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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 11729C

Mechanical Package: benchtop microwave test set Architecture: downconverter and phase detector/PLL Documentation: HP 11729C carrier noise test set data Ate Interface: HP-IB as published for 11729C/3048A Architecture: downconverter and phase detector/PLL Documentation: HP 11729C carrier noise test set data Ate Interface: HP-IB as published for 11729C/3048A Related 11729B: earlier 5 MHz to 18 GHz carrier noise test set



MODEL

**Agilent / Keysight
11729C**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

11729C

LISTING

[https://aumictechlabs.c
om/products/11729c-2/](https://aumictechlabs.com/products/11729c-2/)

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30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 11729C Carrier Noise Test Set is a specialized instrument for measuring phase noise and AM noise in RF and microwave signals across 1.28 GHz to 18 GHz. It functions as a downconverter and phase detector module within noise measurement systems, converting test signals to intermediate frequencies for analysis via Phase Detector or Frequency Discriminator methods. Technical Specifications Frequency Coverage Downconverter Input: 1.28 GHz to 18 GHz (8 bands) Test Signal: 10 MHz to 18 GHz IF Output: 5 MHz to 1280 MHz IF Bandwidth: 10 Hz to 10 MHz (3 dB typical to 15 MHz) Input Power Specifications Downconverter Input (1.28–18 GHz): +7 dBm to +18 dBm Test Frequencies Below 1.28 GHz: –5 dBm to +10 dBm (–2 dBm to +3 dBm optimal) RF Signal Nominal: +3 dBm Output Power IF Output Level: +7 dBm minimum Phase Noise Floor (Residual Noise) At <1.28 GHz input: –115 dBc/Hz (10 Hz), –126 dBc/Hz (100 Hz), –135 dBc/Hz (1 kHz), –142 dBc/Hz (10 kHz), –151 dBc/Hz (100 kHz), –156 dBc/Hz (1 MHz) At 10 GHz

input: -90 dBc/Hz (10 Hz), -105 dBc/Hz (100 Hz), -115 dBc/Hz (1 kHz), -127 dBc/Hz (10 kHz), -137 dBc/Hz (100 kHz), -142 dBc/Hz (1 MHz) AM Noise Floor (Option 130) -138 dBc/Hz at 1 kHz offset -145 dBc/Hz at 10 kHz offset -155 dBc/Hz at 100 kHz offset -160 dBc/Hz at 1 MHz offset

Key Features Dual demodulation methods: Phase Detector and Frequency Discriminator Up-converts external reference signals; down-converts test signals to IF Selectable IF bandwidth from 10 Hz to 10 MHz Accommodates external drive signals (640 MHz fixed or 5 MHz to 1280 MHz variable) AM noise measurement with Option 130

Typical Applications Communication system signal integrity analysis Radar and aerospace oscillator characterization Microwave component phase noise evaluation Critical RF signal performance assessment

Compatibility & Integration The 11729C integrates into phase noise measurement systems as a dedicated downconverter and demodulation module, requiring externally supplied drive signals for operation.

11729C Characteristics / Specifications

PARAMETER	VALUE
Model	11729C
Instrument Type	Carrier noise test set
Frequency Range Class	5 MHz to 18 GHz class (confirm option on unit)
Reference Synthesizers	HP 8662A 8663A
System Family	HP 3048A phase noise systems
Predecessor	11729B
Manufacturer	HP Agilent Keysight
Mechanical Package	benchtop microwave test set
Measurement	carrier phase noise
Architecture	downconverter and phase detector/PLL
Output	baseband noise to the analyzer
Application Class	CW source phase noise
Documentation	HP 11729C carrier noise test set data
Input Type	microwave carrier
Reference Type	low-noise RF synthesizer
Ate Interface	HP-IB as published for 11729C/3048A
Duty	continuous phase-noise measurement
Related 11729B	earlier 5 MHz to 18 GHz carrier noise test set
Use With	8662A/8663A and 3048A software/hardware
Minimum Frequency Class	5 MHz
Maximum Frequency Class	18 GHz
Grounding	system ground with the reference synthesizer

11729C Specifications

PARAMETER	VALUE
HP Agilent 11729C Carrier Noise Test Set	Overview
Applications	Phase-noise characterization of microwave CW sources with HP 3048A systems.
Key Features	Successor to 11729B
Technical Specifications	Model: 11729C

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	
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Notes	
From HP 11729C carrier noise test set family literature as the 11729B successor in 3048A systems. Confirm the exact frequency-option label on the 11729C faceplate.	

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.