

Automatic Calibration Modules

100 kHz to 12,18 & 26.5 GHz 2-Port & 4-Port

withwave
Next Generation Connectivity

WithWave's Automatic Calibration Modules are ideal for users who want fast and easy calibration for various Vector Network Analyzers (VNA). This module is powered up via USB or $\Phi 5.5$ DC connector and communicate with VNA via USB or LAN and designed for full one-port through four-port calibrations of VNAs by **One-Push START button**.

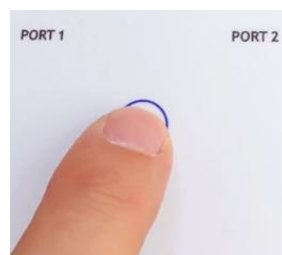
This module works as host systems, measures and calculates calibration coefficients and sends it to VNA easily.

Most of Electronic Calibration Kits work for same manufacturer's VNAs only.

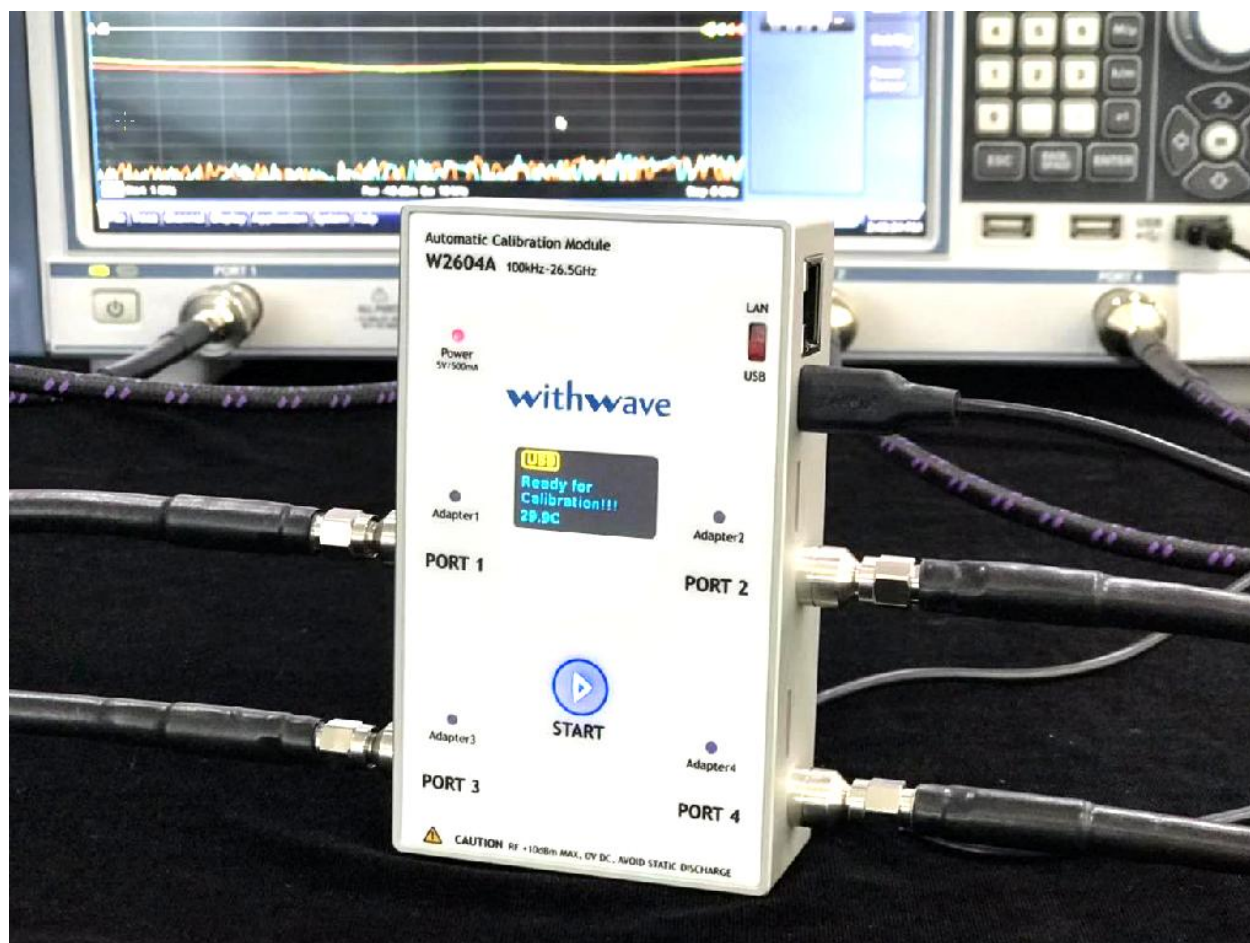
But, this module provides cost-effective calibration solution for users by supporting various VNA models as below.

It's compatible with following VNAs:

- **Keysight PNA series, ENA series**
- **Rohde & Schwarz ZNB, ZVL, ZVA series, ZVT series, ZNLE**
- **Anritsu ShockLine Series**
- **Copper Mountain Technologies Compact & Cobalt Series**



One-Push START button



■ Specification

Scope	Items	Specification
Electrical & Environmental	Freq. range	100 kHz to 12 GHz (W1202A, W1204A) 100 kHz to 18 GHz (W1802A, W1804A) 100 kHz to 26.5 GHz (W2602A, W2604A)
	Impedance	50 Ohm
	Port Power	+ 10 dBm (Max)
	Port DC Voltage	10 V (Max)
	DC Supply	5V/500mA, Φ5.5
	Ethernet interface	LAN/micro USB
	Operating Temperature	+20~+30 (degree)
Mechanical	Port Configuration	Port 1: 3.5 mm, Female Port 2 : 3.5 mm, Female Port 3 : 3.5 mm, Female Port 4: 3.5 mm, Female
	Size	94.5 x 108 x 28.5 (mm)
	Weight	455 g (2-Port) 469 g (4-Port)



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■ Ordering Information

W1202A

Frequency

12: 12 GHz
18 : 18 GHz
26 : 26.5 GHz

of Port

02: 2-Port
04: 4-Port

Interface type

A: 3.5 mm(F)
B: N-type(F)



Interface: 3.5 mm (Female)

2-Port



4-Port



Automatic Calibration Modules

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■ Ordering Information

W1202B

Frequency

12: 12 GHz
18 : 18 GHz
26 : 26.5 GHz

of Port

02: 2-Port
04: 4-Port

Interface type

A: 3.5 mm(F)
B: N-type(F)



Interface: N-type (Female)

2-Port(12 GHz)

2-Port(18 GHz)



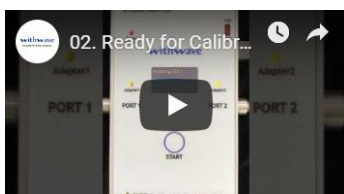
Calibration Procedure (Keysight VNA : 2-Port)



① USB Driver Installation



② Ready for Calibration



Zoom in Video



③ Calibration



Please click pictures for Watching YouTube Videos

Calibration Procedure (Rohde & Schwarz VNA : 4-Port)

① USB Driver Installation



② Ready for Calibration



③ Calibration



Two-Channel Calibration



Please click pictures for Watching YouTube Videos

Automatic Calibration Modules

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2-Port & 4-Port

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■ Contents Information



Index	Description
1	Automatic Calibration Module (2 Ports/ 4 Ports)
2	Torque Wrench (8 mm, 0.9 N·m) : 3.5 mm or N-type
3	USB Driver
4	Power Supply - Input : AC 100~240V, 50~60 Hz - Output : USB, Type A Female, 5V/2.1A
5	DC Power Cable - Connector type : USB Type-A male to Φ5.5 DC plug
6	USB Cable - Connector type : USB 2.0 Type-A male to micro-USB(5 pin)
7	[OPTION] : Data-based Microwave Adapters - 3.5 mm adapter series - 3.5 mm to N adapter series (release 3Q, 2020)

■ Revision History

Revision	Date	Changes
Ver 1.0	Mar.01, 2019	Release Automatic Calibration Module (300 kHz to 12 GHz)
Ver 1.1	Apr.22, 2019	Add 18 GHz & 26.5 GHz version
Ver 2.0	Aug.01, 2019	Change low freq. specification (300 kHz → 100 kHz)
Ver 3.0	Sep.01, 2019	Add 4-Port version (12, 18 & 26.5 GHz)
Ver 3.1	Sep.20, 2019	Add 4-Port Calibration Procedure
Ver 3.2	Nov.13, 2019	Change Contents information
Ver 3.3	Feb.13, 2020	Add Data-based adapters (3.5 mm to 3.5 mm type)
Ver 3.4	Apr.27, 2020	Add compatible model (ZNLE)
Ver 3.5	Aug.07,2025	Delete Data-based Adapters

