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Data Sheet

August 12, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N4433A Electronic Calibration Module (ECal), 300 kHz to 20 GHz, 3.5 mm, 4-port

Keysight / Agilent N4433A 4-Port Electronic Calibration Module (ECal) The N4433A is a 4-port microwave ECal module for Keysight/Agilent VNAs. Frequency 300 kHz to 20 GHz with 3.5 mm connectors (Opt 010 typically all-female). Single-connection multiport electronic calibration. The N4433A is a 4-port microwave ECal module for Keysight/Agilent VNAs. Frequency 300 kHz to 20 GHz with 3.5 mm connectors (Opt 010 typically all-female). Single-connection multiport electronic calibration.



MODEL

**Keysight / Agilent
N4433A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N4433A

LISTING

<https://aumictechlabs.com/products/n4433a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight (Agilent) N4433A is a 4-port electronic calibration module that delivers NIST-traceable network analyzer calibrations from 300 kHz to 20 GHz using 3.5 mm connectors. This ECal module eliminates the complexity of mechanical calibration kits by enabling full 3- or 4-port calibrations with a single connection, dramatically reducing setup time and connection complexity. Solid-state switching technology ensures reliable operation across the entire frequency range while maintaining accuracy equivalent to traditional mechanical methods. Technical Specifications Frequency Range: 300 kHz to 20 GHz Ports: 4 Connectors: 3.5

mm female (Option 010); mixed 3.5 mm male/female available Maximum Input Power: +7 dBm
Damage Level: +20 dBm Maximum DC Level at Test Port: ± 3 V Calibration Standard: NIST
traceable; accuracy comparable to mechanical methods Control Interface: USB Power: USB-
supplied when connected to compatible analyzers; external supply optional via interface kitKey
Features Single-connection 3- and 4-port calibration capability Solid-state switching for reliability
and repeatability Direct USB control integration with PNA and ENA series network analyzers
Transfer standard functionality - accurately transfers factory calibration accuracy to the analyzer
Eliminates need for mechanical calibration standards and multiple connectorsTypical Applications
Production and field network analyzer calibration Rapid multi-port device characterization
Maintenance and periodic recalibration workflows In-situ calibration verification across 300 kHz
to 20 GHz bandCompatibility & Integration The N4433A connects directly to Keysight PNA and
ENA series network analyzers requiring firmware revision 2.5 or higher. Older analyzer families
(8753, 8720) may operate with an 85097B interface kit and external power supply.

Features & description

From manufacturer datasheet

Features

• Ports: 4 • Frequency range: 300 kHz to 20 GHz • Connectors: 3.5 mm (Opt 010: female on all ports typical) • Mixed-connector options available per OEM option tables • Calibration: full 1–4 port, single connection • Switching: solid-state • Interface: USB to PNA/ENA class • Characteristic performance Opt 010 (3.5 mm f) examples: • Directivity: 45 dB (300 k–10 MHz); 50 dB (10 MHz–5 GHz); 47 dB (5–9 GHz); 45 dB (9–13.5 GHz); 40 dB (13.5–20 GHz) • Source match: 36 / 42 / 39 / 37 / 31 dB • Reflection tracking: ± 0.10 / ± 0.06 / ± 0.09 / ± 0.10 / ± 0.18 dB • Transmission tracking: ± 0.18 / ± 0.06 / ± 0.09 / ± 0.12 / ± 0.23 dB • Load match: 35 / 42 / 39 / 38 / 32 dB

Applications

• Fast 1- to 4-port calibration to 20 GHz • 3.5 mm multiport VNA setups • Reduced wear vs mechanical calibration kits

N4433A Characteristics / Specifications

PARAMETER	VALUE
Model	N4433A
Manufacturer	Keysight / Agilent
Instrument Type	4-Port Electronic Calibration Module
Alias	N4433A; Agilent N4433A; Keysight N4433A
Frequency range	300 kHz to 20 GHz
Ports	4
Connector	3.5 mm (Opt 010)
Directivity 10 MHz	5 GHz: 50 dB
Source match 10 MHz	5 GHz: 42 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 / N4433A datasheet. Listing notes 3.5 mm 4-port. Confirm gender option and calibration certificate on the module.
Connectors	3.5 mm (Opt 010: female on all ports typical)
Calibration	full 1–4 port, single connection
Switching	solid-state
Directivity	45 dB (300 k–10 MHz); 50 dB (10 MHz–5 GHz); 47 dB (5–9 GHz); 45 dB (9–13.5 GHz); 40 dB (13.5–20 GHz)
Source match	36 / 42 / 39 / 37 / 31 dB
Reflection tracking	± 0.10 / ± 0.06 / ± 0.09 / ± 0.10 / ± 0.18 dB
Transmission tracking	± 0.18 / ± 0.06 / ± 0.09 / ± 0.12 / ± 0.23 dB
Load match	35 / 42 / 39 / 38 / 32 dB

N4433A Specifications

PARAMETER	VALUE
Applications	- Fast 1- to 4-port calibration to 20 GHz
Key Features	- Ports: 4
Technical Specifications	Model: N4433A

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 Opt 010 (3.5 mm f) examples:

- Directivity: 45 dB (300 k-10 MHz); 50 dB (10 MHz-5 GHz); 47 dB (5-9 GHz); 45 dB (9-13.5 GHz); 40 dB (13.5-20 GHz)
- Source match: 36 / 42 / 39 / 37 / 31 dB
- Reflection tracking: ± 0.10 / ± 0.06 / ± 0.09 / ± 0.10 / ± 0.18 dB
- Transmission tracking: ± 0.18 / ± 0.06 / ± 0.09 / ± 0.12 / ± 0.23 dB
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Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	N4433A
Manufacturer	Keysight / Agilent
Instrument Type	4-Port Electronic Calibration Module
Alias	N4433A; Agilent N4433A; Keysight N4433A

Specifications

PARAMETER	VALUE
Frequency range	300 kHz to 20 GHz
Ports	4
Connector	3.5 mm (Opt 010)

Directivity 10 MHz-5 GHz: 50 dB
Source match 10 MHz-5 GHz: 42 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 / N4433A datasheet. Listing notes 3.5 mm 4-port. Confirm gender option and calibration certificate 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
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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.