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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 86290B RF plug-in

HP Agilent 86290B 2 to 18.6 GHz Broadband RF Sweep Plug In The HP 86290B is a broadband RF plug-in for 8620C covering 2.0 to 18.6 GHz in three sub-bands plus one continuous band. OEM 8620 Series catalog and 86290B operating/service specifications list greater than +10 dBm maximum leveled power at 25 C, power-level control greater than 10 dB, internally leveled variation less than plus or minus 0.7 to 0.9 dB by band, and harmonics greater than 25 dB below the fundamental. Broadband scalar and 8410C multi-octave phase/amplitude measurements from 2 to 18.6 GHz; 27.8 kHz AM for 8756/8757 scalar analyzers. The HP 86290B is a broadband RF plug-in for 8620C covering 2.0 to 18.6 GHz in three sub-bands plus one continuous band. OEM 8620 Series catalog and 86290B operating/service specifications list greater than +10 dBm maximum leveled power at 25 C, power-level control greater than 10 dB, internally leveled variation less than plus or minus 0.7 to 0.9 dB by band, and harmonics greater than 25 dB below the fundamental. Broadband scalar and 8410C multi-octave phase/amplitude measurements from 2 to 18.6 GHz; 27.8 kHz AM for 8756/8757 scalar analyzers.

**MODEL****Agilent / Keysight
86290B****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****86290B****LISTING**<https://aumictechlabs.com/products/86290b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 86290B is an RF plug-in module for the 8620C mainframe that delivers signal generation across 2.0 to 18.6 GHz. It combines a YIG Tuned Oscillator (2.0–6.2 GHz) with a YIG Tuned Multiplier (6.0–18.6 GHz) to provide continuous or band-selectable RF output at +10 dBm. The module supports flexible leveling via internal, external crystal, or power meter modes and includes a YTO test signal outlet on the rear panel. Sweep performance spans 10 msec for single bands and 60 msec across the full 2.0–18.6 GHz range.

Technical Specifications

Frequency Range: 2.0 GHz to 18.6 GHz (continuous Band 4) or selectable Band 1 (2.0–6.2 GHz), Band 2 (6.0–12.4 GHz), Band 3 (12.0–18.6 GHz)

Output Power: +10 dBm across 2.0–18.6 GHz

Power Level Control Range: 10 dBm

Sweep Time: 10 msec (single bands); 60 msec (2.0–18.6 GHz continuous)

RF Output Connector: Type-N standard; APC-7 available (Option 005)

Auxiliary Output: YTO test signal at rear panel AUX OUT connector (typically –10 dBm)

Key Features

- Dual-oscillator architecture: YIG Tuned Oscillator for lower frequencies, YIG Tuned Multiplier for upper bands
- Automatic Level Control with selectable internal, external crystal, or power meter leveling
- Rear panel RF output option (Option 004)
- Multi-band or continuous frequency selection

Typical Applications

- Component and subsystem RF testing
- Scalar network analysis
- RF system characterization
- Local oscillator for down-conversion of high-frequency signals
- Stand-alone RF signal source operation

Compatibility & Integration

Plug-in module for Agilent/Keysight 8620C Mainframe

86290B Characteristics / Specifications

PARAMETER	VALUE
Model	86290B
Instrument Type	Broadband RF sweep plug-in
Host Mainframe	HP 8620C; HP 8350B with 11869A adapter
Band 1 Range	2.0 GHz to 6.2 GHz
Band 2 Range	6.0 GHz to 12.4 GHz
Band 3 Range	12.0 GHz to 18.6 GHz
Band 4 Range	2.0 GHz to 18.6 GHz continuous
Maximum Leveled Power	greater than +10 dBm (10 mW) at 25 C on all four bands
Maximum Leveled Power Option 0	+9.5 dBm with Option 004 rear RF output
Power Level Control Range	greater than 10 dB
Internal Leveling Variation Band 1 And	less than plus or minus 0.7 dB at maximum leveled power
Internal Leveling Variation Band	less than plus or minus 0.9 dB at maximum leveled power
External Crystal Leveling Variation	less than plus or minus 0.15 dB
Harmonically Related Signals	greater than 25 dB below fundamental at specified maximum power
Nonharmonics	greater than 50 dB below fundamental
Residual Am	greater than 55 dB below fundamental in 100 kHz bandwidth
Residual Fm Band 1 Cw	less than 10 kHz peak in 10 kHz bandwidth, FM-NORM-PL in NORM
Residual Fm Band 2 Cw	less than 20 kHz peak
Residual Fm Band 3 And 4 Cw	less than 30 kHz peak
Frequency Versus Temperature Band	plus or minus 0.5 MHz perC Frequency Versus Temperature Band 4: plus or minus 2.0 MHz perC Line Voltage 10 Percent Effect: plus or minus 100 kHz
Source Swr Internal Leveling	less than 1.9
Output Impedance	50 ohm nominal
Rf Output Connector	TypeNfemale
Minimum Sweep Time Single Bands	10 ms

PARAMETER	VALUE
Minimum Sweep Time Band	60 ms on 2 to 18.6 GHz
Auxiliary Output	rear panel 2 to 6.2 GHz fundamental oscillator, nominally minus 10 dBm
Frequency Reference Output	nominally 1 V/GHz rear-panel BNC
Internal Am On Off	1000 Hz square-wave on/off ratio greater than 25 dB
External Am On Off	greater than 30 dB, 40/60 symmetry
Weight Net	4.4 kg
Weight Shipping	5.9 kg
Bandwidth	Residual Fm Band 1 Cw: less than 10 kHz peak in 10 kHz bandwidth, FM-NORM-PL in NORM

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 greater than +10 dBm maximum leveled power at 25 C, power-level control greater than 10 dB, internally leveled variation less than plus or minus 0.7 to 0.9 dB by band, and harmonics greater than 25 dB below the fundamental.

Applications

Broadband scalar and 8410C multi-octave phase/amplitude measurements from 2 to 18.6 GHz; 27.8 kHz AM for 8756/8757 scalar analyzers.

Key Features

Continuous 2.0 to 18.6 GHz sweep plus three higher-resolution bands

Internal leveling standard, greater than +10 dBm

Rear-panel 2 to 6.2 GHz auxiliary oscillator output, nominally minus 10 dBm

TypeNfemale RF output

Technical Specifications

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PARAMETER	VALUE
Model	86290B
Instrument Type	Broadband RF sweep plug-in
Host Mainframe	HP 8620C; HP 8350B with 11869A adapter
Band 1 Range	2.0 GHz to 6.2 GHz
Band 2 Range	6.0 GHz to 12.4 GHz
Band 3 Range	12.0 GHz to 18.6 GHz
Band 4 Range	2.0 GHz to 18.6 GHz continuous
Maximum Leveled Power	greater than +10 dBm (10 mW) at 25 C on all four bands
Maximum Leveled Power Option 004	+9.5 dBm with Option 004 rear RF output
Power Level Control Range	greater than 10 dB
Internal Leveling Variation Band 1 And 2	less than plus or minus 0.7 dB at maximum leveled power
Internal Leveling Variation Band 4	less than plus or minus 0.9 dB at maximum leveled power
External Crystal Leveling Variation	less than plus or minus 0.15 dB
Harmonically Related Signals	greater than 25 dB below fundamental at specified maximum power
Nonharmonics	greater than 50 dB below fundamental
Residual Am	greater than 55 dB below fundamental in 100 kHz bandwidth
Residual Fm Band 1 Cw	less than 10 kHz peak in 10 kHz bandwidth, FM-NORM-PL in NORM
Residual Fm Band 2 Cw	less than 20 kHz peak
Residual Fm Band 3 And 4 Cw	less than 30 kHz peak

PARAMETER	VALUE
Frequency Versus Temperature Band 1	plus or minus 0.5 MHz perC Frequency Versus Temperature Band 4: plus or minus 2.0 MHz perC Line Voltage 10 Percent Effect: plus or minus 100 kHz
Source Swr Internal Leveling	less than 1.9
Output Impedance	50 ohm nominal
Rf Output Connector	TypeN female
Minimum Sweep Time Single Bands	10 ms
Minimum Sweep Time Band 4	60 ms on 2 to 18.6 GHz
Auxiliary Output	rear panel 2 to 6.2 GHz fundamental oscillator, nominally minus 10 dBm
Frequency Reference Output	nominally 1 V/GHz rear-panel BNC
Internal Am On Off	1000 Hz square-wave on/off ratio greater than 25 dB
External Am On Off	greater than 30 dB, 40/60 symmetry
Weight Net	4.4 kg
Weight Shipping	5.9 kg

Notes

Numeric rows from HP 8620 Series catalog 86290B/C specifications and HP 86290B operating/service manual frequency/power table. 86290C is the +13 dBm (20 mW) sibling, not this file.

Ordering Information

OPTION	DESCRIPTION
Option 004	rear RF output

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.