminal and three-terminal configurations with minimal parasitic capacitance.

Technical Specifications

Capacitance Range: 40 pF to 1.2 μ F

Decade Switches: Four independent switches providing 0.1 μ F, 0.01 μ F, 0.001 μ F (1000 pF), and 0.0001 μ F (100 pF) steps respectively

Vernier Control: 40 pF to 140 pF continuously adjustable with 2 pF resolution

Direct Reading Accuracy: $\pm(0.25\% + 3 \text{ pF})$ at 1 kHz for three-terminal connection

Capacitance Residual: 1 pF (three-terminal)

Dissipation Factor: 0.001 maximum above 1040 pF; 0.005 maximum below 1040 pF at 1 kHz

Insulation Resistance: 5 G Ω minimum after 5

minutes at 500 Vdc Temperature Coefficient: Less than ± 70 ppm/ $^{\circ}\text{C}$ Maximum Voltage Rating: 500 Vdc Operating Temperature Range: 0°C to 65°C Maximum Operating Frequency: Usable to 40 MHz Dimensions: 76 mm H $\times$ 264 mm W $\times$ 152 mm D Key Features Double-shielded construction minimizes parasitic capacitance and enables low residual error in three-terminal operation Silvered-mica capacitors in decade steps ensure long-term stability and accuracy Easy-to-read inline decade switch displays for direct capacitance value selection Ground terminal for three-terminal measurement mode; disconnectable grounding strap converts to two-terminal operation Air capacitor vernier provides fine adjustments between decade steps Typical Applications Precision capacitance measurements and device calibration Working standard in calibration laboratories Circuit design and verification testing Research and development environments requiring stable reference capacitance Compatibility & Integration The instrument accepts three-terminal measurement connections with isolated ground and low terminals, supporting integration into both manual measurement setups and calibration systems requiring precision reference standards.

Features & description

From manufacturer datasheet

Features

- Multi-decade capacitance selection
- Fine vernier for continuous trim near the low end
- Passive precision standard (no active electronics)

Applications

- Capacitance substitution and calibration
- Bridge and LCR meter verification
- Lab standard decade capacitor

4440B Characteristics / Specifications

PARAMETER	VALUE
Model	4440B
Manufacturer	HP / Agilent
Instrument Type	Decade Capacitor
Alias	4440B; Agilent 4440B; HP 4440B
Capacitance range	40 pF to 1.2 uF
Vernier range class	40 pF to 140 pF continuous
Vernier resolution class	2 pF Notes Specs from HP 4440B decade capacitor literature summaries. Confirm decade switch markings, maximum voltage rating, and residual inductance notes on the faceplate/manual shipped with the unit.

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

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Notes
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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

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<https://aumictechlabs.com>

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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.