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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP 86603A RF Section Module

HP 86603A RF Section Plug-In 1 to 2600 MHz for 8660 Synthesizers The HP 86603A is the RF section plug-in for 8660A/C synthesized signal generators, covering 1 MHz to 2600 MHz. Below 1300 MHz it operates without the 11661B frequency extension; 1300-2600 MHz requires 11661B in the 8660 mainframe. Output impedance 50 ohm. Leveled output class +10 dBm below 1300 MHz (reduced above 1300 MHz / with 11661B per 8660 data). Companion RF sections: 86601A 0.01-110 MHz, 86602B 1-1300 MHz. The 86603A occupies the RF-section slot; modulation and reference remain 8660 mainframe plus audio/modulation plug-ins. The HP 86603A is the RF section plug-in for 8660A/C synthesized signal generators, covering 1 MHz to 2600 MHz. Below 1300 MHz it operates without the 11661B frequency extension; 1300-2600 MHz requires 11661B in the 8660 mainframe. Output impedance 50 ohm. Leveled output class +10 dBm below 1300 MHz (reduced above 1300 MHz / with 11661B per 8660 data). Companion RF sections: 86601A 0.01-110 MHz, 86602B 1-1300 MHz. The 86603A occupies the RF-section slot; modulation and reference remain 8660 mainframe plus audio/modulation plug-ins. Mainframe supplies reference and modulation

**MODEL****Keysight / Agilent /
HP 86603A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****86603A****LISTING**[https://aumictechlabs.c
om/products/86603a-
2/](https://aumictechlabs.com/products/86603a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight/Agilent/HP 86603A RF Section Module is a plug-in component for 8660-series synthesized signal generator mainframes. It extends frequency coverage to 2600 MHz and delivers carrier generation with precise frequency resolution, low harmonic content, and selectable modulation modes including AM and optional phase modulation. Technical Specifications Frequency Range: 1 to 2600 MHz Frequency Resolution: 1 Hz (below 1300 MHz); 2 Hz (1300 MHz and above) Harmonic Content: Below -30 dBc (below 1300 MHz); Below -20 dBc (1300 MHz and above) Signal-to-Phase Noise Ratio: Greater than 45 dB (below 1300 MHz); Greater than 39 dB (1300 MHz and above) AM Modulation Depth: 0-90% (below 1300 MHz); 0-50% (1300 MHz and above) Pulse Rise/Fall Time: 50 ns PM Maximum Peak Deviation: 0-100 degrees (below 1300 MHz); 0-200 degrees (1300 MHz and above) Key Features Dual-range performance with frequency-dependent specifications optimized for lower and upper band operation Fine 1 Hz or 2 Hz frequency resolution for precise carrier tuning Low harmonic distortion suitable for sensitive RF measurements AM modulation with depth control across full frequency range Optional phase modulation capability via Option 002 Fast pulse modulation with 50 ns transition time Compatibility & Integration Designed for 8660A, 8660C, and 8660D mainframes. Operation with 8660A requires Option 003. Phase modulation (Option 002) integrates with HP 86634A and HP 86635A modulation sections. The HP 11661B Frequency Extension Module is required when pairing 86603A with 8660C mainframes in certain configurations. Product Status: Obsolete.

86603A Characteristics / Specifications

PARAMETER	VALUE
Model	86603A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	RF section plug-in
Series	8660
Alias	86603A; HP 86603A
Frequency Range	1 MHz to 2600 MHz
Range Without 11661B	1 to 1300 MHz
Range With 11661B	1 to 2600 MHz
Impedance	50 ohm
Host Mainframe	8660A or 8660C
Extension Module	11661B required above 1300 MHz
Related 86601A	0.01 to 110 MHz RF section
Related 86602B	1 to 1300 MHz RF section
Output Level Class	plus 10 dBm class below 1300 MHz
Form	8660 RF-section plug-in
Status	HP 8660 family
Installation	8660 RF slot; 11661B if using 1.3-2.6 GHz
Documentation	8660A/C RF section
Use	restore 86603A RF coverage
Compatibility	8660A/C only
Identification	86603A
Cooling	8660 airflow
Reference	8660 internal/external reference
Modulation	8660 modulation plug-ins
Remote	HP-IB on 8660C class

PARAMETER	VALUE
RF Connector	8660 front N/BNC class per mainframe
Duty	continuous in 8660
NotAMainframe	plug-in only
Calibration	8660 system cal after swap Notes Specs from HP 8660 RF-section table (86603A 1-2600 MHz, 11661B above 1300 MHz, 50 ohm). Confirm 11661B presence for 1.3-2.6 GHz. Do not invent SSB phase-noise numbers from later 8663A.

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	86603A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	RF section plug-in
Specifications	
PARAMETER	VALUE
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Alias	86603A; HP 86603A
Frequency Range	1 MHz to 2600 MHz
Specifications	
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Range Without 11661B	1 to 1300 MHz
Range With 11661B	1 to 2600 MHz
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Output Level Class	plus 10 dBm class below 1300 MHz
Form	8660 RF-section plug-in

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Calibration: 8660 system cal after swap
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Specs from HP 8660 RF-section table (86603A 1-2600 MHz, 11661B above 1300 MHz, 50 ohm). Confirm 11661B presence for 1.3-2.6 GHz. Do not invent SSB phase-noise numbers from later 8663A.

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.