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**Data Sheet**

August 15, 2026

AGILENT / KEYSIGHT

# Agilent/Keysight N4433D

Agilent Keysight N4433D 4-port ECal Module DC/300 kHz to 26.5 GHz The Keysight N4433D is a 4-port microwave ECal module. OEM ECal technical overview 5963-3743 lists DC/300 kHz to 26.5 GHz with 3.5 mm connectors (code 010 four-female or mixed 101-402 genders), 0DC or 003 low-edge codes, and USB control from Keysight VNAs. Full four-port calibration of 26.5 GHz 3.5 mm VNAs and mixed-gender 3.5 mm fixtures. 0DC extends the low edge to DC; 003 starts at 300 kHz The Keysight N4433D is a 4-port microwave ECal module. OEM ECal technical overview 5963-3743 lists DC/300 kHz to 26.5 GHz with 3.5 mm connectors (code 010 four-female or mixed 101-402 genders), 0DC or 003 low-edge codes, and USB control from Keysight VNAs. Full four-port calibration of 26.5 GHz 3.5 mm VNAs and mixed-gender 3.5 mm fixtures. 0DC extends the low edge to DC; 003 starts at 300 kHz 3.5 mm connectors including four-female code 010



MODEL

**Agilent / Keysight  
N4433D**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**N4433D**

LISTING

<https://aumictechlabs.com/products/n4433d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Keysight N4433D is a 4-port electronic calibration (ECal) module that delivers fast, accurate full-port calibration for Keysight vector network analyzers. Unlike traditional mechanical calibration kits, this USB-controlled module completes 4-port calibration in less than half the time while reducing operator error and connector wear. Technical Specifications Frequency Coverage

300 kHz to 26.5 GHz (standard) DC to 26.5 GHz (with Option 0DC) 50 Ohm impedance  
Connectors 3.5 mm, mixed connector type configurations (female-female, male-male, female-male) Directivity Performance (Option 010, 3.5 mm female) DC to 10 MHz: 50 dB 300 kHz to 10 MHz: 45 dB 10 MHz to 5 GHz: 50 dB 5 to 9 GHz: 47 dB 9 to 13.5 GHz: 45 dB 13.5 to 20 GHz: 40 dB 20 to 26.5 GHz: 36 dB Operating Environment Temperature: +20 °C to +26 °C Humidity: Up to 95% RH at 40 °C, non-condensing

**Key Features** Direct USB control from compatible Keysight VNAs eliminates manual calibration workflows Firmware-driven process reduces operator intervention and associated errors Connector longevity through reduced mechanical stress and wear cycles Option 0DC extends calibration capability to DC for broadband device characterization and time-domain analysis

**Typical Applications** Full 4-port calibration of vector network analyzers; broadband component and circuit characterization; device modeling requiring DC-to-microwave frequency span.

**Compatibility & Integration** Designed for direct integration with Keysight vector network analyzers via USB interface.

## N4433D Characteristics / Specifications

| PARAMETER                         | VALUE                                                                    |
|-----------------------------------|--------------------------------------------------------------------------|
| Instrument Type                   | Four port electronic calibration module                                  |
| Series Family                     | Keysight N443xD 4-port ECal                                              |
| Port Count                        | 4                                                                        |
| Control Interface                 | USB 2.0; High Speed 480 Mbit/s and Full Speed 12 Mbit/s; any USB 2.0 hub |
| Operating Temperature             | plus 20 C to plus 26 C                                                   |
| Operating Humidity                | up to 95 percent RH at 40 C, non-condensing                              |
| Typical Maximum Input Power       | minus 7 dBm (calibration degrades above this)                            |
| Typical Maximum Dc Level          | plus or minus 3 V                                                        |
| Typical Damage Level              | plus 20 dBm                                                              |
| Mixed Connectors                  | per-port gender and family codes 101-408 class                           |
| Literature                        | Keysight ECal modules technical overview 5963-3743                       |
| Supported Analyzers               | PNA, ENA, PXI VNA (N4433D not on some FieldFox paths)                    |
| Frequency With ODC                | DC to 26.5 GHz                                                           |
| Frequency With 0                  | 300 kHz to 26.5 GHz                                                      |
| Connector Type                    | 3.5 mm                                                                   |
| Code 010 Connectors               | four 3.5 mm female                                                       |
| Mixed 3.5 Mm Female Codes         | 101 201 301 401                                                          |
| Mixed 3.5 Mm Male Codes           | 102 202 302 402                                                          |
| Directivity ODC Dc To 10 MHz      | 50 dB                                                                    |
| Directivity 003 300 kHz To 10 MHz | 45 dB                                                                    |
| Directivity 10 MHz To 5 GHz       | 50 dB                                                                    |
| Directivity 5 To 9 GHz            | 47 dB                                                                    |
| Directivity 9 To 13.5 GHz         | 45 dB                                                                    |
| Directivity 13.5 To 20 GHz        | 40 dB                                                                    |
| Directivity 20 To 26.5 GHz        | 36 dB                                                                    |

| PARAMETER                           | VALUE                                                                             |
|-------------------------------------|-----------------------------------------------------------------------------------|
| Source Match 0DC Dc To 10 MHz       | 42 dB                                                                             |
| Source Match 10 MHz To 5 GHz        | 42 dB                                                                             |
| Source Match 5 To 9 GHz             | 39 dB                                                                             |
| Source Match 9 To 13.5 GHz          | 37 dB                                                                             |
| Source Match 13.5 To 20 GHz         | 31 dB                                                                             |
| Source Match 20 To 26.5 GHz         | 26 dB                                                                             |
| Reflection Tracking 10 MHz To 5 GHz | plus or minus 0.06 dB                                                             |
| Reflection Tracking 13.5 To 20 GHz  | plus or minus 0.18 dB                                                             |
| Reflection Tracking 20 To 26.5 GHz  | plus or minus 0.31 dB                                                             |
| FieldFox Note                       | N4433D 4-port ECal is not supported on some FieldFox paths per 5963-3743 footnote |
| Humidity                            | up to 95 percent RH at 40 C, non-condensing                                       |

## General Specifications & Supplementary Characteristics

| PARAMETER                         | VALUE                                                 |
|-----------------------------------|-------------------------------------------------------|
| Operating temperature             | plus 20 C to plus 26 C                                |
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| Humidity                          | up to 95 percent RH at 40 C, non-condensing           |
| Operating Humidity                | up to 95 percent RH at 40 C, non-condensing           |
| Typical Maximum Input Power       | minus 7 dBm (calibration degrades above this)         |
| Typical Maximum Dc Level          | plus or minus 3 V                                     |
| Typical Damage Level              | plus 20 dBm                                           |
| Mixed Connectors                  | per-port gender and family codes 101-408 class        |
| Literature                        | Keysight ECal modules technical overview 5963-3743    |
| Supported Analyzers               | PNA, ENA, PXI VNA (N4433D not on some FieldFox paths) |
| Frequency With ODC                | DC to 26.5 GHz                                        |
| Frequency With 0                  | 300 kHz to 26.5 GHz                                   |
| Connector Type                    | 3.5 mm                                                |
| Code 010 Connectors               | four 3.5 mm female                                    |
| Mixed 3.5 Mm Female Codes         | 101 201 301 401                                       |
| Mixed 3.5 Mm Male Codes           | 102 202 302 402                                       |
| Directivity ODC Dc To 10 MHz      | 50 dB                                                 |
| Directivity 003 300 kHz To 10 MHz | 45 dB                                                 |
| Directivity 10 MHz To 5 GHz       | 50 dB                                                 |
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| Source Match ODC Dc To 10 MHz     | 42 dB                                                 |
| Source Match 10 MHz To 5 GHz      | 42 dB                                                 |

| PARAMETER                           | VALUE                                                                                                                                                                                                                                                                                     |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| Source Match 13.5 To 20 GHz         | 31 dB                                                                                                                                                                                                                                                                                     |
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| Reflection Tracking 13.5 To 20 GHz  | plus or minus 0.18 dB                                                                                                                                                                                                                                                                     |
| Reflection Tracking 20 To 26.5 GHz  | plus or minus 0.31 dB                                                                                                                                                                                                                                                                     |
| FieldFox Note                       | N4433D 4-port ECal is not supported on some FieldFox paths per 5963-3743 footnote Notes Frequency, connector, and residual-error rows from Keysight ECal technical overview 5963-3743 N4433D code 010 3.5 mm table. Residual errors apply when applied power does not exceed minus 7 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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| PARAMETER                         | VALUE                                                                    |
| Instrument Type                   | Four port electronic calibration module                                  |
| Series Family                     | Keysight N443xD 4-port ECal                                              |
| Port Count                        | 4                                                                        |
| Control Interface                 | USB 2.0; High Speed 480 Mbit/s and Full Speed 12 Mbit/s; any USB 2.0 hub |
| Operating Temperature             | plus 20 C to plus 26 C                                                   |
| Operating Humidity                | up to 95 percent RH at 40 C, non-condensing                              |
| Typical Maximum Input Power       | minus 7 dBm (calibration degrades above this)                            |
| Typical Maximum Dc Level          | plus or minus 3 V                                                        |
| Typical Damage Level              | plus 20 dBm                                                              |
| Mixed Connectors                  | per-port gender and family codes 101-408 class                           |
| Literature                        | Keysight ECal modules technical overview 5963-3743                       |
| Supported Analyzers               | PNA, ENA, PXI VNA (N4433D not on some FieldFox paths)                    |
| Frequency With 0DC                | DC to 26.5 GHz                                                           |
| Frequency With 003                | 300 kHz to 26.5 GHz                                                      |
| Connector Type                    | 3.5 mm                                                                   |
| Code 010 Connectors               | four 3.5 mm female                                                       |
| Mixed 3.5 Mm Female Codes         | 101 201 301 401                                                          |
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| Directivity 0DC Dc To 10 MHz      | 50 dB                                                                    |
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| Directivity 13.5 To 20 GHz        | 40 dB                                                                    |
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| Reflection Tracking 20 To 26.5 GHz  | plus or minus 0.31 dB                                                             |
| FieldFox Note                       | N4433D 4-port ECal is not supported on some FieldFox paths per 5963-3743 footnote |

#### Notes

Frequency, connector, and residual-error rows from Keysight ECal technical overview 5963-3743 N4433D code 010 3.5 mm table. Residual errors apply when applied power does not exceed minus 7 dBm.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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<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.