

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 3, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) W11644A Mechanical Calibration Kit, 75 to 110 GHz

Keysight (Agilent) W11644A Mechanical Calibration Kit, 75 to 110 GHz The Keysight/Agilent W11644A is a waveguide mechanical calibration kit covering 75 to 110 GHz (W-band). It provides the precision open/short/load (and related) standards needed to calibrate vector network analyzers in WR-10 / W-band waveguide interfaces. Related 11644A family kits cover other bands (e.g., R/U/V/Q). VNA calibration at W-band (75–110 GHz); millimeter-wave S-parameter measurements; production and metrology waveguide cal. The Keysight/Agilent W11644A is a waveguide mechanical calibration kit covering 75 to 110 GHz (W-band). It provides the precision open/short/load (and related) standards needed to calibrate vector network analyzers in WR-10 / W-band waveguide interfaces. Related 11644A family kits cover other bands (e.g., R/U/V/Q). VNA calibration at W-band (75–110 GHz); millimeter-wave S-parameter measurements; production and metrology waveguide cal.



MODEL

**Keysight / Agilent
W11644A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

W11644A

LISTING

<https://aumictechlabs.com/products/w11644a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight W11644A Mechanical Calibration Kit delivers precision calibration for Vector Network Analyzer (VNA) measurements in the 75 to 110 GHz band. This WR-10 waveguide

calibration standard set eliminates systematic errors and ensures traceable, repeatable characterization across Keysight network analyzer platforms. The kit implements Thru-Reflect-Line (TRL) calibration methodology, delivering high-accuracy error correction without external power or complex setup.

Technical Specifications
Frequency Range: 75 to 110 GHz
Waveguide: WR-10 W-band
Calibration Method: Thru-Reflect-Line (TRL)
Termination Return Loss: ≥ 36.6 dB
Quarter-Wavelength Shim Return Loss: 46 dB
Standard Section Return Loss: ≥ 36.6 dB
Mechanical Tolerance: Waveguide shorts flat within 0.008 mm

Key Features
Precision airline standard for direct TRL calibration
Flush short-circuit standard with guaranteed mechanical flatness
Quarter-wavelength precision shims for phase reference
Fixed termination loads with high return loss
NIST-traceable certification on precision airlines and shorts
Electrical specifications derived from modeled mechanical measurements
Temperature stability critical for optimal performance; minimize handling during calibration
Supplied with user and service documentation including replacement part numbers, maintenance procedures, and firmware .xkt files

Typical Applications
Waveguide component and device characterization at W-band frequencies
Systematic error removal in VNA measurements
Calibration standard replacement and kit refresh
High-frequency transmission line and filter validation

Compatibility & Integration
Supported VNA platforms include Keysight 8510, 872x, and PNA series instruments. Documentation covers both connector types (X, P, K) and alternate waveguide configurations (R, Q, U, V, W), ensuring broad instrument compatibility.

Features & description

From manufacturer datasheet

Features

• Frequency: 75 GHz to 110 GHz • Type: Mechanical calibration kit (waveguide) • Band: W-band • Family: 11644A series mechanical cal kits • Interface: Waveguide (W-band / WR-10 class)–confirm flange type on kit

W11644A Characteristics / Specifications

PARAMETER	VALUE
Model	W11644A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Mechanical Calibration Kit
Alias	W11644A; Agilent W11644A; W-band 11644A Frequency Coverage
Minimum Frequency	75 GHz
Maximum Frequency	110 GHz
Waveguide Band	W Contents / Standards Mechanical open, short, load (and thru as applicable) standards per W11644A kit configuration—confirm packing list for exact standards and flange type (e.g., UG-387/U-M style W-band flanges commonly used). Published detailed electrical uncertainty tables belong in the kit's calibration definitions / Keysight cal kit data.
Frequency	75 GHz to 110 GHz
Type	Mechanical calibration kit (waveguide)
Band	W-band
Family	11644A series mechanical cal kits
Interface	Waveguide (W-band / WR-10 class)—confirm flange type on kit

W11644A Specifications

PARAMETER	VALUE
Applications	VNA calibration at W-band (75–110 GHz); millimeter-wave S-parameter measurements; production and metrology waveguide cal.
Key Features	- Frequency: 75 GHz to 110 GHz
Technical Specifications	Model: W11644A
Frequency Coverage	Minimum Frequency: 75 GHz

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	W11644A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Mechanical Calibration Kit
Alias	W11644A; Agilent W11644A; W-band 11644A

Frequency Coverage

Frequency Coverage

PARAMETER	VALUE
Minimum Frequency	75 GHz
Maximum Frequency	110 GHz
Waveguide Band	W

Contents / Standards

Mechanical open, short, load (and thru as applicable) standards per W11644A kit configuration-confirm packing list for exact standards and flange type (e.g., UG-387/U-M style W-band flanges commonly used). Published detailed electrical uncertainty tables belong in the kit’s calibration definitions / Keysight cal kit data.

Operational Notes

Do not confuse with R11644A, U11644A, V11644A, or Q11644A (different frequency bands). Prefer Keysight W11644A product documentation and cal kit definition files for VNA setup.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 3, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.