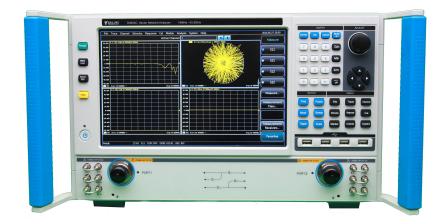
(Frequency Range: 10MHz - 43.5GHz / 50GHz)



### **Key Features**

- Frequency coverage from 10MHz to 43.5GHz / 50GHz
- Flexible calibration types, compatible with many calibration parts
- Support Multi-window, multi-channel Measurement, instantly execute intricate measurement plan
- Include multiple display formats including logarithmic amplitude, linear range, standing wave, phase, group delay, Smith circle map, polar coordinates
- Support USB, GPIB, LAN, VGA
- 12.1 inch high resolution touch screen
- Record / Run, one button operation to simplify measurement setup procedures and improve the working efficiency
- Provide functions including Pulse S Parameter measurement, time domain measurement, mixer measurement, 2 dimensional measurement of gain compression, millimeter wave spread spectrum, antenna and RCS measurement reception.

### **Typical Applications**

- Mixer Test
- Filter Test
- Integrated Pulse S Parameter Test



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(Frequency Range: 10MHz - 43.5GHz / 50GHz)

S3602 Series VNA Products, designed with new hardware architecture, improves impressively many key specifications such as scanning speed, system dynamic range etc. In terms of software, S3602 is equipped with a high-performance embedded computer which runs Windows operation system. It helps S3602 to have a friendly UI and easy to operate.

S3602 Vector Network Analyzer provides many calibration methods including frequency response, single interface, responsive isolation, enhanced response, dual interface and electrical calibration. S3602 has many display formats including logarithmic amplitude, linear range, standing wave, phase, group delay, Smith chart, polar coordinates. S3602 equipped with many standard interfaces including USB, LAN, GPIB, VGA.

Apart from all features of conventional vector analyzer, S3602 is capable of 2D scanning of mixer / inverter and gain compression, and of multi-functional comprehensive parameter test of S Parameter under pulse circumstance, which can precisely measure amplitude-frequency characteristics, phase-frequency characteristics and group-delay characteristics of microwave network.

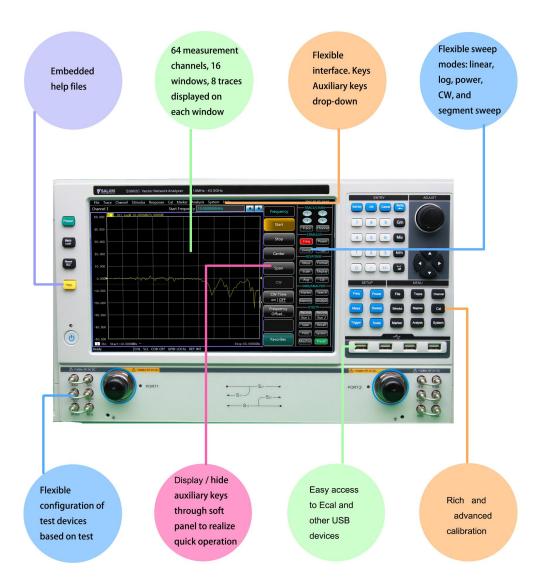
This product can be universally implemented in fields including transmission/reception module measurement, dielectric material property measurement, microwave pulse characteristic measurement and photoelectric property measurement; this analyzer is a necessary tester in the scientific research, production process of systems like radar, communication and navigation.



(Frequency Range: 10MHz - 43.5GHz / 50GHz)

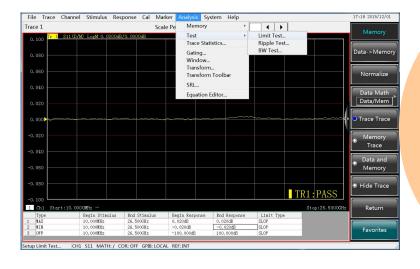
### **Features To Boost Your Efficiency**

Humanized user interface for easy operation, which can improve the efficiency



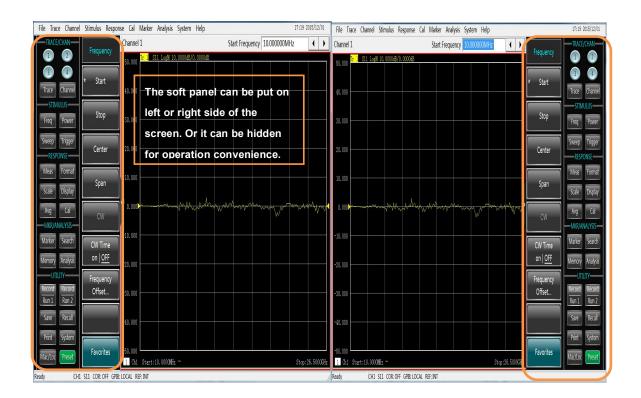


(Frequency Range: 10MHz - 43.5GHz / 50GHz)



Parameters can be quickly input through activated input toolbar.

It can improve the test efficiency to setup the limit line and segment sweep value for production line.





(Frequency Range: 10MHz - 43.5GHz / 50GHz)

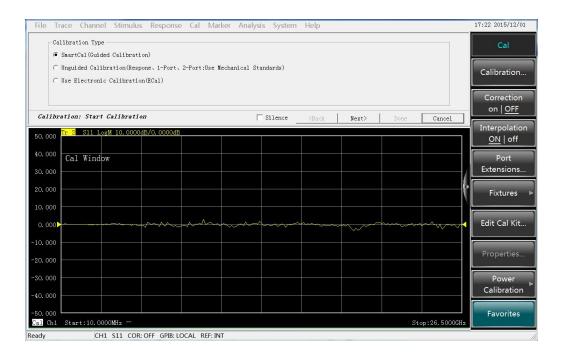


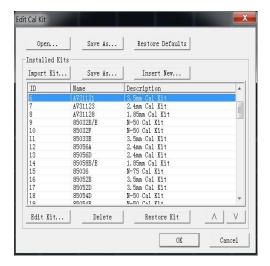
#### Flexible and optional calibration types, compatible with multiple calibration kits

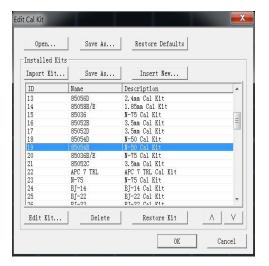
S3602 series vector network analyzer provides multiple calibration types, including guided calibration (smart calibration), unguided calibration (using mechanical calibration kit to conduct through response calibration, through response & isolation calibration, single port calibration, enhanced response calibration, full two-port SOLT calibration, TRL calibration) and electronic calibration (ECal) etc. Users can select coaxial mechanical calibration kits or electronic calibration kit based on test requirements.



(Frequency Range: 10MHz - 43.5GHz / 50GHz)





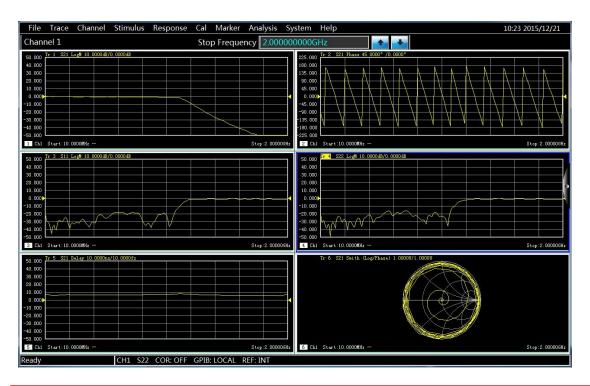




(Frequency Range: 10MHz - 43.5GHz / 50GHz)

#### Multiple windows to display all measuring channels

The analyzer has function of multi-channel and multi-window display. It supports up to 64 channels. Maximum 16 measuring windows can be simultaneously displayed, and each window can simultaneously display up to 8 testing traces, which makes the observation results more visible and the operation more convenient.



#### 12.1-inch high resolution touch screen

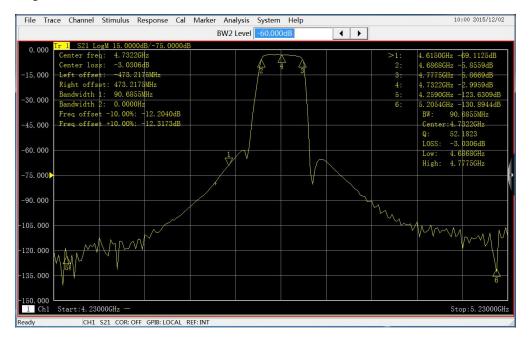
The 12.1-inch touch screen with 1280\*800 resolution has bright and comfortable color, which can make the operation very convenient.



(Frequency Range: 10MHz - 43.5GHz / 50GHz)

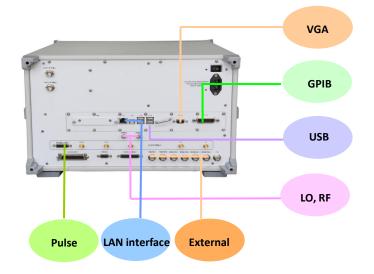
#### Large dynamic range

S3602 series vector network analyzer is designed with the concept of mixer receiving, which effectively extends the dynamic range of the complete machine and meets the test demand for large dynamic range.



# Rich peripheral interfaces, flexible and practical

With new embedded computer module and Windows operation system, S3602 series vector network analyzer realizes the perfect combination of the instrument and PC. Rich I/O interfaces (including GPIB, USB, and LAN etc.) are provided for different data transmission requirements.





(Frequency Range: 10MHz - 43.5GHz / 50GHz)

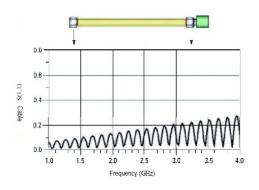
#### Low trace noise, high test accuracy

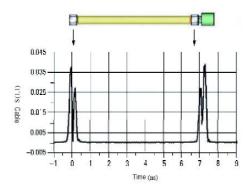
The excellent performance of S3602 series vector network analyzer in trace noise highly improves its test accuracy so as to meet user's demand for accurate measurement, and it is especially helpful for the accurate measurement of devices with low insertion loss.



#### Time-domain analysis can comprehensively characterize the design

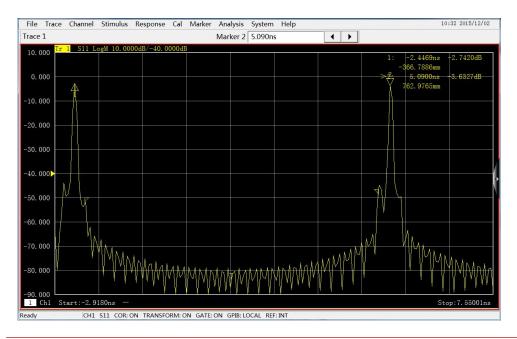
With time-domain options, S3602 series vector network analyzer can realize the switching of measurement results between frequency-domain and time-domain, which can be used to identify the discontinuous points of devices, fixtures or cables to realize accurate fault location.







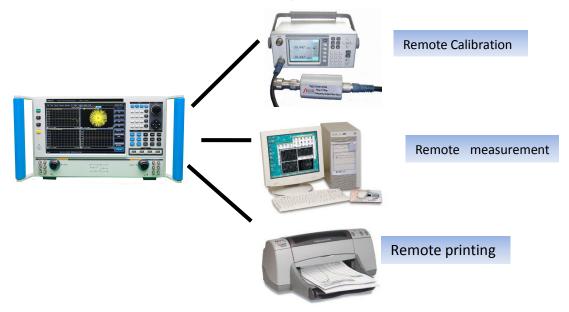
(Frequency Range: 10MHz - 43.5GHz / 50GHz)



#### **Automatic test**

S3602 series vector network analyzer can provide a integrated automatic test solutions including automatic calibration, automatic measurement, automatic reading and automatic printing.

Flexible and multiple control modes are provided through GPIB, LAN, and USB interfaces.





(Frequency Range: 10MHz - 43.5GHz / 50GHz)

### **Typical Applications**

#### Mixer test

The 4-port measurement option of S3602 series vector network analyzer has two built-in sources. It can be used to measure scalar and vector parameters of mixers.

#### Filter test

S3602 series vector network analyzer provides a filter test menu, easy to do any filter test.

#### • Integrated pulse S parameter test

S3602 series vector network analyzer can output pulse modulation signal and can measure pulse network S parameters.

#### • High-speed sweep magnetron test

S3602 series vector network analyzer has high sweep speed. It is capable of magnetron test.



(Frequency Range: 10MHz - 43.5GHz / 50GHz)

### Technical Specifications (S3602 C / D)

	Frequency characteristic				
_	S3602C: 10MHz - 43.5GHz				
Frequency Range		S3602D: 10MHz - 50GHz			
Frequency resolution	1Hz				
Frequency Accuracy	±1×10	<sup>-7</sup> (23℃±3℃	)		
Port Harmonic Suppression					
Port 1, 3	-51dBc (0.01-4GHz) , -60dBc (4-40GHz) , -60dBc (40-50GHz)				
Harmonic Suppression					
Port 2, 4	-13dB	c (0.01-4GHz	z),-21dBc (4-13	.5GHz)	
Harmonic Suppression	-60dB	c (13.5-40GH	lz),-60dBc (40-	50GHz)	
	Port Power Characteristics				
	26dB	(10-50MHz)	, 25dB (0.05-40	GHz), 32dB (4-1	0GHz)
Dawar Sween Banga	31dB	(10-13.5GHz	), 33dB (13.5-26	6.5GHz), 31dB (26.5	5-30GHz)
Power Sweep Range	30dB	(30-35GHz)	, 29dB (35-40G	iHz), 26dB (40	-47GHz)
	17dB	(47-50GHz)			
	Frequency range	Port 1, 3	Port 1, 3	Port 2, 4	
		Filtering mode	High-power mode	FUIL 2, 4	
	10 - 50	OMHz	+1dBm	+9dBm	+11dBm
	0.05 -	4GHz	0dBm	+5dBm	+10dBm
	4 - 10GHz		+7dBm		+7dBm
Maximum Output Power	10 - 13.5GHz		+6dBm		+6dBm
maximum Output Fower	13.5 - 26.5GHz		+8dBm		+8dBm
	26.5 - 30GHz		+6dBm		+8dBm
	30 - 35GHz		+5dBm		+7dBm
	35 - 40GHz		+4dBm		+5dBm
	40 - 47GHz		+1dBm		+2dBm
	47 - 50GHz		-8dBm		-6dBm
	Pulse characteristics				
Pulse Width Setting Range	Pulse Width Setting Range 33ns - 60s				
Pulse Transition Time 30ns (10		30ns (10%	-90%)		
Pulse off Ratio	<b>64dB</b> (0.01-4GHz) , 80dB (4-40GHz) , 80dB (40-50GHz)			-50GHz)	



(Frequency Range: 10MHz – 43.5GHz / 50GHz)

Network Parameter Characteristics				
	74dB (10-50MHz) , 93dB (0.05-0.5GHz) ,118dB (0.5-4GHz)			
	121dB(4-10GHz),120dB(10-13.5GHz),118dB(13.5-26.5GHz)			
System Dynamic Range	115dB (26.5-30GHz), 113dB (30-35GHz), 110dB (35-40GHz)			
	105dB(40-47GHz), 92dB(47-50GHz)			
	42dB (0.01-2GHz), 42dB (2-13.5GHz)			
Effective Directionality				
	38dB (13.5-40GHz) , 36dB (40-50GHz)			
Effective Source Match	36dB (0.01-2GHz), 31dB (2-13.5GHz)			
	28dB (13.5-40GHz) , 27dB (40-50GHz)			
Payload Match	42dB (0.01-2GHz), 42dB (2-13.5GHz)			
	37dB(13.5-40GHz), 35dB(40-50GHz)			
Reflection Tracking	±0.04dB (0.01-13.5GHz), ±0.03dB (13.5-40GHz), ±0.04dB (40-50GHz)			
Transmission tracking	±0.1dB (0.01-13.5GHz), ±0.16dB (13.5-40GHz), ±0.20dB (40-50GHz)			
	Other			
Amplitude Trace Noise 0.2 (10-50MHz) , 0.02 (50-500MHz) , 0.005 (0.5-1GHz)				
dB rms				
(1kHz IF bandwidth)	0.004 (1-26.5GHz) , 0.005 (26.5-40GHz) , 0.008 (40-50GHz)			
Phase Noise Trace	1 (10-50MHz) , 0.7 (50-500MHz) , 0.04 (0.5-1GHz)			
deg rms				
(1kHz IF bandwidth)	0.05 (1-26.5GHz) , 0.06 (26.5-40GHz) , 0.06 (40-50GHz)			
IF Bandwidth	1Hz-5MHz			
Amplitude Display	0.004 dD (4);			
Resolution	0.001dB/div			
Phase Display Resolution	0.01°/div			
Amplitude Reference				
Level Set Required Value	-500-+500dB			
Phase Reference Level	<b>700</b> 1 <b>700</b> 2			
Set Required Value	-500-+500°			
-	General characteristic			
Port Connector Type	2.4mm $(M)$ , $50\Omega$ system impendence			
	S3602C/D: 2 Port, Standard			
Measurement of Ports	S3602C/D-400: 4 Port, (Optional)			
Peripheral Interface	USB, GPIB, VGA, LAN			
operating system	Windows 7			



(Frequency Range: 10MHz - 43.5GHz / 50GHz)

#### **General Information**

Display Method	12.I inch high resolution touch screen		
Dimension (LxHxW)	426mm×266mm×600mm (Including handles, pad foot and footing)		
	463mm×279.5mm×690mm(handles, pad foot and footing are not included))		
The Maximum Power	50014		
Consumption	500W		
Maximum Weight	47kg		

### **Standard Package**

Item	Name Q		
1	S3602C Vector Network Analyzer (10MHz - 43.5GHz)	1 Set	
	S3602D Vector Network Analyzer (10MHz - 50GHz)	1 Set	
2	Standard three-wire Power Cord		
3	USB keyboard / Mouse	1 PC	
4	User Guide		

### **Optional Package for S3602C**

Part No.	Name	Description
	Dual Interface Programmable	Equip source path with two 60dB programmable
S3602C-201	Dual-Interface Programmable	step attenuator and equip receiver path with two
	Step Attenuator	35dB programmable step attenuator
S3602C-400	Four-Interface Measurement	Dual incentive four-interface Vector Network
330020-400	Four-interface weasurement	Analyzer
		Equipping source path with four 60dB programmab
S3602C-401	Four-Interface Programmable	le step attenuator and equipping receiver channel
	Step Attenuator	with four 35dB programmable step attenuator
		(must work with option 400)
C2602D 402	Active Inter modulation	Applicable for active inter modulation measurement
S3602B-402	Measurement	of amplifier (400 Options)
S3602C-008	Pulse Measurement	Applicable for S parameter measurement under
	Pulse Measurement	pulse circumstance
S3602C-S10	Time Demain Measurement	Able to recognize and analyze the discontinuous
	Time Domain Measurement	location of instrument, cable or fixture.



(Frequency Range: 10MHz - 43.5GHz / 50GHz)

S3602C-S80	Frequency Deviation  Measurement	Applicable for frequency deviation measurement, necessary for millimeter wave spread spectrum monitor.
S3602C-S82	Scalar Measurement of Mixer	Applicable for the mixer's scalar measurement
S3602C-S83	Vector Measurement of Mixer	Applicable for the mixer's vector measurement
S3602C-S84	Embedded Local Oscillator Measurement	Applicable for embedded local oscillator measurement
S3602C-S86	Gain Compression Two Dimensional Scanning Measurement	Applicable for amplifier's gain compression two dimensional scanning measurement
SAV31123	2.4mm Calibration Kit	Applicable for whole-machine calibration
FE0BN0BM025.0	2.4mm Test Cable	Applicable for whole-machine measurement
FE0BN0BL025.0	2.4mm Test Cable	Applicable for whole-machine measurement
SAV20404	Electronic Calibration Kit	Applicable for whole-machine calibration (45MHz - 40GHz second interface)

### **Optional Package for S3602D**

Part No.	Name	Description
	Dual Interface Programmable	Equip source path with two 60dB programmable
S3602D-201	Dual-Interface Programmable	step attenuator and equip receiver path with
	Step Attenuator	two 35dB programmable step attenuator
S3602D-400	Four-Interface Measurement	Dual incentive four-interface Vector Network
33002D-400	Four-interface weasurement	Analyzer
		Equipping source path with four 60dB programm
S3602D-401	Four-Interface Programmable	able step attenuator and equipping receiver chan
	Step Attenuator	nel with four 35dB Programmable step attenuator
		(must work with option 400)
S3602D-402	Active Inter modulation	Applicable for active inter modulation
	Measurement	measurement of amplifier (400 Options)
S3602D-008	Pulse Measurement	Applicable for S parameter measurement under
	i dise Measurement	pulse circumstance



(Frequency Range: 10MHz - 43.5GHz / 50GHz)

S3602D-S10	Time Domain Measurement	Able to recognize and analyze the discontinuous location of instrument, cable or fixture.
S3602D-S80	Frequency Deviation  Measurement	Applicable for frequency deviation measurement, necessary for millimeter wave spread spectrum monitor.
S3602D-S82	Scalar Measurement of Mixer	Applicable for the mixer's scalar measurement
S3602D-S83	Vector Measurement of Mixer	Applicable for the mixer's vector measurement
S3602D-S84	Embedded Local Oscillator Measurement	Applicable for embedded local oscillator measurement
S3602D-S86	Gain Compression Two Dimensional Scanning Measurement	Applicable for amplifier's gain compression two dimensional scanning measurement
SAV31123A	2.4mm Calibration Kit	Applicable for whole-machine calibration
FE0BN0BM025.0	2.4mm Test Cable	Applicable for whole-machine measurement
FE0BN0BL025.0	2.4mm Test Cable	Applicable for whole-machine measurement

**Note:** Information will conduct the necessary updates, the contents of this document are subject to change without notice



