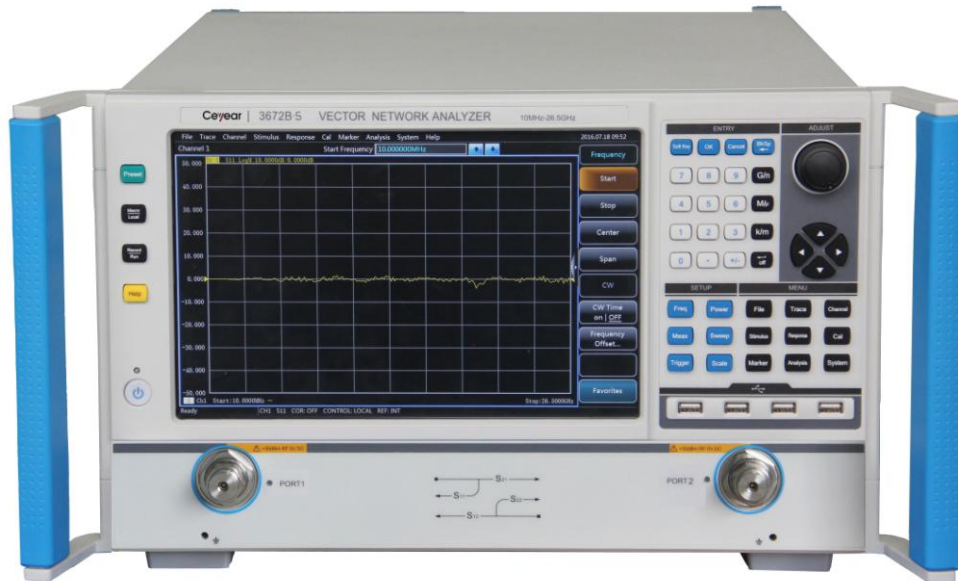# 3672A/B/C -S   Vector Network Analyzer

（10MHz～13.5 GHz/26.5 GHz/43.5 GHz）

Product Overview

3672*-S Series Vector Network Analyzers are consist of 3672A-S (10MHz～13.5GHz), 3672B-S (10MHz～26.5GHz) and 3672C-S (10MHz～43.5GHz). 3672*-S series reduce cost and enhance price-performance ratio but still maintain the same critical technical specifications with those of high performance instrument, such as sweep speed, dynamic range etc. 3672*-S series offer multiple calibration types including frequency response, single port, response isolation, enhanced response, full dual-port and E-cal. Multiple display types are embedded like logarithm amplitude, linear amplitude, standing-wave, phase, group delay, Smith chart, polar coordinates. Many standard interfaces are available including USB, LAN, GPIB, VGA etc. They can precisely measure characteristics of amplitude-frequency, phase-frequency, and group delay and so on.

Main Characteristics

- Flexible calibration types, compatible with multiple calibration kits
- Support complicated testing solutions with many windows, multiple channels and fast operation
- Multiple display types like logarithm amplitude, linear amplitude, standing-wave ratio, Smith chart etc.
- With USB, GPIB, LAN and VGA
- 12.1 inch 1280*800 high-resolution multi-point touch screen
- Record/Run, one-button operation simplifies measurement setup and improves working efficiency.

**Flexible calibration types, compatible with multiple calibration kits**

3672*-S series can give you various calibration types, including guided calibration (auto Cal), non-guided calibration (using mechanical Cal kits for through response, through response and isolation calibration, single port calibration, enhanced response calibration, full dual-port SOLT calibration, TRL calibration),

E-Cal. Different Cal kits can be selected, like coaxial calibration kits or E-Cal kits, according to actual measurement needs, to make measurement easy for devices of diversified interfaces.
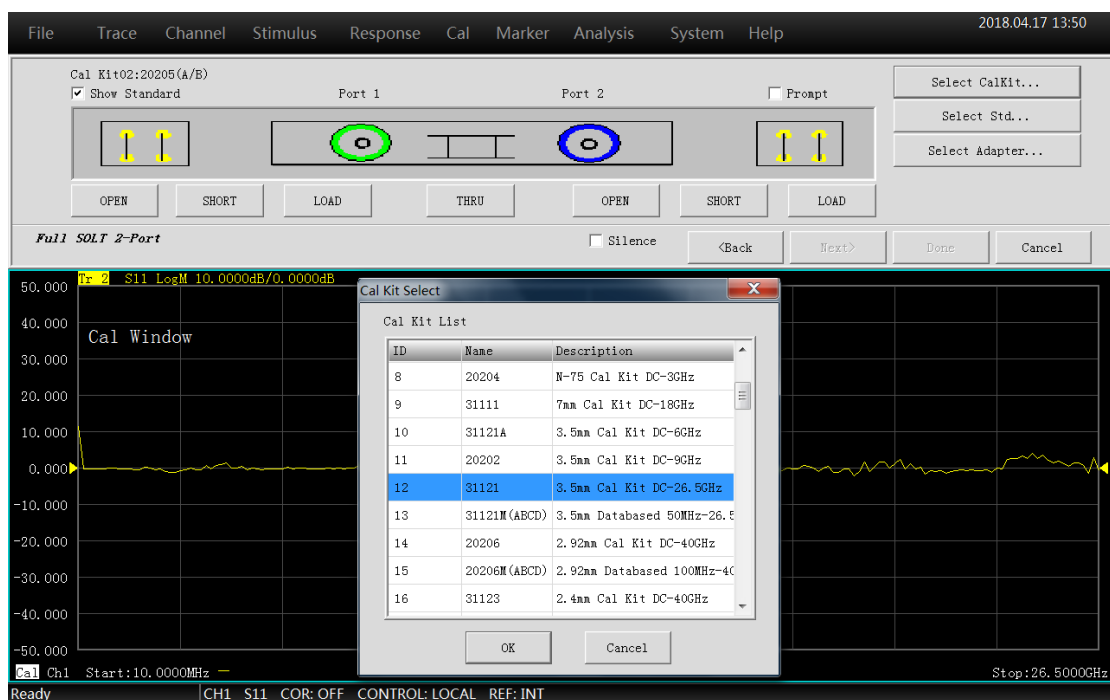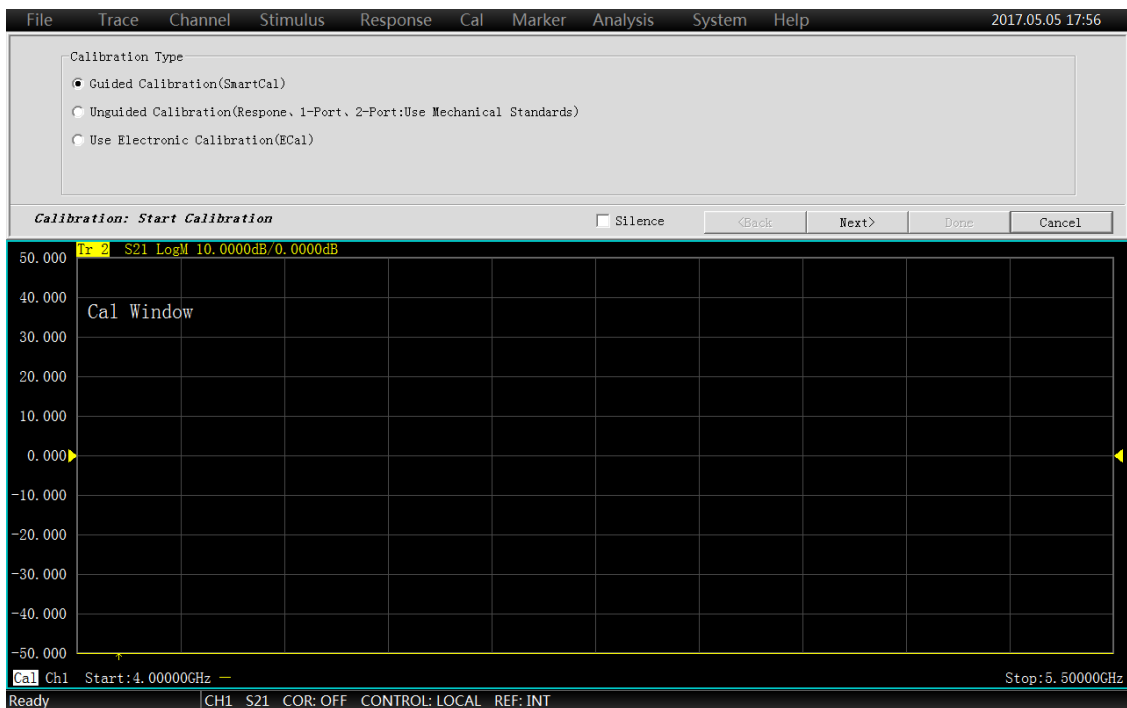

Multiple windows display all measurement channels

The analyzers support up to 64 channels and display up to 32 measuring windows simultaneously, with up to 16 trace curves displayed in each window at the same time, allowing more visual observation and more convenient operation.
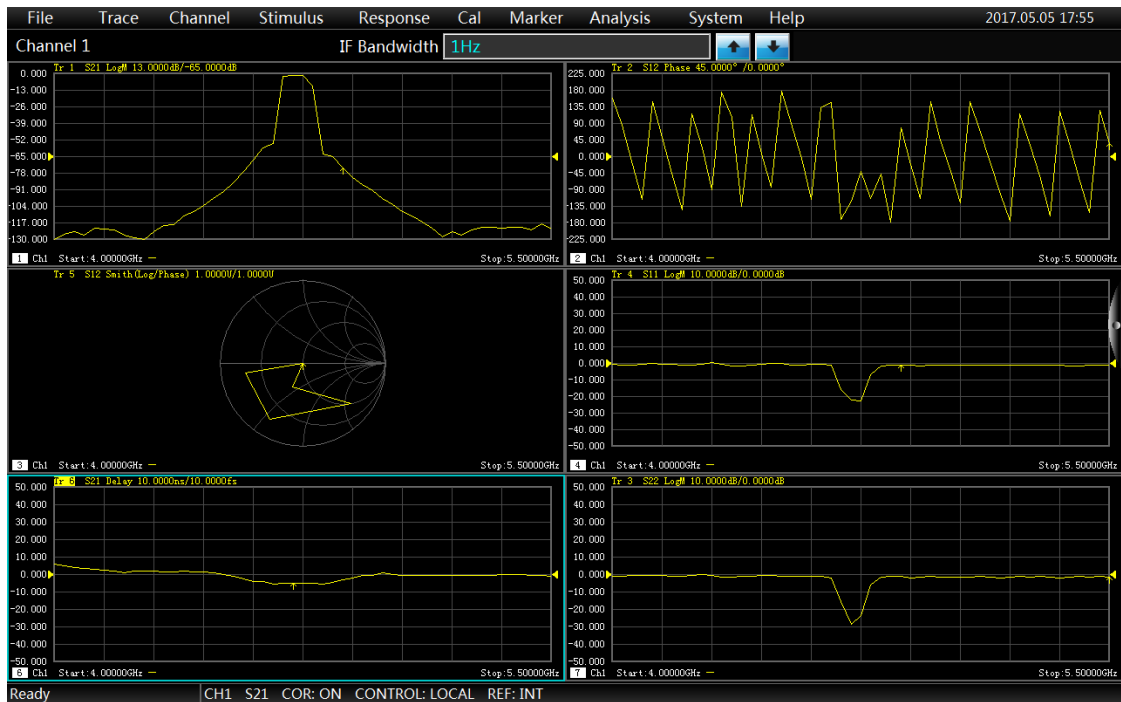
Wide dynamic range

3672*-S series implement the design concept of mixer receiving to extend dynamic range during your complete main units testing, and to meet test requirements of large dynamic range.
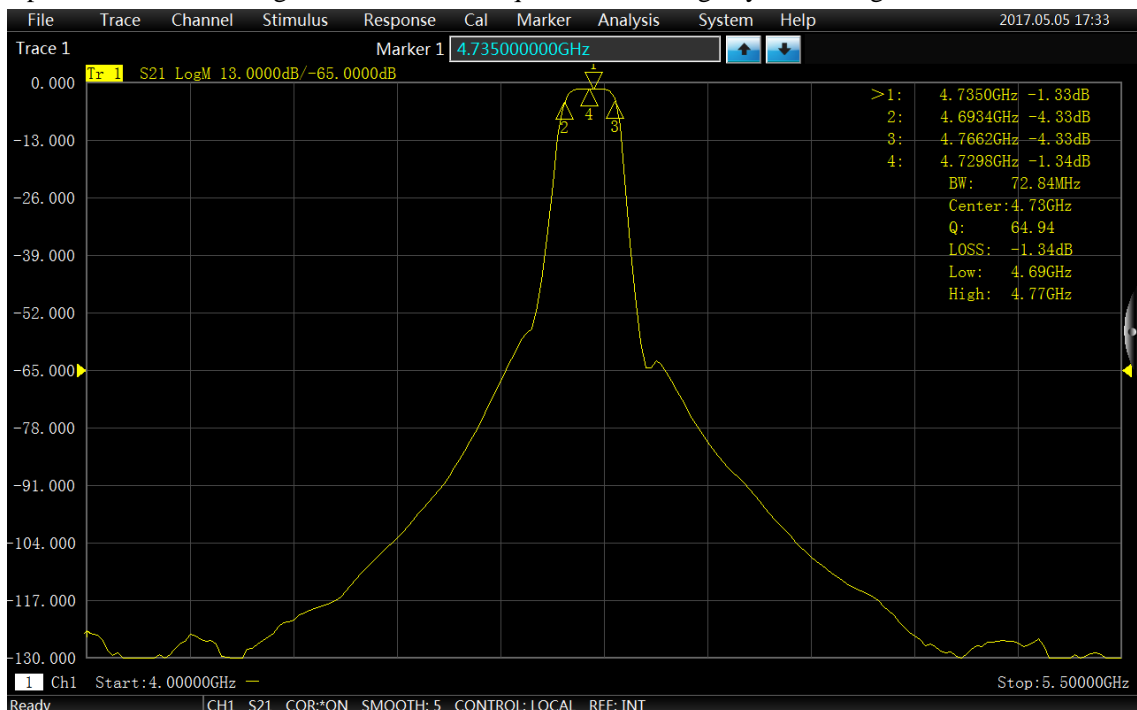
Rich peripheral interfaces, flexible and practical

3672*-S series realize the perfect combination of the instrument and PC through the hardware and software platform consisting of embedded computer module which is compatible with PC and Windows

operation system. The users can use the rich I/O interfaces (including GPIB, USB, and LAN) to realize the optimum selection of data communication.

VGA interface
Gives a convenient connection to external display

GPIB interface
To send and receive GPIB/SCPI orders

USB interface gives a convenient connection between the USB interface and peripheral devices

LO, RF output interface
Offers output signals for millimeter-wave frequency extension and

LAN interface
Realizes network connection and remote control of the instrument

Ex trigger interface
To input and output external trigger signals
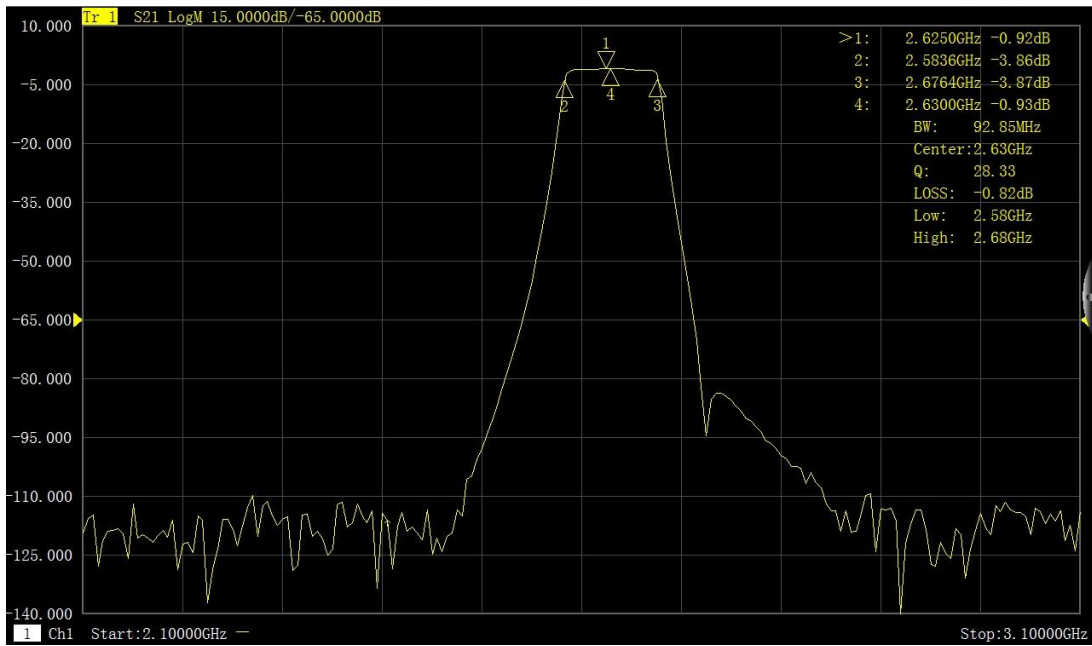
Time domain analysis can characterize the design thoroughly

Time domain option can facilitate the switching between frequency domain and time domain of measuring results, which can be used to identify the discontinuous points of device, fixture or cable to realize the accurate positioning of fault site.
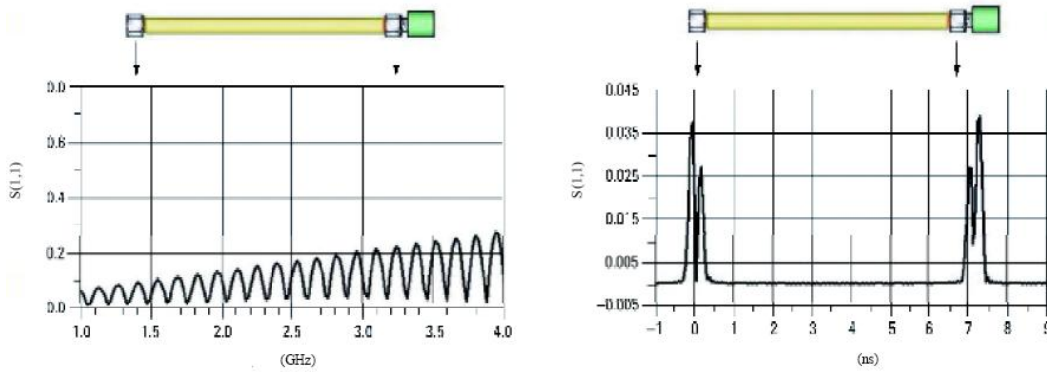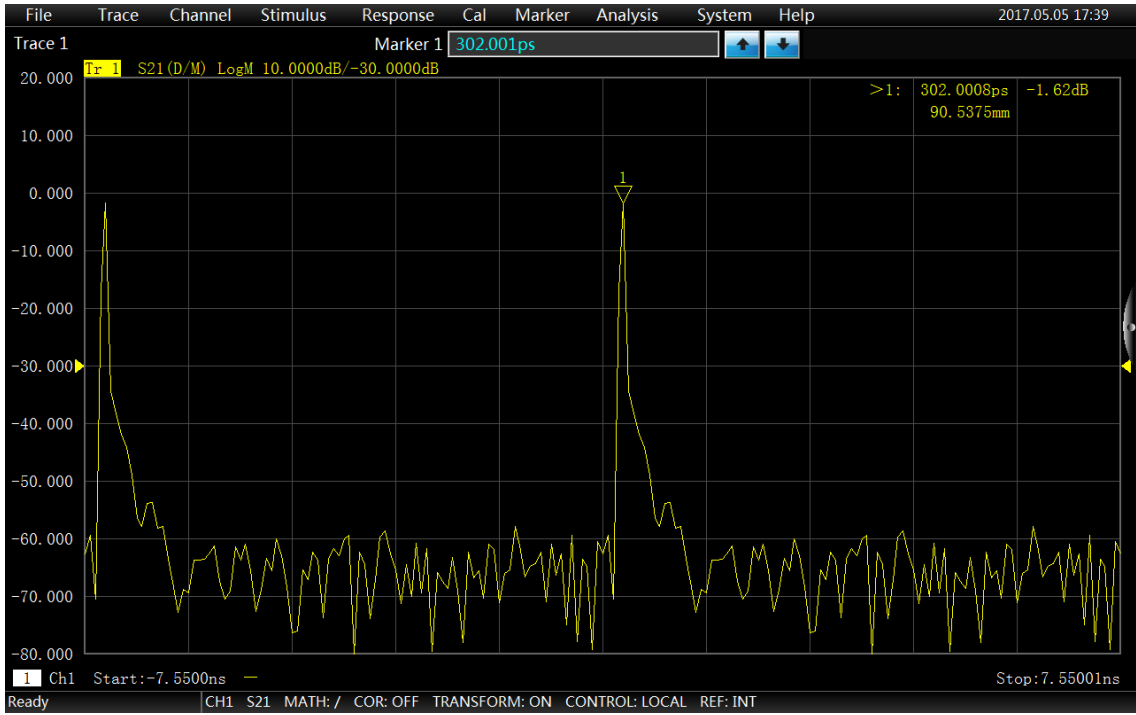
Technical Specifications

3672A/B-S Technical Specifications

Frequency Characteristics	
Frequency Range	10MHz～13.5/26.5GHz
Frequency Resolution	1Hz
Frequency Accuracy	±1×10-7（23℃±3℃）
Port Harmonic Suppression	
Port 1 Harmonic Suppression	-48dBc（0.01～4GHz） -57dBc（4～26.5GHz）
Port 2 Harmonic Suppression	-13dBc（0.01～4GHz） -18dBc（4～26.5GHz）
Port Power Characteristics	
Power Sweep Range	33dB（10～50MHz） 30dB（0.05～4GHz） 34dB（4～7GHz） 31dB（7～13.5GHz） 29dB（13.5～20GHz） 25dB（20～26.5GHz）

Max. Output Power	Frequency Range	Port 1 Filtering Mode	Port 1 High Power Mode	Port 2
	10～50MHz	0dBm	+9dBm	+13dBm
	0.05～4GHz	0dBm	+6dBm	+13dBm
	4～7GHz	+12dBm		+10dBm
	7～13.5GHz	+8dBm		+9dBm
	13.5～20GHz	+6dBm		+6dBm
	20～26.5GHz	+4dBm		+2dBm

Power Linearity（23℃±3℃）	±2.0dB
Network Parameter Characteristics	
System Dynamic Range	90dB（0.01～1GHz） 120dB（1～4GHz） 127dB（4～10GHz） 120dB（10～20GHz） 115dB（20～24GHz） 110dB（24～26.5GHz）
Effective Directivity	48dB（0.01～2GHz） 44dB（2～26.5GHz）
Effective Source Match	40dB（0.01～2GHz） 30dB（2～26.5GHz）
Effective Load Match	48dB（0.01～2GHz） 44dB（2～26.5GHz）
Reflection Tracking	±0.04dB（0.01～2GHz） ±0.05dB（2～26.5GHz）
Transmission Tracking	±0.10dB（0.01～2GHz） ±0.12dB（2～26.5GHz）
Others	
Amplitude Trace Noise dB rms (1khz IF Bandwidth)	0.050（10～50MHz） 0.007（50～500MHz） 0.002（0.5～13.5GHz）

	0.003（13.5～20GHz）
	0.005（20～26.5GHz）
Phase Trace Noise deg rms (1khz IF Bandwidth)	0.200（10～50MHz） 0.051（50～500MHz） 0.042（0.5～13.5GHz） 0.054（13.5～20GHz） 0.054（20～26.5GHz）
IF Bandwidth	1Hz～5MHz
Amplitude Display Resolution	0.001dB/div
Phase Display Resolution	0.01°/div
Required Value of Reference Level Amplitude Setup	-500～+500dB
Required Value of Reference Level Phase Setup	-500～+500°
General Characteristics	
Ports & Connectors	3.5mm (Male), system impedance of 50ohm
Number of Measuring Ports	2-port
Peripheral Interface	USB, GPIB, VGA, LAN
Operating System	Windows 7
Display	12.1 inch high resolution touch screen
Size	W×H×D=426mm×266mm×550mm (without stand and handles） W×H×D=516mm×279.5mm×640mm (with stand and handles）
Max. Power Consumption	400W
Max. Weight	42kg

3672C-S Technical Specifications

Frequency Characteristics				
Frequency Range	10MHz～43.5GHz			
Frequency Resolutions	1Hz			
Frequency Accuracy	±1×10-7（23℃±3℃）			
Port Harmonic Suppression				
Port 1 Harmonic Suppression	-48dBc（0.01～4GHz） -57dBc（4～13.5GHz） -57dBc（13.5～43.5GHz）			
Port 2 Harmonic Suppression	-13dBc（0.01～4GHz） -18dBc（4～13.5GHz） -57dBc（13.5～43.5GHz）			
Port Power Characteristics				
Power Sweep Characteristics	32dB（10～50MHz） 29dB（0.05～4GHz） 28dB（4～13.5GHz） 30dB（13.5～40GHz） 27dB（40～43.5GHz）			
Max. Output Power	Frequency Range	Port 1 Filtering Mode	Port 1 High Power Mode	Port 2
	10～50MHz	-1dBm	+8dBm	+11dBm
	0.05～4GHz	0dBm	+5dBm	+9dBm
	4～13.5GHz	+5dBm		+6dBm
	13.5～40GHz	+7dBm		+7dBm

	40～43.5GHz	+5dBm	+5dBm
Network Parameter Characteristics			
System Dynamic Range	74dB（0.01～1GHz） 119dB（1～13.5GHz） 115dB（13.5～26.5GHz） 110dB（26.5～35GHz） 105dB（35～43.5GHz）		
Effective Directivity	42dB（0.01～13.5GHz） 38dB（13.5～40GHz） 36dB（40～43.5GHz）		
Effective Source Match	36dB（0.01～2GHz） 31dB（2～13.5GHz） 28dB（13.5～40GHz） 27dB（40～43.5GHz）		
Effective Load Match	42dB（0.01～13.5GHz） 37dB（13.5～40GHz） 35dB（40～43.5GHz）		
Reflection Tracking	±0.04dB（0.01～13.5GHz） ±0.03dB（13.5～40GHz） ±0.04dB（40～43.5GHz）		
Transmission Tracking	±0.1dB（0.01～13.5GHz） ±0.16dB（13.5～40GHz） ±0.20dB（40～43.5GHz）		
Others			
Amplitude Trace Noise dB rms（1kHzIF bandwidth）	0.050（10～50MHz） 0.020（50～500MHz） 0.005（0.5～13.5GHz） 0.004（13.5～26.5GHz） 0.008（40～43.5GHz）		
Phase Trace Noise deg rms（1kHz IF bandwidth）	0.900（10～50MHz） 0.700（50～500MHz） 0.040（0.5～13.5GHz） 0.050（13.5～26.5GHz） 0.060（26.5～43.5GHz）		
IF Bandwidth	1Hz～5MHz		
Amplitude Display Resolution	0.001dB/div		
Phase Display Resolution	0.01°/div		
Required Value Of Reference Level Amplitude Setup	-500～+500dB		
Required Value Of Reference Level Phase Setup	-500～+500°		
General Characteristic			
Ports & Connectors	2.4mm (Male), system impedance of 50ohm		
Number Of Measuring Ports	2-port		
Peripheral Interface	USB, GPIB, VGA, LAN		
Operating System	Windows 7		
Display	12.1 inch high resolution touch screen		
Size	W×H×D=426mm×266mm×600mm（without stand and handles） W×H×D=516mm×279.5mm×690mm（with stand, rear stand and handles）		
Max. Power Consumption	500W		

Max. Weight	47kg

Ordering Information

Main Unit	Description
3672A-S	Vector Network Analyzer（10MHz ~ 13.5GHz）
3672B-S	Vector Network Analyzer（10MHz ~ 26.5GHz）
3672C-S	Vector Network Analyzer（10MHz ~ 43.5GHz）

Standard Package

No.	Description	Remarks
1	Power Cord	Standard tri-prong power cord
2	USB Keyboard/Mouse	-
3	User Manual	-
4	Certificate of Conformity	-
5	Aluminum Alloy Case	-

3672A/B-S Options

Option	Description	Functions
31121	3.5mm Cal Kit	For calibration of the main unit
FB0HA0HB025.0	3.5mm Test Cable	For measurement of the main unit
FB0HA0HC025.0	3.5mm Test Cable	For measurement of the main unit
20403	E-Cal Module	For calibration of the main unit (10MHz-26.5GHz dual-port)

3672C-S Option

Options	Description	Functions
31123	2.4Mm Cal Kit	For calibration of the main unit
FE0BN0BM025.0	2.4Mm Test Cable	For measurement of the main unit
FE0BN0BL025.0	2.4Mm Test Cable	For measurement of the main unit
20404	E-Cal Kit	For calibration of the main unit (10MHz-50GHz, dual-port)