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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N4693D

Agilent Keysight N4693D Microwave ECal Module 2.4 mm DC to 50 GHz (code 0DC) The Keysight N4693D isaprecision 2-port N469xD Series microwave ECal module with 2.4 mm connectors. OEM ECal technical overview 5963-3743 lists 10 MHz to 50 GHz (code 100) as the standard low-frequency edge (or 10 MHz on 40/50/67 GHz models) and DC to 50 GHz (code 0DC) with 0DC. 2.4 mm precision ECal to 50 GHz. Precision full two-port VNA calibration for microwave devices, broadband modeling, and enhanced time-domain/TDR work when 0DC is installed. The Keysight N4693D isaprecision 2-port N469xD Series microwave ECal module with 2.4 mm connectors. OEM ECal technical overview 5963-3743 lists 10 MHz to 50 GHz (code 100) as the standard low-frequency edge (or 10 MHz on 40/50/67 GHz models) and DC to 50 GHz (code 0DC) with 0DC. 2.4 mm precision ECal to 50 GHz. Precision full two-port VNA calibration for microwave devices, broadband modeling, and enhanced time-domain/TDR work when 0DC is installed. Precision microwave residual errors versus economy N755xA

**MODEL****Agilent / Keysight
N4693D****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****N4693D****LISTING**<https://aumictechlabs.com/products/n4693d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N4693D is a 2-port electronic calibration module engineered for precision VNA calibration across an extended frequency range. Using solid-state, programmable impedance standards with NIST-traceable characterization data, it eliminates the need for mechanical

calibration kits and reduces connection cycles. The module connects directly to compatible Keysight vector network analyzers via USB, enabling single-connection electronic calibration with full two-port capability.

Technical Specifications

- Ports: 2
- Connector Type: 2.4 mm (male/male, female/female, or male/female configurations available)
- Frequency Coverage: Standard: 10 MHz to 50 GHz Option 0DC: DC to 50 GHz
- Calibration Method: Single-connection electronic calibration using traceable, verifiable electronic standards
- Impedance States: Programmable and highly repeatable solid-state devices
- Data Traceability: NIST-traceable characterization data

Key Features

- Direct USB control from compatible vector network analyzers eliminates external instrumentation
- Programmable impedance states deliver consistent, repeatable measurements across test sequences
- DC-to-50 GHz capability (Option 0DC) supports broadband device modeling and time-domain analysis
- Single-connection calibration significantly reduces measurement time versus traditional mechanical kits
- Multiple connector configurations accommodate diverse test requirements

Typical Applications

- Full two-port VNA calibration for component and circuit characterization
- Broadband device modeling spanning DC to 50 GHz
- Time-domain and signal integrity analysis requiring extended low-frequency coverage
- Rapid calibration workflows requiring minimal physical connections

Compatibility & Integration

The N4693D integrates with Keysight vector network analyzers including PNA, ENA, PXI VNA, and FieldFox series through direct USB connection. Included plastic storage case protects the module and accessories during transport and storage.

N4693D Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Two port microwave electronic calibration module
Series Family	Keysight N469xD microwave ECal
Port Count	2
Control Interface	USB from Keysight VNA firmware (no external PC required)
Operating Temperature	plus 20 C to plus 26 C
Typical Maximum Input Power	minus 5 dBm (calibration degrades above this)
Typical Maximum Dc Level	plus or minus 10 V
Typical Damage Level	plus 10 dBm
Zero Dc Code	0DC extends the low edge to DC
Connector Genders	M0F mixed, M0M male-male, F0F female-female
Literature	Keysight ECal modules technical overview 5963-3743 and N469xD fact sheet 5992-2768
Supported Analyzers	PNA, PNA-X, ENA (except N4693D/N4694D on some ENA models), PXI VNA, Streamline, FieldFox CPU2 class
User Characterization	adapters or fixtures can be embedded in module flash
Precision Class	microwave precision ECal versus N755xA economy ECal
Connector Type	2.4 mm
Frequency Standard Code	10 MHz to 50 GHz (code 100)
Frequency With 0DC	DC to 50 GHz (code 0DC)
Directivity 0DC Dc To 45 MHz	40 dB
Directivity Code 100 10 To 45 MHz	27 dB
Directivity 45 To 200 MHz	40 dB
Directivity 200 MHz To 2 GHz	46 dB
Directivity 2 To 10 GHz	47 dB
Directivity 10 To 20 GHz	44 dB
Directivity 20 To 40 GHz	38 dB

PARAMETER	VALUE
Directivity 40 To 50 GHz	34 dB
Source Match 45 To 200 MHz	44 dB
Source Match 200 MHz To 2 GHz	46 dB
Source Match 2 To 10 GHz	42 dB
Source Match 10 To 20 GHz	37 dB
Source Match 20 To 40 GHz	35 dB
Source Match 40 To 50 GHz	32 dB
Reflection Tracking 200 MHz To 2 GHz	plus or minus 0.03 dB
Reflection Tracking 40 To 50 GHz	plus or minus 0.08 dB
Low Edge Code 1	10 MHz start
Ena Note	N4693D is not supported on E5071C, E5072A, E5061B, and E5063A per 5963-3743

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	plus 20 C to plus 26 C
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Typical Maximum Input Power	minus 5 dBm (calibration degrades above this)
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Source Match 10 To 20 GHz	37 dB
Source Match 20 To 40 GHz	35 dB
Source Match 40 To 50 GHz	32 dB
Reflection Tracking 200 MHz To 2 GHz	plus or minus 0.03 dB
Reflection Tracking 40 To 50 GHz	plus or minus 0.08 dB
Low Edge Code 1	10 MHz start
Ena Note	N4693D is not supported on E5071C, E5072A, E5061B, and E5063A per 5963-3743 Notes Connector, frequency codes, temperature, input-power, and residual-error rows from Keysight Electronic Calibration (ECal) Modules technical overview 5963-3743 model N4693D. Residual-error tables apply when applied power does not exceed minus 5 dBm.

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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Source Match 2 To 10 GHz	42 dB
Source Match 10 To 20 GHz	37 dB
Source Match 20 To 40 GHz	35 dB
Source Match 40 To 50 GHz	32 dB
Reflection Tracking 200 MHz To 2 GHz	plus or minus 0.03 dB
Reflection Tracking 40 To 50 GHz	plus or minus 0.08 dB
Low Edge Code 100	10 MHz start
Ena Note	N4693D is not supported on E5071C, E5072A, E5061B, and E5063A per 5963-3743

Notes

Connector, frequency codes, temperature, input-power, and residual-error rows from Keysight Electronic Calibration (ECal) Modules technical overview 5963-3743 model N4693D. Residual-error tables apply when applied power does not exceed minus 5 dBm.

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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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.