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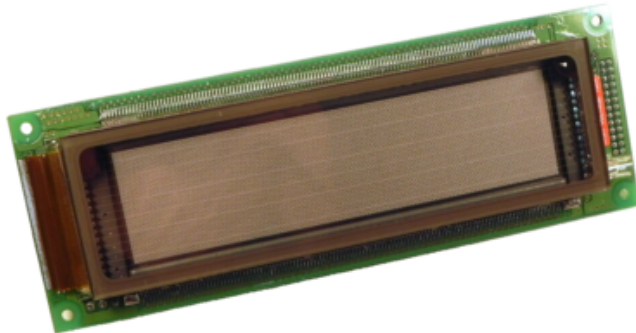
Data Sheet

August 1, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 2090

Agilent / Keysight Embedded Test Systems. Bandwidth: 1 GHz (E8267D PSG vector signal generator).



MODEL

**Agilent / Keysight
2090**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

2090

LISTING

<https://aumictechlabs.com/products/2090-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 2090 is a signal simulation and processing platform engineered for complex measurement environments in satellite communications and broadband wireless access. It functions as an automated test system that integrates with other Keysight instruments and software to deliver end-to-end signal generation and analysis solutions. The instrument supports multi-channel coherent signal simulation with configurable display options and comprehensive system-level diagnostics.

Technical Specifications

Display Options: LCD with rear-panel contrast adjustment, or Vacuum Fluorescent Display (VFD) with 2×40 character resolution and fixed 100% intensity

Signal Generation Capability: Multi-channel coherent outputs up to 44 GHz with precise phase and amplitude offsets

RF Modulation Bandwidth: 1 GHz (E8267D PSG vector signal generator)

Arbitrary Waveform Generation: 1.25 GS/s sampling rate, 15-bit resolution, dual independent output channels (N6030A)

Key Features

- Precision System Interface providing high-reliability RF switching and wideband isolation for simultaneous multi-point measurements
- Single-connection architecture minimizing external cabling complexity
- Integrated system software with user-defined operator security levels and SCPI pass-through capability
- Measurement libraries

with automatic calibration offset correction and path effect compensation First-level diagnostic self-test functionality for rapid fault isolation LO signal distribution lock boxes enabling phase coherence across multi-channel configurations Typical Applications Satellite communication system verification Broadband wireless access signal validation Multi-carrier and multi-channel signal simulation Complex RF environment emulation in development and manufacturing Compatibility & Integration The Z2090B variant integrates with the E8267D PSG vector signal generator (direct I/Q modulation to 44 GHz, 1 GHz RF bandwidth) and N6030A Arbitrary Waveform Generator (1.25 GS/s, 15-bit). Rack integration supported via ballast kits (C2790AC: 30-pound anti-tip solution). Complete system software handles operator interface management, security protocols, and measurement automation with full SCPI command support.

Features & description

From manufacturer datasheet

Features

- Frequency range 10 MHz to 20 GHz
- Fully synthesized CW, stepped, and ramp sweep
- High power: +16 dBm below 2 GHz, +17 dBm above 2 GHz (25 +/-5 C)
- Minimum settable power -10 dBm; -80 dBm with Option 1E1 step attenuator
- Frequency resolution 1 Hz (CW); markers, power sweep, user flatness correction
- Pulse, AM, FM, and internal 1 kHz / 27.8 kHz square-wave modulation
- GPIB with SCPI and HP 8350 mnemonic compatibility
- Compatible with 8757A/C/D/E scalar analyzers and 8970B noise figure meters

2090 Characteristics / Specifications

PARAMETER	VALUE
Model	83752B
Manufacturer	Hewlett-Packard / Agilent
Instrument Type	High-power synthesized sweeper
Frequency Range	10 MHz to 20 GHz
CW Resolution	1 Hz
CW Switching Time	70 ms maximum
Stepped Sweep	2 to 1601 points; resolution settable 1 Hz
Ramp Sweep Time	10 ms to 100 s; up to 400 MHz/ms max
Timebase	Standard +/-10 ppm; Option 1E5 aging 5e-10/day, 1e-7/year RF Output
Minimum Settable Power	-10 dBm; -80 dBm with Option 1E1
Power Resolution	0.01 dB settable
Source Match	less than 1.7:1 SWR, internally leveled (typical)
RF Connector	Precision 3.5 mm male standard; Option 1ED Type-N; Option 1E4 rear panel Spectral Purity (at max leveled power)
Harmonics (83752B)	-20 dBc
Subharmonics	None
Pulse on/off	60 dB; rise/fall 15 ns (0.5-2 GHz), 100 ns rise / 50 ns fall (2-20 GHz) AM sensitivity 1 dB/V; depth about 22 dB for Bmodels FM AC/locked and DC/unlocked modes with published deviation limits
Internal square wave	1.0 kHz and 27.8 kHz (scalar mode) General
Dimensions	133 × 425 × 483 mm (5.25 × 16.75 × 19 in)
Weight	Net about 16 kg (35 lb)
Power	90-132 VAC or 198-264 VAC; 400 VA max
Operating Temperature	0 to 55 C
High power	+16 dBm below 2 GHz, +17 dBm above 2 GHz (25 +/-5 C)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 55 C
Operating Temperature	0 to 55 C

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	83752B
Manufacturer	Hewlett-Packard / Agilent
Instrument Type	High-power synthesized sweeper
Frequency Range	10 MHz to 20 GHz
CW Resolution	1 Hz
CW Switching Time	70 ms maximum
Stepped Sweep	2 to 1601 points; resolution settable 1 Hz
Ramp Sweep Time	10 ms to 100 s; up to 400 MHz/ms max
Timebase	Standard +/-10 ppm; Option 1E5 aging 5e-10/day, 1e-7/year

RF Output

Maximum Leveled Power (25 +/-5 C): less than 2 GHz +16 dBm; greater than 2 GHz +17 dBm (reduce 1 dB with Option 1E1)

Specifications

PARAMETER	VALUE
Minimum Settable Power	-10 dBm; -80 dBm with Option 1E1
Power Resolution	0.01 dB settable
Source Match	less than 1.7:1 SWR, internally leveled (typical)
RF Connector	Precision 3.5 mm male standard; Option 1ED Type-N; Option 1E4 rear panel

Spectral Purity (at max leveled power)

Harmonics (83752B): -20 dBc
Subharmonics: None
Non-harmonic spurious: -50 dBc (conditions per datasheet)

Modulation

Pulse on/off: 60 dB; rise/fall 15 ns (0.5-2 GHz), 100 ns rise / 50 ns fall (2-20 GHz)
AM sensitivity 1 dB/V; depth about 22 dB forBmodels
FM AC/locked and DC/unlocked modes with published deviation limits
Internal square wave: 1.0 kHz and 27.8 kHz (scalar mode)

General

Specifications

PARAMETER	VALUE
Dimensions	133 x 425 x 483 mm (5.25 x 16.75 x 19 in)
Weight	Net about 16 kg (35 lb)
Power	90-132 VAC or 198-264 VAC; 400 VA max
Operating Temperature	0 to 55 C

Warm-up: 30 minutes from cold start

Common Options
1E1 70 dB step attenuator; 1E4 rear RF output; 1E5 high-stability timebase; 1EE mm-wave source module interface; 1ED Type-N; 1EF 3.5 mm

Operational Notes
Perform peak function as required before applying specifications. Allow band-switch settling near 2 GHz. For master/slave two-tone tracking, share 10 MHz references and sweep interfaces between two 83751/83752 units.

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 ·
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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.