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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight U3042AM20 26.5 GHz, 20-Port Mechanical Test Set

Keysight U3042AM20 26.5 GHz 20 Port Mechanical Test Set The Keysight U3042AM20 is a 26.5 GHz 20-port mechanical test set for PNA/PNA-X multiport S-parameter systems. OEM U3042A series configuration data list 26.5 GHz coverage, 20 test ports, and mechanical switching for expanding a 2-port PNA to 20-port measurements with 3.5 mm class connectors. Multiport passive and active device characterization to 26.5 GHz on PNA-X. Instrument Type: Mechanical multiport test set The Keysight U3042AM20 is a 26.5 GHz 20-port mechanical test set for PNA/PNA-X multiport S-parameter systems. OEM U3042A series configuration data list 26.5 GHz coverage, 20 test ports, and mechanical switching for expanding a 2-port PNA to 20-port measurements with 3.5 mm class connectors. Multiport passive and active device characterization to 26.5 GHz on PNA-X. Instrument Type: Mechanical multiport test set Sibling Six Port: U3022AM04 26.5 GHz 6-port mechanical test set



MODEL

**Agilent / Keysight
U3042AM20**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

U3042AM20

LISTING

<https://aumictechlabs.com/products/u3042am20-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight U3042AM20 is a 26.5 GHz mechanical test set that expands the port capacity of 4-port network analyzers to deliver 24-port full crossbar measurement capability in a single

connection. This 20-port multiplexing module integrates with PNA, PNA-L, and PNA-X series instruments, enabling simultaneous characterization of multiport devices across the entire microwave frequency spectrum.

Technical Specifications

Frequency Range Maximum Frequency: 26.5 GHz

Port Configuration Test Set Ports: 20 Combined System Ports: 24 (when connected to a 4-port network analyzer)

Measurement Capability: Full crossbar configuration

Key Features

- Mechanical switching architecture for deterministic port sequencing
- Single-connection measurement approach eliminates reconfiguration overhead
- Direct integration with established Keysight network analyzer platforms
- Maintains calibration and measurement integrity across all 24 ports

Typical Applications

- Multiport RF and microwave device characterization
- High-frequency passive component testing (switches, filters, couplers)
- Antenna and connector validation across multiple ports
- Automated production test of port-intensive assemblies
- S-parameter acquisition across large port matrices

Compatibility & Integration

The U3042AM20 connects directly to Keysight PNA, PNA-L, and PNA-X series network analyzers equipped with four measurement ports. No external controllers or proprietary interfaces are required. System configuration requires a single network analyzer connection, enabling rapid setup and deployment in both laboratory and production environments.

U3042AM20 Characteristics / Specifications

PARAMETER	VALUE
Model	U3042AM20
Instrument Type	Mechanical multiport test set
Frequency Range	to 26.5 GHz
Port Count	20
Host Analyzers	Keysight PNA / PNA-X
Switching	mechanical
Connector Class	3.5 mm class
Family	U3042A multiport test sets
Sibling Six Port	U3022AM04 26.5 GHz 6-port mechanical test set
Sibling Ten Port	U3022AE10 26.5 GHz 10-port mechanical test set
Manufacturer	HP Agilent Keysight
Mechanical Package	external mechanical test set
Application Class	multiport S-parameters
Documentation	Keysight U3042A series configuration guide U3042AM20 row
Minimum Frequency Class	PNA start frequency as configured
Maximum Frequency	26.5 GHz
Calibration	multiport cal with the PNA firmware
Control	PNA-X drives the test set
Duty	continuous multiport sweep
Use Case	FEM switch matrices and antenna arrays
System Impedance	50 ohm
Port Type	mechanical coaxial test ports

U3042AM20 Specifications

PARAMETER	VALUE
Keysight U3042AM20 26.5 GHz 20 Port Mechanical Test Set	Overview
Applications	Multiport passive and active device characterization to 26.5 GHz on PNA-X.
Key Features	20 mechanical test ports
Technical Specifications	Model: U3042AM20

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 Keysight U3042A/U3022A multiport mechanical test-set configuration listings, U3042AM20 26.5 GHz 20-port row. Confirm connector sex and PNA option set.	

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.