

**Aumictech**

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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N7553A

Agilent Keysight N7553A Economy ECal Module DC to 14 GHz The Keysight N7553A is a 2-port N755xA Series economy electronic calibration (ECal) module covering DC to 14 GHz. OEM N755xA fact sheet 5992-2547 and ECal technical overview 5963-3743 list 50 ohm 2-port operation, USB control from the VNA, no warm-up, 77 × 29 × 27 mm housing, and economy-mechanical-kit-class residual errors down to DC. Fast full two-port VNA calibration of insertable or non-insertable 50 ohm devices; FieldFox, ENA, PNA, PXI, and Streamline Series USB VNAs. The Keysight N7553A is a 2-port N755xA Series economy electronic calibration (ECal) module covering DC to 14 GHz. OEM N755xA fact sheet 5992-2547 and ECal technical overview 5963-3743 list 50 ohm 2-port operation, USB control from the VNA, no warm-up, 77 × 29 × 27 mm housing, and economy-mechanical-kit-class residual errors down to DC. Fast full two-port VNA calibration of insertable or non-insertable 50 ohm devices; FieldFox, ENA, PNA, PXI, and Streamline Series USB VNAs. Single-connection ECal versus mechanical open/short/load/thru kits



MODEL

**Agilent / Keysight
N7553A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N7553A

LISTING

<https://aumictechlabs.com/products/n7553a-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N7553A is a 2-port electronic calibration module purpose-built for vector network analyzers. It eliminates the need for mechanical calibration kits, reducing calibration time by up to 50% while maintaining measurement accuracy across DC to 14 GHz. The module features

programmable, highly repeatable impedance states derived from fully traceable electronic standards, enabling faster VNA setup and verification workflows.

Technical Specifications
Frequency Range: DC to 14 GHz Ports: 2 Calibration Type: Electronic (ECal) Connector Options: 3.5 mm or Type-N 50 Ω (female or male configurations) Interface: USB 2.0 micro Impedance States: Programmable with high repeatability Maximum Input Power: +7 dBm (power exceeding this level degrades calibration performance) Operating Temperature: +15 to +35°C at up to 75% relative humidity

Key Features Compact, lightweight 2-port form factor Fully traceable electronic impedance standards Programmable calibration states for rapid instrument qualification Dual connector support eliminates module swapping for different test configurations USB control enables integration with both benchtop and portable measurement systems

Typical Applications Component and subsystem S-parameter characterization VNA performance verification and calibration RF circuit validation across microwave frequencies Field measurements using handheld network analyzers

Compatibility & Integration The N7553A connects to Keysight PNA-X, PNA, ENA, and PXI series vector network analyzers. FieldFox handheld analyzers are also supported. USB 2.0 micro connectivity provides command control and impedance state programming without external power supplies.

N7553A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Two port economy electronic calibration module
Series Family	Keysight N755xA economy ECal
Port Count	2
System Impedance	50 ohm
Control Interface	USB from Keysight VNA firmware (no external PC required)
Warm Up	none required; start calibration immediately
Module Size HxWxD	77 mm x 29 mm x 27 mm
Operating Temperature	plus 15 C to plus 35 C
Operating Humidity	up to 75 percent RH
Typical Maximum Input Power	minus 15 dBm (calibration degrades above this)
Typical Maximum Dc Level	0 V on test port
Typical Damage Level	plus 10 dBm
Supported Analyzers	Keysight ENA, PNA, PXI VNA, Streamline Series USB VNA, FieldFox (CPU2 class for N755xA)
Connector Gender Codes	3FF 3MF 3MM (3.5 mm); NFF NMF NMM (Type-N 50 ohm, models to 18 GHz)
Storage Accessory	plastic storage box code 150
Torque Accessory 3p	N7550X-151 3.5 or 2.92 mm torque wrench
Torque Accessory Type N	N7550X-152 Type-N torque wrench
Literature	Keysight ECal modules technical overview 5963-3743 and N755xA product fact sheet 5992-2547
Directivity Dc To 500 MHz	42 dB (3.5 mm or Type-N tables)
Source Match Dc To 500 MHz	37 dB
Reflection Tracking Dc To 500 MHz	plus or minus 0.13 dB
Frequency Range	DC to 14 GHz
Connector Types	3.5 mm or Type-N 50 ohm
Directivity 500 MHz To 4 GHz	36 dB

PARAMETER	VALUE
Source Match 500 MHz To 4 GHz	30 dB
Reflection Tracking 500 MHz To 4 GHz	plus or minus 0.13 dB
Directivity 4 To 6.5 GHz	36 dB
Source Match 4 To 6.5 GHz	30 dB
Reflection Tracking 4 To 6.5 GHz	plus or minus 0.18 dB
Directivity 6.5 To 9 GHz	36 dB
Source Match 6.5 To 9 GHz	30 dB
Reflection Tracking 6.5 To 9 GHz	plus or minus 0.18 dB
Directivity 9 To 14 GHz	36 dB
Source Match 9 To 14 GHz	28 dB
Reflection Tracking 9 To 14 GHz	plus or minus 0.25 dB
Humidity	up to 75 percent RH

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	plus 15 C to plus 35 C
Operating Temperature	plus 15 C to plus 35 C
Humidity	up to 75 percent RH
Operating Humidity	up to 75 percent RH
Typical Maximum Input Power	minus 15 dBm (calibration degrades above this)
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Typical Damage Level	plus 10 dBm
Supported Analyzers	Keysight ENA, PNA, PXI VNA, Streamline Series USB VNA, FieldFox (CPU2 class for N755xA)
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Frequency Range	DC to 14 GHz
Connector Types	3.5 mm or Type-N 50 ohm
Directivity 500 MHz To 4 GHz	36 dB
Source Match 500 MHz To 4 GHz	30 dB
Reflection Tracking 500 MHz To 4 GHz	plus or minus 0.13 dB
Directivity 4 To 6.5 GHz	36 dB
Source Match 4 To 6.5 GHz	30 dB
Reflection Tracking 4 To 6.5 GHz	plus or minus 0.18 dB

PARAMETER	VALUE
Directivity 6.5 To 9 GHz	36 dB
Source Match 6.5 To 9 GHz	30 dB
Reflection Tracking 6.5 To 9 GHz	plus or minus 0.18 dB
Directivity 9 To 14 GHz	36 dB
Source Match 9 To 14 GHz	28 dB
Reflection Tracking 9 To 14 GHz	plus or minus 0.25 dB Notes Frequency, connector, size, temperature, input-power, and residual-error rows from Keysight N755xA Series ECal product fact sheet 5992-2547 and Electronic Calibration (ECal) Modules technical overview 5963-3743 model N7553A. Directivity/source-match/tracking tables apply when applied power does not exceed minus 15 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
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Storage Accessory	plastic storage box code 150
Torque Accessory 3p5	N7550X-151 3.5 or 2.92 mm torque wrench
Torque Accessory Type N	N7550X-152 Type-N torque wrench
Literature	Keysight ECal modules technical overview 5963-3743 and N755xA product fact sheet 5992-2547
Directivity Dc To 500 MHz	42 dB (3.5 mm or Type-N tables)
Source Match Dc To 500 MHz	37 dB
Reflection Tracking Dc To 500 MHz	plus or minus 0.13 dB
Frequency Range	DC to 14 GHz
Connector Types	3.5 mm or Type-N 50 ohm
Directivity 500 MHz To 4 GHz	36 dB
Source Match 500 MHz To 4 GHz	30 dB

PARAMETER	VALUE
Reflection Tracking 500 MHz To 4 GHz	plus or minus 0.13 dB
Directivity 4 To 6.5 GHz	36 dB
Source Match 4 To 6.5 GHz	30 dB
Reflection Tracking 4 To 6.5 GHz	plus or minus 0.18 dB
Directivity 6.5 To 9 GHz	36 dB
Source Match 6.5 To 9 GHz	30 dB
Reflection Tracking 6.5 To 9 GHz	plus or minus 0.18 dB
Directivity 9 To 14 GHz	36 dB
Source Match 9 To 14 GHz	28 dB
Reflection Tracking 9 To 14 GHz	plus or minus 0.25 dB

Notes

Frequency, connector, size, temperature, input-power, and residual-error rows from Keysight N755xA Series ECal product fact sheet 5992-2547 and Electronic Calibration (ECal) Modules technical overview 5963-3743 model N7553A. Directivity/source-match/tracking tables apply when applied power does not exceed minus 15 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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.