

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U1701B

Temperature Coefficient: 0.1 times specified accuracy per °C Outside 18 to 28 °C Primary Application: Capacitance measurement Calibration Document: Certificate of calibration included class From Keysight U1701B Handheld Capacitance Meter data sheet electrical and general specification tables. Primary Application: Capacitance measurement Calibration Document: Certificate of calibration included class From Keysight U1701B Handheld Capacitance Meter data sheet electrical and general specification tables.



MODEL

**Agilent / Keysight
U1701B**

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

U1701B

LISTING

<https://aumictechlabs.com/products/u1701b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight U1701B is a handheld capacitance meter engineered for rapid, accurate capacitor characterization across a broad measurement range. Designed for electronics assembly, passive component troubleshooting, and quality control, this meter combines precision measurement capability with intelligent sorting and analysis functions. The 4½-digit display delivers readings to 11,000 counts with automatic polarity indication and backlight operation. Technical Specifications Capacitance Measurement Range: 1000 pF to 199.99 mF Resolution: Ranges from 0.1 pF (1000.0 pF range) to 0.01 mF (199.99 mF range), with intermediate steps across nF and µF scales. Accuracy: Temperature-compensated to 23 °C ± 5 °C, <80% RH. Typical performance: ±0.5% + 3 counts (100 nF to 100 µF ranges); ±1.0% + 10 counts (1000 pF range); ±2.0% + 5 counts (199.99 mF range). Full accuracy maintained 0 °C to 50 °C. Measuring Rate: 5 times/s (≤100 µF); 0.86 times/s (1000 µF); 0.13 times/s (10 mF); 0.006 times/s (199.99

mF). Display: 4½-digit dual LCD, 11,000 counts maximum resolution. Automatic polarity. Backlight and secondary display for extended functionality. Power: 9 V alkaline battery (ANSI/NEDA 1604A or IEC 6LR61). AC adapter available. Operating Environment: 0 °C to 50 °C (full accuracy); humidity ≤80% RH at ≤31 °C, decreasing linearly to 50% RH at 50 °C. Temperature coefficient: $0.1 \times (\text{specified accuracy})/^{\circ}\text{C}$. Key Features Compare Mode with 25 user-defined High/Low limit sets; audible and visible alerts; non-volatile memory Tolerance Mode with selectable 1%, 5%, 10%, 20% tolerance bands Relative Mode to offset residual lead capacitance Hold function for measurement freezing Min/Max/Average recording and statistics Data logging to PC via optional IR-to-USB cable (U5481B) Typical Applications Electronics assembly verification, passive component sorting, in-circuit capacitor troubleshooting, production quality control, and field service diagnostics. Compatibility & Integration Optional IR-to-USB cable (U5481B) enables PC-based data acquisition and logging workflows.

U1701B Characteristics / Specifications

PARAMETER	VALUE
Display Counts	11000
Display Digits	4.5
Capacitance Range Minimum	1000 pF
Capacitance Range Maximum	199.99 mF
Instrument Type	Handheld capacitance meter
Battery Type	9 V alkaline
Battery Life Typical	80 hours without backlight
Power Consumption Battery	5.6 mA
Operating Temperature Full Accuracy	0 C to 50 C
Operating Humidity	up to 80 percent RH to 31 C
Altitude Maximum	2000 m
Storage Temperature	minus 20 C to 60 C
Temperature Coefficient	0.1 times specified accuracy perCoutside 18 to 28 C
Low Battery Threshold Approx	6.0 V
Weight	320 g
Dimensions HxWxD	184 x 87 x 41 mm
Form Factor	Handheld
Series Family	U1701B
Connectivity Option	IR to USB cable
Tweezer Option	SMB tweezer accessory
Primary Application	Capacitance measurement
Polarity Indication	Automatic
Calibration Document	Certificate of calibration included class
Operating temperature	Full Accuracy: 0 C to 50 C
Humidity	up to 80 percent RH to 31 C

U1701B Specifications

PARAMETER	VALUE
Agilent Keysight U1701B Handheld Capacitance Meter	Overview
Key Features	11000 count capacitance focused display
Technical Specifications	Display Counts: 11000
Notes	From Keysight U1701B Handheld Capacitance Meter data sheet electrical and general specification tables.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 20 C to 60 C
Operating temperature	Full Accuracy: 0 C to 50 C
Operating Temperature	Full Accuracy: 0 C to 50 C
Humidity	up to 80 percent RH to 31 C
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Primary Application	Capacitance measurement
Polarity Indication	Automatic

PARAMETER	VALUE
Calibration Document	Certificate of calibration included class Notes From Keysight U1701B Handheld Capacitance Meter data sheet electrical and general specification tables.

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 list about 80 hours battery life, 0 to 50 C full-accuracy operating temperature, and 184 x 87 x 41 mm handheld form factor.

Applications

SMT and through-hole capacitor sorting, assembly-line capacitance checks, and field passive-component verification.

Key Features

11000 count capacitance focused display

Wide range to 199.99 mF

Alligator clip leads included

Optional IR USB cable

Optional SMB tweezers

Technical Specifications

Technical Specifications

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Primary Application	Capacitance measurement
Polarity Indication	Automatic
Calibration Document	Certificate of calibration included class

Notes
From Keysight U1701B Handheld Capacitance Meter data sheet electrical and general specification tables.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.