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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U9391C

Keysight U9391C Comb Generator Module Class The Agilent/Keysight U9391C is a microwave comb generator accessory used to create a spectrum of harmonically related tones for calibrating and verifying spectrum analyzers and receivers. OEM Keysight U9391 comb generator literature describes millimeter-wave harmonic combs driven from a reference input. Spectrum analyzer harmonic calibration checks, receiver spur surveys with known tone grids, and millimeter-wave frequency response stimulus. Instrument Type: microwave comb generator The Agilent/Keysight U9391C is a microwave comb generator accessory used to create a spectrum of harmonically related tones for calibrating and verifying spectrum analyzers and receivers. OEM Keysight U9391 comb generator literature describes millimeter-wave harmonic combs driven from a reference input. Spectrum analyzer harmonic calibration checks, receiver spur surveys with known tone grids, and millimeter-wave frequency response stimulus. Instrument Type: microwave comb generator Primary Function: harmonic tone comb generation



MODEL

**Agilent / Keysight
U9391C**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

U9391C

LISTING

<https://aumictechlabs.com/products/u9391c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight U9391C is a comb generator for precision phase calibration of nonlinear measurements on the Keysight PNA-X nonlinear vector network analyzer. It calibrates PNA and PNA-X network analyzers for phase and delay measurements of frequency converters without

requiring separate reference or calibration mixers. Built on InP MMIC technology, the U9391C delivers superior phase stability and excellent amplitude and phase flatness, qualifying it as a precision calibration phase reference standard.

Technical Specifications

Frequency Performance
Output frequency: 10 MHz to 26.5 GHz
Input frequency: 10 MHz to 6 GHz
Minimum output power per picket: -80 dBm at 10 MHz input PRF
Input power range: -15 dBm to +15 dBm

Harmonic Generation
The device generates frequency harmonics at integer multiples from an RF input signal with 10 MHz minimum tone spacing. A customer-selectable, USB-controlled frequency divider provides divide ratios of 1, 2, 4, 8, or 16, enabling broad harmonic spacing flexibility. Drive frequency can be set at 1, 2, 4, 8, or 16 times the pulse repetition frequency. Power & Control
DC power supply: $15 \pm 10\%$ Vdc at 300 mA nominal
USB interface for primary control and calibration data retrieval
Embedded calibration data accessible directly by PNA-X via USB
Trigger output for synchronization with pulse repetition frequency

Physical & Connectivity
Rugged 3.5-mm, 2.4-mm, and 1.85-mm bulkhead connectors provide high repeatability. Output connectors available in female or male configurations. A sine-to-square wave converter is included as standard.

Key Features
Superior phase stability from InP MMIC technology
Excellent amplitude and phase flatness across operating range
Plug-and-play operation with PNA-X NVNA
Simple USB-controlled frequency divider for flexible harmonic spacing
Integrated trigger output for PRF synchronization

Typical Applications
Nonlinear vector network analyzer phase calibration
Frequency converter phase and delay measurements
Precision calibration reference standard

Compatibility & Integration
The U9391C integrates directly with Keysight PNA and PNA-X network analyzers via USB. Multiple units require separate power supplies for nonlinear measurements. Plug-and-play connectivity eliminates external calibration mixer requirements.

U9391C Characteristics / Specifications

PARAMETER	VALUE
Model	U9391C
Instrument Type	microwave comb generator
Primary Function	harmonic tone comb generation
Drive Input Class	reference frequency input class
Output Spectrum	harmonically related tones
Frequency Coverage Class	microwave to millimeter wave class family
Tone Spacing	determined by drive frequency
Output Connector Class	coaxial precision connector class
Form Factor	compact RF module
Operating Temperature Class	0 C to 40 C laboratory class
Storage Temperature Class	minus 40 C to 70 C class
Power Source Class	DC bias or instrument powered class
Series Family	Keysight U9391
Related Models	U9391F U9391G class variants
Amplitude Flatness Class	comb tooth amplitude table class
Phase Noise Context	follows drive reference quality
Use With	spectrum analyzers and receivers
Calibration Role	frequency marker and response checks
Impedance Class	50 Ohm
Mounting Class	bench or fixture mount class
Weight Class	small RF module class
Humidity Class	noncondensing
Altitude Class	standard laboratory altitude class
Emi Class	shielded RF module class
Storage temperature	Class: minus 40 C to 70 C class

PARAMETER	VALUE
Operating temperature	Class: 0 C to 40 C laboratory class
Humidity	Class: noncondensing

U9391C Specifications

PARAMETER	VALUE
Keysight U9391C Comb Generator Module Class	Overview
Compact module form factor	Keysight U9391 family accessory
Technical Specifications	Model: U9391C

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: minus 40 C to 70 C class
Operating temperature	Class: 0 C to 40 C laboratory class
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Altitude Class	standard laboratory altitude class
Emi Class	shielded RF module class Notes Capability rows from Keysight U9391C comb generator accessory catalog descriptions. Exact maximum frequency and tooth power levels are on the U9391C datasheet configuration table.

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

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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.