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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 85108A

HP Agilent 85108A Pulsed RF 8510C Network Analyzer System 2 to 20 GHz The HP/Agilent 85108A is the 2 to 20 GHz pulsed-RF 8510C network analyzer system. OEM 8510C data sheet lists test set 85110A, sources 83622B and 83623L, calibration kit 85052B 3.5 mm, and full two-port sliding-load calibration. Pulsed receiver dynamic range is 75/74/73 dB and CW receiver dynamic range 89/89/88 dB across 2-8 / 8-18 / 18-20 GHz. The 85110A can handle up to 20 W (plus 43 dBm) at port 2 with step attenuators and an isolator in the rear-panel link. The HP/Agilent 85108A is the 2 to 20 GHz pulsed-RF 8510C network analyzer system. OEM 8510C data sheet lists test set 85110A, sources 83622B and 83623L, calibration kit 85052B 3.5 mm, and full two-port sliding-load calibration. Pulsed receiver dynamic range is 75/74/73 dB and CW receiver dynamic range 89/89/88 dB across 2-8 / 8-18 / 18-20 GHz. The 85110A can handle up to 20 W (plus 43 dBm) at port 2 with step attenuators and an isolator in the rear-panel link. Pulsed-RF S-parameter test of high-power amplifiers and T/R modules from 2 to 20 GHz.



MODEL

**Agilent / Keysight
85108A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85108A

LISTING

<https://aumictechlabs.com/products/85108a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85108A is a pulsed-RF network analyzer system built around the Agilent 8510C with pulsed-RF measurement option (Option 008). It delivers vector S-parameter analysis and pulse profile characterization for high-power and pulsed-RF device testing across IF, RF, and

microwave frequencies. The system handles CW power up to 20 W and pulsed device output power up to 100 W, enabling accurate measurement of components under realistic pulsed operating conditions. This platform supports spectral analysis, noise figure measurements, and load pull characterization without compromising raw system performance. The pulsed measurement engine achieves 60 dB dynamic range at 20 GHz independent of duty cycle, with an equivalent bandwidth of 1.5 MHz. Pulse widths down to 1 microsecond are evaluated, making it suitable for on-wafer and in-fixture device assessment at low duty cycles. The system includes an internal pulse generator or accepts external pulse generator input, with flexible external-trigger capability for asynchronous data acquisition control.

Technical Specifications
Frequency range: 2.00 GHz to 20.00 GHz (optional configuration to 50 GHz)
CW power handling: up to 20 W
Pulsed device output power: up to 100 W
Pulsed dynamic range: 60 dB at 20 GHz, duty-cycle independent
CW dynamic range: 75 dB at 20 GHz (expandable to >62 dB at 50 GHz)
Equivalent bandwidth (pulsed): 1.5 MHz
Minimum pulse width evaluation: 1 microsecond
Interface: GPIB/Key

Features
Pulse profile network analysis for dynamic RF characterization
Internal pulse generator with external trigger input for measurement synchronization
High-power measurement capability under constant-power and pulsed-power conditions
Spectral analysis without performance degradation
Load pull measurement support
Factory-integrated system configurations available

Typical Applications
Pulsed RF device characterization
High-power component testing
On-wafer and in-fixture device measurements
Microwave and RF component assessment

Compatibility & Integration
Built on the Agilent 8510C architecture with Option 008 pulsed-RF measurement capability. Compatible with Agilent 85110A test set for high-power handling and direct RF access. The 50 GHz configuration utilizes a 20 GHz synthesized sweeper as LO source in fundamental or third-harmonic mode.

85108A Characteristics / Specifications

PARAMETER	VALUE
Model	85108A
Instrument Type	pulsed-RF 8510C vector network analyzer system
Frequency Range	2 GHz to 20 GHz
Test Set	85110A S-parameter test set
Rf Sources	83622B and 83623L synthesized sweepers (one each)
Calibration Kit	85052B 3.5 mm
Calibration Technique	full two-port with sliding loads
Max Power Port2 All Bands	plus 11 dBm (0 dB step attenuators)
Reference Power 2 To 8 Ghz	plus 0 dBm nominal
Reference Power 8 To 18 Ghz	minus 1 dBm nominal
Reference Power 18 To 20 Ghz	minus 2 dBm nominal
Min Power Pulsed 2 To 8 Ghz	minus 64 dBm
Min Power Cw 2 To 8 Ghz	minus 78 dBm
Receiver Dynamic Range Pulsed 2 To 8 Ghz	75 dB
Receiver Dynamic Range Cw 2 To 8 Ghz	89 dB
System Dynamic Range Pulsed 2 To 8 Ghz	64 dB
System Dynamic Range Cw 2 To 8 Ghz	78 dB
Receiver Dynamic Range Pulsed 8 To 18 Ghz	74 dB
Receiver Dynamic Range Pulsed 18 To 20 Ghz	73 dB
System Dynamic Range Pulsed 8 To 18 Ghz	62 dB
System Dynamic Range Pulsed 18 To 20 Ghz	60 dB
Port2 High Power Handling	up to 20 W (plus 43 dBm) with step attenuators and isolator

PARAMETER	VALUE
Specification Temperature	23 C plus or minus 3 C
Connector Class	3.5 mm
Manufacturer	HP Agilent Keysight

85108A Specifications

PARAMETER	VALUE
Applications	Pulsed-RF S-parameter test of high-power amplifiers and T/R modules from 2 to 20 GHz.
Key Features	Dedicated 85110A pulsed S-parameter test set
Dual 8360 sources for pulsed stimulus	CW and pulsed dynamic-range columns
Technical Specifications	Model: 85108A

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.

performance as stated

Technical Specifications

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Reference Power 2 To 8 Ghz	plus 0 dBm nominal
Reference Power 8 To 18 Ghz	minus 1 dBm nominal
Reference Power 18 To 20 Ghz	minus 2 dBm nominal
Min Power Pulsed 2 To 8 Ghz	minus 64 dBm
Min Power Cw 2 To 8 Ghz	minus 78 dBm

Receiver Dynamic Range Pulsed 2 To 8 Ghz: 75 dB
Receiver Dynamic Range Cw 2 To 8 Ghz: 89 dB
System Dynamic Range Pulsed 2 To 8 Ghz: 64 dB
System Dynamic Range Cw 2 To 8 Ghz: 78 dB
Receiver Dynamic Range Pulsed 8 To 18 Ghz: 74 dB
Receiver Dynamic Range Pulsed 18 To 20 Ghz: 73 dB
System Dynamic Range Pulsed 8 To 18 Ghz: 62 dB
System Dynamic Range Pulsed 18 To 20 Ghz: 60 dB

Specifications

PARAMETER	VALUE
Port2 High Power Handling	up to 20 W (plus 43 dBm) with step attenuators and isolator
Specification Temperature	23 C plus or minus 3 C
Connector Class	3.5 mm
Manufacturer	HP Agilent Keysight

Notes

From Agilent 8510C Network Analyzer data sheet 85108A pulsed-RF system table. Complete 85108A system data sheet has additional pulse-width and duty-cycle limits.

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.