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Data Sheet

August 12, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N4432A Electronic Calibration Module (ECal), 300 kHz to 18 GHz, 4-Port

Keysight / Agilent N4432A 4-Port Electronic Calibration Module (ECal) The N4432A is a 4-port microwave ECal module for Keysight/Agilent VNAs. Single-connection full multiport calibration with solid-state switching. Frequency 300 kHz to 18 GHz. Connector options include Type-N 50 Ω (Opt 020) or mixed 3.5 mm / Type-N configurations. The N4432A is a 4-port microwave ECal module for Keysight/Agilent VNAs. Single-connection full multiport calibration with solid-state switching. Frequency 300 kHz to 18 GHz. Connector options include Type-N 50 Ω (Opt 020) or mixed 3.5 mm / Type-N configurations.



MODEL

**Keysight / Agilent
N4432A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N4432A

LISTING

<https://aumictechlabs.com/products/n4432a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N4432A is a 4-port electronic calibration (ECal) module that delivers NIST-traceable calibration accuracy across 300 kHz to 18 GHz. This solid-state instrument eliminates the need for mechanical calibration kits, reducing connector wear, repair costs, and operator-dependent errors. Single-connection calibration technique on 3- or 4-port configurations transfers factory calibration accuracy directly to Keysight PNA, ENA, PXI VNA, FieldFox, and USB vector network analyzers via USB control interface. Technical Specifications Frequency Range: 300 kHz to 18 GHz

Ports: 4-port Calibration Type: Single-connection, 3- or 4-port calibration Accuracy: NIST traceable Impedance States: Programmable and highly repeatable solid-state switching Operating Temperature: +20 °C to +26 °C Humidity: Up to 95% RH at 40 °C, non-condensing Control Interface: USB Connector Types: Type-N (f) standard; mixed connector options available including 3.5 mm and Type-N configurations

Key Features Pre-characterized S-parameter data stored within module acts as transfer standard Programmable solid-state switching for repeatable impedance states User characterization support - allows re-characterization with adapters or custom fixtures Stores up to five user-defined characterizations in addition to factory data Significantly reduces calibration time and potential for error Minimizes connector wear and associated maintenance costs

Typical Applications Manufacturing RF/microwave component and subsystem testing Research and development characterization Field-deployed VNA measurements and on-site calibration

Compatibility & Integration Supported Analyzers: Keysight PNA series, ENA series, PXI VNA, FieldFox, USB VNAs Firmware Requirements: PNA series requires firmware revision 2.5 or higher; E5071C ENA supports 9 kHz to 300 kHz operation with firmware version A.09.10 or higher Control: Direct USB interface eliminates need for external switching hardware

Features & description

From manufacturer datasheet

Features

• Ports: 4 • Frequency range: 300 kHz to 18 GHz • Standard connector option 020: Type-N 50 Ω female on all ports • Mixed-connector options: Type-N 50 Ω and/or 3.5 mm per port option codes • Calibration: full 1–4 port with single connection • Switching: reliable solid-state • Interface: USB control with PNA/ENA class analyzers • Characterization: factory characterized; NIST-traceable class performance tables • Characteristic performance Opt 020 (Type-N f) examples: • Directivity: 45 dB (300 k–10 MHz); 50 dB (10 MHz–5 GHz); 47 dB (5–9 GHz); 41 dB (9–13.5 GHz); 40 dB (13.5–18 GHz) • Source match: 35 / 41 / 37 / 34 / 34 dB across those bands • Reflection tracking: ± 0.10 / ± 0.06 / ± 0.10 / ± 0.15 / ± 0.14 dB • Transmission tracking: ± 0.18 / ± 0.05 / ± 0.10 / ± 0.17 / ± 0.21 dB • Load match: 35 / 42 / 39 / 35 / 33 dB

Applications

• Fast 1- to 4-port VNA calibration with one connection • Reduced connector wear vs mechanical standards • Multiport PNA / ENA / PNA-L calibration

N4432A Characteristics / Specifications

PARAMETER	VALUE
Model	N4432A
Manufacturer	Keysight / Agilent
Instrument Type	4-Port Electronic Calibration Module
Alias	N4432A; Agilent N4432A; Keysight N4432A
Frequency range	300 kHz to 18 GHz
Ports	4
Connector option 0	Type-N 50 Ω (f)
Directivity 10 MHz	5 GHz: 50 dB
Source match 10 MHz	5 GHz: 41 dB
Reflection tracking 10 MHz	5 GHz: ± 0.06 dB
Load match 10 MHz	5 GHz: 42 dB
Interface	USB to VNA Notes Specs from Keysight ECal technical overview / N443xA datasheets. Confirm connector option (020 vs mixed) and cal due date on the module.
Standard connector option 020	Type-N 50 Ω female on all ports
Mixed-connector options	Type-N 50 Ω and/or 3.5 mm per port option codes
Calibration	full 1–4 port with single connection
Switching	reliable solid-state
Characterization	factory characterized; NIST-traceable class performance tables
Directivity	45 dB (300 k–10 MHz); 50 dB (10 MHz–5 GHz); 47 dB (5–9 GHz); 41 dB (9–13.5 GHz); 40 dB (13.5–18 GHz)
Source match	35 / 41 / 37 / 34 / 34 dB across those bands
Reflection tracking	± 0.10 / ± 0.06 / ± 0.10 / ± 0.15 / ± 0.14 dB
Transmission tracking	± 0.18 / ± 0.05 / ± 0.10 / ± 0.17 / ± 0.21 dB
Load match	35 / 42 / 39 / 35 / 33 dB

N4432A Specifications

PARAMETER	VALUE
Applications	- Fast 1- to 4-port VNA calibration with one connection
Key Features	- Ports: 4
Technical Specifications	Model: N4432A
Notes	Specs from Keysight ECal technical overview / N443xA datasheets. Confirm connector option (020 vs mixed) and cal due date on the module.

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.

performance tables

- Characteristic performance Opt 020 (Type-N f) examples:
- Directivity: 45 dB (300 k-10 MHz); 50 dB (10 MHz-5 GHz); 47 dB (5-9 GHz); 41 dB (9-13.5 GHz); 40 dB (13.5-18 GHz)
- Source match: 35 / 41 / 37 / 34 / 34 dB across those bands
- Reflection tracking: ± 0.10 / ± 0.06 / ± 0.10 / ± 0.15 / ± 0.14 dB
- Transmission tracking: ± 0.18 / ± 0.05 / ± 0.10 / ± 0.17 / ± 0.21 dB
- Load match: 35 / 42 / 39 / 35 / 33 dB

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	N4432A
Manufacturer	Keysight / Agilent
Instrument Type	4-Port Electronic Calibration Module
Alias	N4432A; Agilent N4432A; Keysight N4432A

Specifications

PARAMETER	VALUE
Frequency range	300 kHz to 18 GHz
Ports	4
Connector option 020	Type-N 50 Ω (f)

Directivity 10 MHz-5 GHz: 50 dB
Source match 10 MHz-5 GHz: 41 dB
Reflection tracking 10 MHz-5 GHz: ± 0.06 dB
Load match 10 MHz-5 GHz: 42 dB
Interface: USB to VNA

Notes

Specs from Keysight ECal technical overview / N443xA datasheets. Confirm connector option (020 vs mixed) and cal due date on the module.

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>

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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.