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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N4693A Electronic Calibration Module, 10 MHz to 50 GHz

Agilent / Keysight N4693A Electronic Calibration Module 10 MHz to 50 GHz The Agilent/Keysight N4693A is a 2-port microwave ECal module covering 10 MHz to 50 GHz with 2.4 mm connectors. It stores characterized electronic standards and performs full two-port calibration via USB control from compatible PNA/ENA network analyzers. Gender options include M0F, F0F, and M0M. Successor D-series N4693D extends similar coverage with optional DC. Full 2-port VNA calibration to 50 GHz; precision S-parameter measurement setup in R&D and production; replacing mechanical 2.4 mm cal kits for speed and reduced connector wear; broadband microwave device characterization. The Agilent/Keysight N4693A is a 2-port microwave ECal module covering 10 MHz to 50 GHz with 2.4 mm connectors. It stores characterized electronic standards and performs full two-port calibration via USB control from compatible PNA/ENA network analyzers. Gender options include M0F, F0F, and M0M. Successor D-series N4693D extends similar coverage with optional DC. Full 2-port VNA calibration to 50 GHz; precision S-parameter measurement setup in R&D and production; replacing mechanical 2.4 mm cal kits for speed and reduced connector wear; broadband microwave device characterization.



MODEL	CALIBRATION
Keysight / Agilent N4693A	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
N4693A	https://aumictechlabs.com/products/n4693a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight (Agilent) N4693A is a 2-port electronic calibration module that delivers full two-port calibration from a single connection across 10 MHz to 50 GHz. Operating with 2.4 mm connectors, this ECal module eliminates manual calibration procedures, reducing operator error and connector wear on both the module and VNA. Solid-state switching ensures repeatable, NIST-traceable calibrations essential for laboratory and production environments demanding high measurement confidence. Technical Specifications Frequency coverage spans 10 MHz to 50 GHz with performance-balanced across the range. Reflection tracking remains within ± 0.08 to ± 0.10 dB across most bands, tightening to ± 0.08 dB between 45 MHz and 10 GHz. Transmission tracking ranges from ± 0.09 dB (200 MHz to 2 GHz) to ± 0.15 dB at band edges. Load match varies from 27 to 35 dB depending on frequency, while source match spans 29 to 36 dB. Operating temperature is maintained at +20 to +26 °C. Key Features Full two-port calibration via single connection eliminates multi-step manual procedures NIST-traceable measurements ensure calibration confidence Solid-state switching provides consistent, repeatable performance Reduces connector wear through automated operation Available in three connector configurations: MOF (one male, one female), FOF (both female), MOM (both male) Compact form factor: approximately 12 × 9 × 5 inches, 3 lbs Typical Applications VNA calibration in RF/microwave test laboratories Production line network analyzer verification Periodic calibration maintenance in field environments High-frequency device characterization requiring traceable calibration standards Compatibility & Integration Direct USB control integrates with Keysight PNA and ENA series network analyzers. Legacy analyzer support (Agilent 8753E/ES/ET and 8720D/ES/ET models) requires the optional 85097B interface kit.

Features & description

From manufacturer datasheet

Features

- Frequency range 10 MHz to 50 GHz • 2.4 mm connectors, 50 ohm • Gender options M0F / F0F / M0M • USB control from PNA and ENA series VNAs • Solid-state switching; NIST-traceable calibrations • Single-connection full two-port ECal • Part of N4690 Series microwave ECal family

N4693A Characteristics / Specifications

PARAMETER	VALUE
Model	N4693A
Manufacturer	Agilent / Keysight
Instrument Type	2-port microwave electronic calibration module (ECal)
Alias	N4693A; Agilent N4693A; Keysight N4693A
Frequency Coverage	10 MHz to 50 GHz
Ports	2
Connector Type	2.4 mm
Impedance	50 ohm
Connector Sex Options	M0F; F0F; M0M
Control Interface	USB from Keysight/Agilent PNA and ENA VNAs
Calibration Type	Automated full two-port ECal
Switching	Solid-state electronic standards
Traceability	NIST-traceable factory characterization
Uncertainty Bands Class	Specified across 10-45 MHz, 45-200 MHz, 200 MHz-2 GHz, 2-10 GHz, 10-20 GHz, 20-40 GHz, 40-50 GHz
Reflection Tracking Typical Class	about +/-0.08 to +/-0.10 dB by band (published uncertainty table)
Transmission Tracking Typical Class	about +/-0.09 to +/-0.15 dB by band (published uncertainty table)
Load Match Typical Class	about 27 to 35 dB by band (published uncertainty table)
Source Match Typical Class	about 29 to 36 dB by band (published uncertainty table)
Series Family	N4690 Series microwave ECal
Successor	N4693D (10 MHz or DC to 50 GHz, 2.4 mm) Notes Specs from Keysight/Agilent N4693A product and N4690 Series ECal literature. Confirm connector gender option and calibration due date; for DC coverage use N4693D Option 0DC rather than assuming on N4693A.

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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PARAMETER	VALUE
Model	N4693A
Manufacturer	Agilent / Keysight
Instrument Type	2-port microwave electronic calibration module (ECal)
Alias	N4693A; Agilent N4693A; Keysight N4693A
Frequency Coverage	10 MHz to 50 GHz
Ports	2
Connector Type	2.4 mm
Impedance	50 ohm
Connector Sex Options	M0F; F0F; M0M
Control Interface	USB from Keysight/Agilent PNA and ENA VNAs
Calibration Type	Automated full two-port ECal
Switching	Solid-state electronic standards
Traceability	NIST-traceable factory characterization
Uncertainty Bands Class	Specified across 10-45 MHz, 45-200 MHz, 200 MHz-2 GHz, 2-10 GHz, 10-20 GHz, 20-40 GHz, 40-50 GHz
Reflection Tracking Typical Class	about +/-0.08 to +/-0.10 dB by band (published uncertainty table)
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Source Match Typical Class	about 29 to 36 dB by band (published uncertainty table)
Series Family	N4690 Series microwave ECal
Successor	N4693D (10 MHz or DC to 50 GHz, 2.4 mm)
Notes	
Specs from Keysight/Agilent N4693A product and N4690 Series ECal literature. Confirm connector gender option and calibration due date; for DC coverage use N4693D Option 0DC rather than assuming on N4693A.	

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.