


Aumictech

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E5091A

The Keysight E5091A is a multiport test set for 4-port ENA Series network analyzers. Configuration class 009 provides nine DUT test ports; class 016 provides thirteen to sixteen configurable DUT ports. RF coverage is 50 MHz to 8.5 GHz with Type-N and SMA front-panel interfaces and USB control from the E5071C. Multiport component and module S-parameter production test expanding a 4-port ENA beyond four DUT ports. Nine-port or 13/16-port configurable expansions. Switch isolation typically -100 dB over much of band. Isolation Over Arbitrary Ports 50 MHz To 6 GHz Class 009: -100 dB Isolation 6 GHz To 8.5 GHz Class 009: -90 dB Stability Typical Low Band: 0.005 dB per C Stability Typical 6 To 8.5 GHz: 0.015 dB per C Notes Numeric rows from Agilent E5071C datasheet E5091A multiport test set tables 42 through 46. Port performance without calibration as stated by OEM.



MODEL

**Agilent / Keysight
E5091A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E5091A

LISTING

<https://aumictechlabs.com/products/e5091a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E5091A is a multiport test set that extends 4-port ENA network analyzers to measure devices with up to 16 ports using a single connection. This approach eliminates repeated setup cycles, reduces interconnect errors, and increases measurement throughput in R&D and manufacturing. The instrument employs solid-state switching for speed and reliability, incorporates temperature control for measurement stability, and includes built-in balanced measurement capability for mixed-mode S-parameter analysis. Available in 9-port and 16-port

configurations, it addresses complex testing requirements for components such as antenna switch modules with balanced ports.

Technical Specifications

Device Connectivity: Single-connection measurement for devices up to 16 ports

Port Configurations: 9-port and 16-port options

Frequency Range: 50 MHz to 8.5 GHz across five operating bands

Interconnection Ports: 50 Ω N-type (female) connectors

Power Input: 90–132 VAC or 198–264 VAC, 47–63 Hz

Maximum Power Consumption: 150 VA

Measurement Stability: Temperature control function included

Key Features

- Solid-state switches enable fast, reliable multiport measurements
- Built-in balanced measurement support for mixed-mode S-parameters
- Control line for DUT path switching and external control functions
- Voltage adjustment trimmer for output control

Compatible with Keysight Measurement Wizard Assistant (MWA) software for automated setup and enhanced productivity

Typical Applications

- Mobile handset antenna switch module characterization
- Devices with balanced port configurations
- Multiport component testing requiring single-connection convenience

Compatibility & Integration

The E5091A integrates with Keysight ENA Series RF Network Analyzers (such as the E5071C) through 50 Ω N-type interconnection ports. Calibration support includes the N4431B 4-port ECal module. The instrument is obsolete; the E5092A Configurable Multiport Test Set is the recommended replacement.

E5091A Characteristics / Specifications

PARAMETER	VALUE
Model	E5091A
Instrument Type	multiport RF test set
Frequency Range	50 MHz to 8.5 GHz
Damage Level Typical	20 dBm plus or minus 25 VDC
Configuration Nine Port Class	9 DUT ports plus 4 interconnect ports
Configuration Sixteen Port Class	13 to 16 configurable DUT ports plus 4 interconnect
Interconnect Port Count	4
Interconnect Connector	TypeNfemale 50 ohm
Nine Port DUT Connectors	TypeNfemale 50 ohm 9 ports
Sixteen Port DUT Connectors	SMA female 50 ohm 25 ports including configurable switch
Control Connector	15 pinDsub female
USB Port	TypeBto E5071C
Line Frequency	47 to 63 Hz
Line Voltage	90 to 132 VAC or 198 to 264 VAC auto switched
Power Consumption Maximum	150 VA
Load Match SelectedAT2 R1 50 MHz To 300 MHz Class 0	19 dB
Load Match SelectedAT2 R1 6 GHz To 8.5 GHz Class 0	10 dB
Insertion Loss SelectedAT2 R1 50 MHz To 300 MHz Class 0	3 dB
Insertion Loss SelectedAT2 R1 6 GHz To 8.5 GHz Class 0	6 dB
Isolation Over Arbitrary Ports 50 MHz To 6 GHz Class 0	-100 dB
Isolation 6 GHz To 8.5 GHz Class 0	-90 dB
Stability Typical Low Band	0.005 dB perCStability Typical 6 To 8.5 GHz: 0.015 dB perC Notes Numeric rows from Agilent E5071C datasheet E5091A multiport test set

PARAMETER	VALUE
	tables 42 through 46. Port performance without calibration as stated by OEM.

E5091A Specifications

PARAMETER	VALUE
Keysight E5091A Multiport Test Set	Overview
Applications	Multiport component and module S-parameter production test expanding a 4-port ENA beyond four DUT ports.
Key Features	Nine-port or 13/16-port configurable expansions
Technical Specifications	Model: E5091A

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	E5091A
Instrument Type	multiport RF test set
Frequency Range	50 MHz to 8.5 GHz
Damage Level Typical	20 dBm plus or minus 25 VDC
Configuration Nine Port Class	9 DUT ports plus 4 interconnect ports
Configuration Sixteen Port Class	13 to 16 configurable DUT ports plus 4 interconnect
Interconnect Port Count	4
Interconnect Connector	TypeNfemale 50 ohm
Nine Port DUT Connectors	TypeNfemale 50 ohm 9 ports
Sixteen Port DUT Connectors	SMA female 50 ohm 25 ports including configurable switch
Control Connector	15 pinDsub female
USB Port	TypeBto E5071C
Line Frequency	47 to 63 Hz
Line Voltage	90 to 132 VAC or 198 to 264 VAC auto switched
Power Consumption Maximum	150 VA
Load Match SelectedAT2 R1 50 MHz To 300 MHz Class 009: 19 dB Load Match SelectedAT2 R1 6 GHz To 8.5 GHz Class 009: 10 dB Insertion Loss SelectedAT2 R1 50 MHz To 300 MHz Class 009: 3 dB Insertion Loss SelectedAT2 R1 6 GHz To 8.5 GHz Class 009: 6 dB Isolation Over Arbitrary Ports 50 MHz To 6 GHz Class 009: -100 dB Isolation 6 GHz To 8.5 GHz Class 009: -90 dB Stability Typical Low Band: 0.005 dB perCStability Typical 6 To 8.5 GHz: 0.015 dB perC Notes Numeric rows from Agilent E5071C datasheet E5091A multiport test set tables 42 through 46. Port performance without calibration as stated by OEM.	

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 15, 2026

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