

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

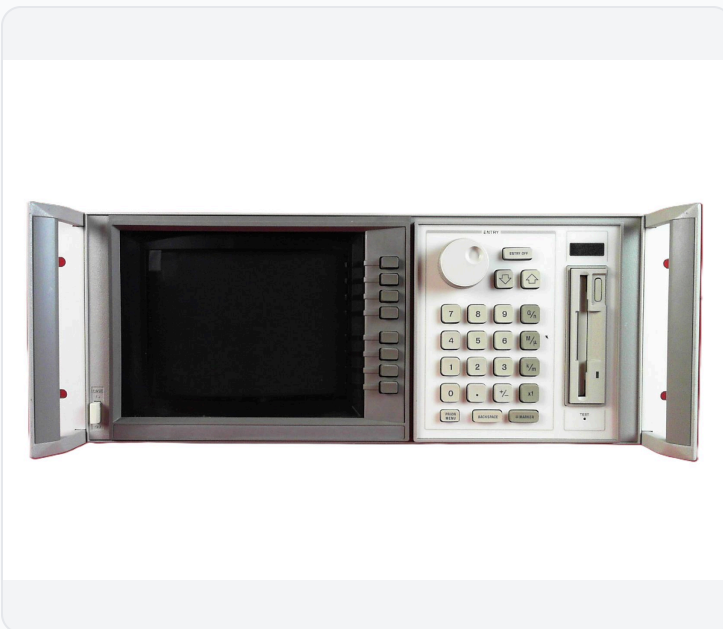
Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 85101B

HP Agilent 85101B 8510B Network Analyzer Display Processor The HP 85101B is the display/processor of the 8510B vector network analyzer. OEM 8510B catalog material extended the 8510A architecture into millimeter-wave waveguide bands (26.5-40, 33-50, 40-60, 50-75, and 75-100 GHz) with external modules, while retaining 45 MHz microwave coverage with 851XA test sets. Microwave and millimeter-wave VNA control for 8510B systems including waveguide bands to 100 GHz. 8510B display/processor with mm-wave band support The HP 85101B is the display/processor of the 8510B vector network analyzer. OEM 8510B catalog material extended the 8510A architecture into millimeter-wave waveguide bands (26.5-40, 33-50, 40-60, 50-75, and 75-100 GHz) with external modules, while retaining 45 MHz microwave coverage with 851XA test sets. Microwave and millimeter-wave VNA control for 8510B systems including waveguide bands to 100 GHz. 8510B display/processor with mm-wave band support 45 MHz microwave coverage with 851XA test sets

**MODEL****Agilent / Keysight
85101B****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****85101B****LISTING**<https://aumictechlabs.com/products/85101b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 85101B is the display and processor module for the Agilent 8510B Microwave Network Analyzer. It is the central control and display unit, enabling characterization of linear behavior in active and passive networks across microwave and millimeter-wave frequencies. The 85101B integrates with an S-parameter test set and compatible RF source to deliver S-parameter

measurements, magnitude, phase, and group delay analysis. Technical Specifications Frequency coverage extends from 45 MHz to 40 GHz in standard configurations, with millimeter-wave systems configurable to 110 GHz. The module supports time-domain capability through Option 010, which computes and displays network time-domain response via inverse Fourier transform of frequency-domain data. Option 010 may require a firmware key for the 8510C analyzer variant. Key Features Display and processing unit for 8510B network analyzer systems S-parameter measurement across 45 MHz to 40 GHz (extendable to 110 GHz) Magnitude, phase, and group delay characterization Time-domain computation and display with Option 010 User-defined calibration standards supporting non-standard interfaces (waveguide, microstrip) Typical Applications The 85101B enables network characterization for filter design, transmission line analysis, and active device measurement. It supports detailed linear behavior assessment of RF and microwave components across extended frequency bands. Compatibility & Integration Designed specifically for the Agilent/Keysight 8510B Microwave Network Analyzer. Compatible S-parameter test sets include the HP 8514B, 8515A, and 8516A. Requires a compatible RF source (e.g., 83621B synthesized sweeper) to form a complete measurement system. Supports calibration kits including the 85051A 7mm, 85052B 3.5mm, 85059A 1.0mm, and 11904S 2.92mm. Recommended power-on sequence for integrated systems: Source, Test Set, 85102, then 85101.

85101B Characteristics / Specifications

PARAMETER	VALUE
Model	85101B
Instrument Type	8510B network analyzer display/processor
Family Frequency Start	45 MHz
Waveguide Band Ka	26.5 to 40 GHz
Waveguide Band Q	33 to 50 GHz
Waveguide Band U	40 to 60 GHz
Waveguide Band V	50 to 75 GHz
Waveguide Band W	75 to 100 GHz
Partner Test Sets	851XA broadband coaxial test sets
Partner Automation	85161A on HP 9000 Series 200/300 BASIC 3.0 or higherSParameters: S11 S21 S12 S22
Measurement Types	magnitude phase group delay
Bus	HP-IB
Manufacturer	HP Agilent Keysight
Form Factor	8510B top-box display/processor
Related Display 85101A	8510A predecessor
Related Display 85101C	8510C color CRT and floppy
Related If Detector	85102B IF/detector
Use Case	microwave and mm-wave vector network analysis
Remote Control	HP-IB
Source Partner	8340/8360 synthesized or 8350B sweep
Two Port Networks	linear characterization
Mm Wave Hardware	external modules for waveguide bands
System Role	8510B display/processor

85101B Specifications

PARAMETER	VALUE
Applications	Microwave and millimeter-wave VNA control for 8510B systems including waveguide bands to 100 GHz.
Key Features	8510B display/processor with mm-wave band support
Waveguide bands 26.5 to 100 GHz with external modules	HP 85161A measurement automation on Series 200/300 BASIC
Technical Specifications	Model: 85101B

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	
Technical Specifications	
PARAMETER	VALUE
Model	85101B
Instrument Type	8510B network analyzer display/processor
Family Frequency Start	45 MHz
Waveguide Band Ka	26.5 to 40 GHz
Waveguide Band Q	33 to 50 GHz
Waveguide Band U	40 to 60 GHz
Waveguide Band V	50 to 75 GHz
Waveguide Band W	75 to 100 GHz
Partner Test Sets	851XA broadband coaxial test sets
Partner Automation	85161A on HP 9000 Series 200/300 BASIC 3.0 or higher
S Parameters	S11 S21 S12 S22
Measurement Types	magnitude phase group delay
Bus	HP-IB
Manufacturer	HP Agilent Keysight
Form Factor	8510B top-box display/processor
Related Display 85101A	8510A predecessor
Related Display 85101C	8510C color CRT and floppy
Related If Detector	85102B IF/detector
Use Case	microwave and mm-wave vector network analysis
Remote Control	HP-IB
Source Partner	8340/8360 synthesized or 8350B sweep
Two Port Networks	linear characterization
Mm Wave Hardware	external modules for waveguide bands
System Role	8510B display/processor
Specifications	

PARAMETER	VALUE
Model	85101B
Instrument Type	8510B network analyzer display/processor
Family Frequency Start	45 MHz
Waveguide Band Ka	26.5 to 40 GHz
Waveguide Band Q	33 to 50 GHz
Waveguide Band U	40 to 60 GHz
Waveguide Band V	50 to 75 GHz
Waveguide Band W	75 to 100 GHz
Partner Test Sets	851XA broadband coaxial test sets
Partner Automation	85161A on HP 9000 Series 200/300 BASIC 3.0 or higherSParameters: S11 S21 S12 S22
Measurement Types	magnitude phase group delay
Bus	HP-IB
Manufacturer	HP Agilent Keysight
Form Factor	8510B top-box display/processor
Related Display 85101A	8510A predecessor
Related Display 85101C	8510C color CRT and floppy
Related If Detector	85102B IF/detector
Use Case	microwave and mm-wave vector network analysis
Remote Control	HP-IB
Source Partner	8340/8360 synthesized or 8350B sweep
Two Port Networks	linear characterization
Mm Wave Hardware	external modules for waveguide bands
System Role	8510B display/processor

Notes

From HP 8510B catalog evolution notes (mm-wave bands 26.5-100 GHz, 85161A automation). Color CRT and 3.5-inch floppy are 8510C/85101C features, not 85101B.

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
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

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