(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)



Key Features

- 3Hz to Max.67GHz wide frequency coverage, 9 sorts of frequency band configuration,
 750GHz external frequency expansion capacity
- Four analysis bandwidth choices, 10MHz/ 40MHz/ 200MHz/ 550MHz
- Excellent test reception capability
- Comprehensive spectrum analysis, supporting continuous scanner FFT step scanning.
- Multi-domain correlation analysis and signal playback
- Support phase noise test, analog demodulation test, multi-domain correlation analysis, pulse signal analysis and external frequency expansion
- Support analogous and digital signal output interface
- Support multiple assistant output junction including USB, LAN, GPIB and monitor
- 10.1 inch LCD touch screen display, 1280 x 800 screen resolution

Typical Applications

- Comprehensive Performance Evaluation of Electronic Systems including Radar and Communication
- Test and Debugging of Transmitter and Receiver
- Configuration of intricate testing diagnostic system, providing the system with signal output, data output and result analysis



(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

S3503 Series Signal Analyzer, featured with excellent dynamic range, phase noise, amplitude precision and testing speed, has multiple analytical functions including high-sensitivity spectrum analysis, spectrum power analysis, IQ analysis, multi-domain correlation analysis, pulse parameter analysis, audio analysis, analogue demodulation analysis and phase noise test, providing you with reliably excellent testing service.

The analyzer has good expansion capacity, and can improve the features by means of flexible configuration options and also can construct testing system or redevelop by means of the output interface of all digitals and analogue signals. The analyzer is applicable for signal and equipment test of fields including Aviation, aerospace, radar detection, communications, electromagnetic countermeasure, and navigation.

Features To Boost Your Efficiency

Wide frequency range

- ♦ Covering coaxial frequency range up to 50GHz.
- 8 optional frequency band configuration, more economical.
- Can be configured with broad frequency band preamplifier corresponding to the frequency band of main unit.
- ♦ The frequency can be extended up to 325GHz (with external frequency extension option).

Maximum 550MHz analyzing bandwidth

- Provide 4 analyzing bandwidth configuration:
 10MHz(standard), 40MHz, 200MHz, 550MHz etc.
- The bandwidth can be flexibly selected: from 10Hz to 550MHz, more than 40 levels.
- According to the selected bandwidth, the seamless capture time differs from 1s to several hours.

Flexible analog & digital signal output interfaces

- 275MHz 475MHz high / intermediate frequency output, 1 Hz frequency stepping.
- ♦ 10MHz 160MHz IF output, 1Hz frequency stepping, 4-gear automatic gain control level.
- ♦ Digital reconstruction signal output, provide IF, AM/FM demodulation and IQ demodulation signal output.
- ♦ Digital signal output, 1X or 4X optical fiber output channel, real-time data interface to record broadband IQ data.
- ♦ External-built digital recorder, support two media type: SSD and HDD.

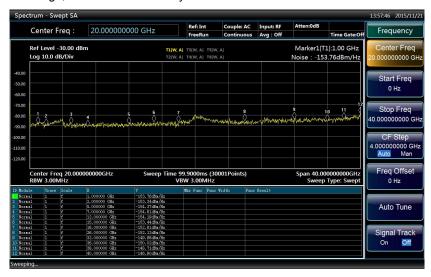




(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

Excellent test & receiving performance

- ♦ 1GHz measurement sensitivity is -156dBm/Hz; configured with preamplifier, the typical value is -167dBm/Hz
- ♦ 50GHz measurement sensitivity is -141dBm/Hz; configured with preamplifier, the typical value is
 -150dBm/Hz
- ♦ 67GHz measurement sensitivity is -135dBm/Hz
- ♦ Full digital IF design, excellent scale fidelity and IF error.



Comprehensive spectrum analysis capability

- ♦ Support frequency sweep and FFT sweep.
- ♦ Zero span fast sweep, the fastest sweep time is 1µs.
- ♦ Accurate frequency counting, counting resolution achieves 0.001Hz
- ♦ Sweep points number can be arbitrarily selected among 101 30001
- ♦ Can be configured with 6 traces, have abundant marker operation functions
- ♦ 6 wave-detection modes, 3 average types
- ♦ Support time gate measurement
- ♦ Test functions of power statistics, burst power, harmonic distortion, TOI, spurious emission etc.



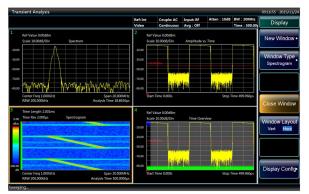


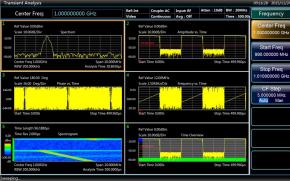


(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

Transient analysis and signal playback analysis

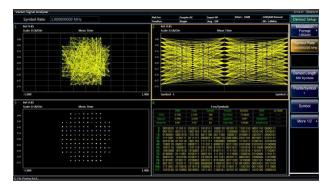
- ♦ Frequency-domain and time-domain correlation test is helpful for understanding and deeply analyzing transient signal events.
- ♦ Waterfall diagram display, analyzing the macroscopic law of analysis signal spectrum changing over time.
- Simultaneously analyze the changes of analysis signal frequency, amplitude, and phase over time, to assist the test in the process of power control and frequency locking.
- Support 500M samples (64 bits accuracy) seamless capture data storage
- ♦ Support multiple storage formats of signal files: CSV, DAT etc.
- Support the playback analysis of signal files





Vector signal analysis

With comprehensive time domain, frequency domain, modulation domain signal analysis and viewing function, it supports more than 20 modulation system demodulation analysis.



Realtime spectrum analysis

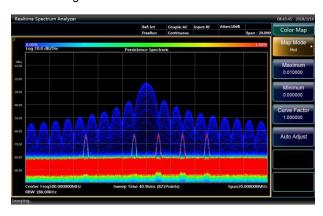
S3503 can achieve seamless Real-time Spectrum Analysis, and frequency template trigger function, which can be used to trigger, capture, and analyze complex signals.

♦ Max. real-time analysis bandwidth: 40MHz, 200MHz(optional), frequency up to 67GHz



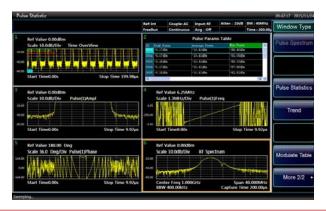
(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

- Digital phosphor spectrum, seamless waterfall, instantaneous spectrum, power vs. time, frequency vs. time and other charts
- 4 100% POI, Min. duration of the signal: 4.3 μ s



Pulse signal analysis

- Pulse signal spectrum and time domain characteristic measurement supports more than 20 kinds of pulse parameters measurement (including time, amplitude, frequency and phase).
- Can perform detailed analysis of amplitude, intrapulse frequency/phase characteristics, and spectral characteristics of arbitrary pulse
- Pulse trend statistics for arbitrary pulse parameters



Phase Noise measurement / Audio Analysis / Analog Demodulation Analysis function

The Phase Noise measurement relies on the excellent phase noise of the signal analyzer and provides one-button automatic measurement to meet the daily signal source phase noise measurement applications.



- ♦ Independently optimized audio measurement channel for low frequency signal parameter measurement and analysis
- Analog Demodulation Analyzer is used to simulate terminal, radio, and general analog modulation source measurement. Demodulate the AM/FM/ Φ M signal and measure parameters such as modulation index, modulation distortion, residual FM, and FM linearity and so on.





(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

Technical Specifications

	DC coupled		AC coupled
	S3503A: 3Hz - 4GHz		S3503A: 10MHz - 4GHz
	S3503B: 3Hz - 9GHz		S3503B: 10MHz - 9GHz
	S3503C: 3Hz		S3503C: 10MHz - 13.2GHz
Frequency Range	S3503D: 3Hz - 18GHz		S3503D: 10MHz - 18GHz
	S3503E: 3Hz - 26.5GHz		S3503E: 10MHz - 26.5GHz
	S3503F: 3Hz		S3503F: 10MHz - 40GHz
	S3503G: 3Hz		S3503G: 10MHz - 45GHz
	S3503H: 3Hz	: - 50GHz	S3503H: 10MHz - 50GHz
	S3503L: 3Hz	- 67GHz	S3503L: /
	Frequency ± (To the last calibration date × aging rate +temperature		calibration date × aging rate +temperature
	Accuracy stability + Calibration Accuracy) Aging rate ± 1x10 ⁻⁷ / Year		
10MHz			± 1x10 ⁻⁷ / Year
Precision _	Temp.		
Frequency	stability	± 1.5x10 ⁻⁸	(20°C- 30°C), ± 5x10 ⁻⁸ (0°C- 55°C)
Reference	Calibration		
	Accuracy	± 4x10 ⁻⁸	
	± (Frequency indication × frequency reference accuracy+0.1% Frequency		
Frequency Readout	Bandwidth+5% RBW+2Hz+0.5 Horizontal resolution*)		
Accuracy	(*: Horizontal resolution = bandwidth / (scan points -1))		
Frequency Counting	(
Accuracy	± (Frequency indication × frequency reference accuracy +0.1Hz)		
Accuracy	Range: 0Hz, 10Hz - Max. frequency range		
Frequency Bandwidth		•	
-	Accuracy: ± (0.1% × bandwidth + bandwidth / (scan points -1))		
Scan Time Range	Bandwidth ≥10Hz: 1ms - 6000s,		
	Bandwidth 0H	Hz: 1us - 6000s	
Resolution Bandwidth	Range: 1Hz - 3MHz (step by 1, 2, 3, 5), 4, 5, 6, 8, 10, 20MHz		
Resolution Balluwium	Conversion L	Incertainty: 1Hz -	10MHz: ±0.3dB, 20MHz: ±1.0dB
Video Bandwidth	1Hz-3MHz (step by 1, 2, 3, 5), 4, 5, 6, 8, 10, 20MHz (RATINGS)		



Signal Analysis Bandwidth	10Hz - 10MHz (Standard), 4	0MHz (Optional), 200MHz (Optional), 550MHz	
Oighai Anaiysis Banawiani	(Optional)		
Memory Capacity	4G		
Trigger Source	Free, Line, video, external level (front panel), external level (back panel), burst RF, timer		
Trigger Detector	Normal, positive peak, negataverage, voltage average	iive peak, sample,video average ,power	
Rectification	Normal, positive peak, negat	tive peak, sample, average, root mean square	
Average Type	Video Average, Power Avera	age, Voltage Average	
	-105dBc/Hz 100Hz,		
SSB Noise (Typical value,	-118dBc/Hz 1kHz,		
Carrier 1GHz, 20°C - 30°C)	-129dBc/Hz 10kHz,		
	-129dBc/Hz 100kHz		
Residual FM			
(central frequency 1 GHz,	≤(0.25 Hz x N) p-p,		
resolution bandwidth	the rated value within 20 ms	N is the number of frequency multiple times of	
10Hz, video bandwidth	LO		
10Hz)			
Displayed Average Noise		10MHz - 1GHz: -156dBm	
Level		1GHz - 2GHz: -154dBm	
(the input end is		2GHz - 3GHz: -153dBm	
connected to match load.		3GHz - 3.6GHz: -151dBm	
sample or average wave	S3503A/B/C/D/E/F/G/H	3.6GHz - 4GHz: -148dBm	
detection, the average type	(typical value, preamplifier	4GHz - 5GHz: -152dBm	
is logarithm, 0dBinput	off)	5GHz - 9GHz: -152dBm	
attenuation, RF gain takes		9GHz - 18GHz : -151dBm	
the DANL as the priority,		18GHz - 26.5GHz : -146dBm	
20°C - 30°C)		26.5GHz - 40GHz : -144dBm	
		40GHz - 50GHz : -141dBm	



		10MHz - 1GHz: -155dBm
	625021	1GHz - 2GHz: -153dBm
		2GHz - 3GHz: -150dBm
		3GHz - 3.6GHz: -148dBm
		3.6GHz - 4GHz: -145dBm
	S3503L	4GHz - 5GHz: -147dBm
	(typical value, preamplifier	5GHz - 9GHz: -147dBm
	off)	9GHz - 18GHz : -148dBm
		18GHz - 26.5GHz : -143dBm
		26.5GHz - 40GHz : -138dBm
		40GHz - 50GHz : -135dBm
		50GHz - 67GHz : -135dBm
		10MHz - 1GHz: -164dBm
		1GHz - 2GHz: -165dBm
		2GHz - 3GHz: -164dBm
		3GHz - 3.6GHz: -163dBm
	S3503A/B/C/D/E/F/G/H	3.6GHz - 4GHz: -162dBm
	(typical value, preamplifier	4GHz - 5GHz: -164dBm
	on)	5GHz - 9GHz: -164dBm
		9GHz - 18GHz : -160dBm
		18GHz - 26.5GHz : -157dBm
		26.5GHz - 40GHz : -152dBm
		40GHz - 50GHz : -150dBm
		3Hz - 20MHz: ±0.5dB
		20MHz - 2GHz: ±0.4dB
Frequency Response (10 dB Attenuation, 20 - 30 ℃)		2GHz - 3.6GHz: ±0.5dB
		3.6GHz - 4GHz: ±0.8dB
	S3503A/B/C/D/E/F/G/H/L	4GHz - 9GHz: \pm 0.8dB
	(typical value)	9GHz - 18GHz: ±1.0dB
30 0)		18GHz - 26.5GHz : \pm 1.2dB
		26.5GHz - 40GHz: ±1.8dB
		40GHz - 50GHz: ±2.0dB
1	T. Control of the Con	T. C.



10MHz - 20MHz: ±0.6dB / ±0.6dB 20MHz - 2GHz: ±0.6dB / ±0.8dB 20MHz - 2GHz: ±0.6dB / ±0.8dB 2GHz - 3.6GHz: ±0.6dB / ±0.9dB 3.6GHz - 4GHz: ±1.0dB / ±1.2dB 4GHz - 9GHz: ±1.3dB / ±1.5dB 9GHz - 18GHz: ±1.5dB / ±1.6dB 18GHz - 26.5GHz: ±1.6dB / ±1.8dB 26.5GHz - 40GHz: ±2.2dB / ±2.3dB 40GHz - 50GHz: ±2.4dB / ±2.6dB 40GHz - 50GHz: ±2.4dB / ±2.6dB 40GHz - 50GHz: ±2.4dB / ±2.6dB 40GHz - 50GHz: ±0.24dB 40GHz - 40GHz: ±0.24dB 40GHz: ±0.24		
S3503A/B/C/D/E/F/G/H S3503A/B/C/D/E/F/G/H S3503A/B/C/D/E/F/G/H S3503A/B/C/D/E/F/G/H S3503A/B/C/D/E/F/G/H S3503A/B/C/D/E/F/G/H S36GHz - 4GHz: ±1.0dB / ±1.2dB 4GHz - 9GHz: ±1.3dB / ±1.5dB 9GHz - 18GHz: ±1.5dB / ±1.6dB 18GHz - 26.5GHz: ±1.6dB / ±1.8dB 26.5GHz - 40GHz: ±2.2dB / ±2.3dB 40GHz - 50GHz: ±2.4dB / ±2.6dB 40GHz - 50GHz: ±2.4dB / ±2.6dB 40GHz - 50GHz: ±0.24dB All frequency: ±(0.24dB+frequency response) S00MHz: ±0.24dB All frequency: ±(0.24dB+frequency response) 40MHz - 40MHz 3dBm 40MHz - 200MHz 41dBm 40MHz - 40GHz 43dBm 40GHz - 9GHz 40GHz - 40GHz 43dBm 40GHz - 9GHz 43dBm 4		
S3503A/B/C/D/E/F/G/H (typical value, preamplifier off / on) S36GHz - 4GHz: ±1.0dB / ±1.2dB 4GHz - 9GHz: ±1.3dB / ±1.5dB 9GHz - 18GHz: ±1.5dB / ±1.6dB 18GHz - 26.5GHz: ±1.6dB / ±1.8dB 26.5GHz - 40GHz: ±2.2dB / ±2.3dB 40GHz - 50GHz: ±2.2dB / ±2.3dB 40GHz - 50GHz: ±2.4dB / ±2.6dB Absolute Amplitude Accuracy (10 dB attenuation, 20° C to 30° C, 1 Hz ≤ resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) 20MHz: ±0.24dB All frequency: ±(0.24dB+frequency response) 20MHz - 40MHz 40MHz - 3dBm 40MHz - 200MHz 40MHz - 4GHz 40MHz - 4GHz 40MHz - 4GHz 40MHz - 40Bm 40MHz - 9GHz - 1dBm 9GHz - 50GHz 40MHz - 1dBm 9GHz - 50GHz 40MHz - 40Bm 40MHz - 50BMZ 40MHz - 40BMZ 40MHz -		
(typical value, preamplifier off / on) (typical value, preamplifier off / on) 4GHz - 9GHz: ±1.3dB / ±1.5dB 9GHz - 18GHz: ±1.5dB / ±1.6dB 18GHz - 26.5GHz: ±1.6dB / ±1.8dB 26.5GHz - 40GHz: ±2.2dB / ±2.3dB 40GHz - 50GHz: ±2.4dB / ±2.6dB Absolute Amplitude Accuracy (10 dB attenuation, 20° C to 30° C, 1 Hz ≤ resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) 20MHz: ±0.24dB All frequency: ±(0.24dB+frequency response) 40MHz - 3dBm 40MHz - 200MHz +1dBm 200MHz - 4GHz +3dBm 4GHz - 9GHz +1dBm 9GHz - 50GHz +1dBm 9GHz - 50GHz +1dBm		
off / on) 9GHz - 18GHz : ±1.5dB / ±1.6dB 18GHz - 26.5GHz : ±1.6dB / ±1.8dB 26.5GHz - 40GHz : ±2.2dB / ±2.3dB 40GHz - 50GHz : ±2.4dB / ±2.6dB Absolute Amplitude Accuracy (10 dB attenuation, 20° C to 30° C, 1 Hz ≤ resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) 1dB Gain Compression (mixer level, dual-tone test, resolution bandwidth is 5kHz, 3MHz frequency interval, 20°C to 30°C) off / on) 9GHz - 18GHz : ±1.5dB / ±1.6dB 18GHz - 26.5GHz : ±1.6dB / ±1.8dB 26.5GHz - 40GHz : ±2.2dB / ±2.3dB 40GHz - 50GHz : ±0.24dB + frequency response) 500MHz : ±0.24dB + frequency response) 40MHz - 3dBm 40MHz - 200MHz + 1dBm 200MHz - 4GHz + 3dBm 4GHz - 9GHz - 1dBm 9GHz - 50GHz + 1dBm		
26.5GHz - 40GHz : ±2.2dB / ±2.3dB 40GHz - 50GHz : ±2.4dB / ±2.6dB Absolute Amplitude Accuracy (10 dB attenuation, 20° C to 30° C, 1 Hz ≤ resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) 1dB Gain Compression (mixer level, dual-tone test, resolution bandwidth is 5kHz, 3MHz frequency interval, 20°C to 30°C) 26.5GHz - 40GHz : ±2.2dB / ±2.3dB / 40GHz - 50GHz + 1.4dBm / 40GHz - 50GHz + 1.4dBm / 40GHz - 4.4dBm / 4.4d		
Absolute Amplitude Accuracy (10 dB attenuation, 20° C to 30° C, 1 Hz resolution bandwidth 1 MHz, input signal -10 to -50 dBm) 20MHz - 40MHz		
Absolute Amplitude Accuracy (10 dB attenuation, 20° C to 30° C, 1 Hz resolution bandwidth 1 MHz, input signal -10 to -50 dBm) 20MHz - 40MHz 40MHz - 200MHz 40MHz - 200MHz 200MHz - 4GHz resolution bandwidth is 5kHz, 3MHz frequency interval, 20°C to 30°C) 500MHz: ±0.24dB 400.24dB+frequency response) 500MHz: ±0.24dB 400.24dB+frequency 500MHz - 40MHz 400MHz - 3dBm 400MHz - 200MHz 400MHz - 40MHz 400MHz - 200MHz 400MHz - 40MHz 400MHz - 40MHz 400MHz - 40MHz 400MHz - 40MHz 400MHz - 500MHz 400MHz - 40MHz 400MHz - 500MHz 400MHz - 40MHz 400MHz - 40MHz 400MHz - 40MHz 400MHz - 40MHz 400MHz - 500MHz 400MHz - 40MHz 400MHz - 500MHz 400MHz - 500MHz 400MHz - 40MHz 400MHz - 500MHz 400MHz - 500MHz 400MHz - 40MHz 400MHz - 500MHz 400MHz 4		
Accuracy (10 dB attenuation, 20° C to 30° C, 1 Hz resolution bandwidth 1 MHz, input signal -10 to -50 dBm) 20MHz - 40MHz 40MHz - 3dBm 40MHz - 200MHz 200MHz - 4GHz +3dBm 4GHz - 9GHz 4GHz - 1dBm 9GHz - 50GHz 41dBm		
(10 dB attenuation, 20° C to 30° C, 1 Hz ≤ resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) 20MHz - 40MHz		
to 30° C, 1 Hz ≤ resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) 20MHz - 40MHz		
to 30° C, 1 Hz ≤ resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) All frequency: ±(0.24dB+frequency response)		
resolution bandwidth≤ 1 MHz, input signal -10 to -50 dBm) 20MHz - 40MHz 40MHz - 3dBm 40MHz - 200MHz 40MHz - 200MHz 200MHz - 4GHz 40MHz - 200MHz 40MHz - 200MHz 40Hz - 200MHz 40Hz - 3dBm 40MHz - 200MHz 40Hz - 200MHz 40Hz - 3dBm 40Hz - 200MHz 40Hz - 200Hz 40Hz - 4GHz 40Hz - 50Hz		
dBm) 20MHz - 40MHz		
20MHz - 40MHz - 3dBm 1dB Gain Compression (mixer level, dual-tone test, resolution bandwidth is 5kHz, 3MHz frequency interval, 20°C to 30°C) 20MHz - 40MHz - 3dBm 40MHz - 200MHz - 4GHz +3dBm 4GHz - 9GHz - 1dBm 9GHz - 50GHz +1dBm		
1dB Gain Compression (mixer level, dual-tone test, resolution bandwidth is 5kHz, 3MHz frequency interval, 20°C to 30°C) 40MHz - 200MHz		
(mixer level, dual-tone test, resolution bandwidth is 5kHz, 3MHz frequency interval, 20°C to 30°C) 40MHz - 200MHz		
resolution bandwidth is 5kHz, 3MHz frequency interval, 20°C to 30°C) 1200MHz - 4GHz		
5kHz, 3MHz frequency interval, 20°C to 30°C) 4GHz - 9GHz		
interval, 20°C to 30°C) 9GHz - 50GHz +1dBm		
Third-order 10MHz - 200MHz +15dBm		
Inter modulation Distortion 200MHz - 4GHz +16dBm		
(Typical value, input mixer 4GHz - 9GHz +15dBm		
two -10dBm signal test, 9GHz - 18GHz +15dBm		
frequency interval is 18GHz - 50GHz +17dBm		
50kHz, 20℃ to 18GHz - 50GHz (S3503L) +13dBm		
30℃) 50GHz - 67GHz +13dBm		
Residual Response		
(the input end is connected 200kHz - 9GHz: -100dBm		
to match load, 0dB All frequency: -100dBm (rated value)		
attenuation)		



(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

Input Interface	S3503A/B/C/D	N (F), impedance 50Ω
	S3503E	3.5mm (M), impedance 50Ω
input interrace	S3503F/G/H	2.4mm (M), impedance 50Ω
	S3503L	1.85mm (M), impedance 50Ω

General Information

Power Supply	AC 100~240V: 50~60Hz	
Power	Stand by: < 20W, Operating: < 400W	
Weight	25kg	
Dimension (W×H×D)	510mm×190mm×534mm (including handle, foot-pad, bottom feet) 426mm×177mm×460mm (excluding handle, foot-pad, bottom feet)	

Standard Package

Item	Name	Qty
1	S3503 Series Signal/ Spectrum Analyzer	1 Set
2	Standard Three-Wire Power Cord	1 PC
3	USB Mouse	1 PC
4	User Manual	1 PC
5	Certificate of Quality	1 PC

Main machine

Part No.	Frequency Range
S3503A	3Hz - 4GHz
S3503B	3Hz - 9GHz
S3503C	3Hz - 13.2GHz
S3503D	3Hz - 18GHz
S3503E	3Hz - 26.5GHz
S3503F	3Hz - 40GHz
S3503G	3Hz - 45GHz





(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

S3503H	3Hz - 50GHz
S3503L	3Hz - 67GHz

Options

Part No.	Name	Description
S3503-H01	Rear Panel RF Input	Postposition of RF signal input interface1
S3503-H02	High IF Output	Output the second IF signal, the output frequency range 275MHz - 475MHz, step resolution 1Hz.
S3503-H03	IF Output	Output the third IF signal, the output frequency rang 10MHz - 160MHz, step resolution 1Hz.
S3503-H04A	Reconstructed IF/ Video Signal Output	To achieve signal output of any IF, AM / FM or I / Q by means of digital reconstruction, with the bandwidth upper limit 40MHz. (Note: H04A&H04B are available for options)
S3503-H04B	Wide Band Reconstruct IF/ Video Signal Output	To achieve signal output of any IF, AM / FM or I / Q by means of digital reconstruction, with the bandwidth ranging from 50MHz to 100MHz. (Note: H04B is only available when H38B 200MHz broadband option is selected; H04A & H04B are available for options.)
S3503-H08	Wide Log Detect Output	Output logarithmic detector signal that presents the level characteristics of input signal.
S3503-H12A	40MHz Bandwidth Digital Interface	To output real-time signal acquisition data through optical fiber and support signal data output with maximum 40MHz bandwidth. (Note: H12A is forbidden to choose when H38B is selected; H12B is forbidden to choose when this option is selected, H39 is not available)
S3503-H12B	200MHz Bandwidth Digital Interface	To output instantaneous broadband data by means of optical fiber, support maximum 200MHz bandwidth signal data output. (Note: H12B is only available for selection when H38B 200MHz broadband option is selected; H12A and H39 are not available for selection when this option is selected.)



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S3503-H12C	550MHz Bandwidth Digital Interface	To output instantaneous broadband data by means of optical fiber, support maximum 550MHz bandwidth signal data output. (Notes: H12C can only be selected when option H38C with 550MHz broadband is selected;once this option is selected, H12A,H12B and H39 cannot be selected)
S3503-H15	+24V DC Power Supply	Use +24V DC Power Supply
S3503-H22A	SAV4711 Data Recorder	Equipping SDD data recorder that has the same interface characteristics to achieve the instantaneous large-number record of signal data. (Note: H22A can only be selected after H12A or H12B digital interface is selected, the capacity selection of the recorded is shown in SAV4711 Recorder files)
S3503-H22B	SAV4712 Data Recorder	Equipping HDD data recorder that has the same interface characteristics to achieve the instantaneous large-number record of signal data. (Note: H22A can only be selected after H12A or H12B digital interface is selected, the capacity selection of the recorded is shown in SAV 4712 Recorder files)
S3503-H33	Electronic Attenuator	Frequency Range 3Hz - 4GHz, attenuation range 30db,1db stepping.
S3503-H34-04 S3503-H34-09 S3503-H34-13 S3503-H34-26 S3503-H34-26 S3503-H34-40 S3503-H34-45 S3503-H34-50	Low-Noise Preamplifier	Either Low-band preamplifier or full-band amplifier is available for option. Under the circumstance when full-band preamplifier is chosen, and noise optimization path of 4GHz or above frequency is provided.(Note: Low-wave preamplifier number is H34-04, full-band preamplifier is selected according to the frequency limit of the selected signal analyzer. eg,S3503E frequency range up to26.5GHz should choose S3603-H34-26.



S3503-H36	Pre-selector Bypass	Bypass receives the tracking pre-selector in the channel (Note: H36 Pre-selector Bypass shall be chosen when H38A or H38B is chosen in order to provide the optimal broadband signal reception characteristics)
S3503-H38A	40MHz Analysis Bandwidth	Support 10Hz-40MHz Analysis Bandwidth (Note: Whenever H38A is chosen, H36 Pre-selector By pass shall be chosen in order to provide the optimal br oadband signal reception features; H38A is unnecessar y when H38B is chosen)
S3503-H38B	200MHz Analysis Bandwidth	Support 10Hz-200MHz analysis bandwidth (Note: H38B and H38C cannot be selected at the same time. Whenever H38B is selected, H36 pre-selector bypass option should be chosen in order to provide the most optimal broadband signal reception features)
S3503-H38C	550MHz Analysis Bandwidth	Support 10Hz-550MHz analysis bandwidth (Note: H38B and H38C cannot be selected at the same time. When ever H38B is selected, H36 pre-selector bypass option should be chosen in order to provide the most optimal broadband signal reception features)
S3503-H39	Audio Analysis	Fulfill audio signal parameter test, distortion test and waveform analysis. (Note: H12A& H12B are unavailable when this option is selected)
S3503-H40	External Mixer	Provide external mixing methods to extend range measurement capability. This option provides local oscillator input, IF input function and signal-recognition function. (only available for S3503A, Extended frequency depends on the selected extending module, extending module is optional part)
S3503-H41	Realtime analysis	Provide digital phosphor spectrum and seamless waterfall, including frequency template trigger, which can support real-time spectrum analysis of 200MHz bandwidth. (Note:The maximum real-time analysis bandwidth is determined by the bandwidth options of the instrument configuration, H38A and H38B.)



S3503-H48	Noise figure measurement	Noise source drive and noise figure measurement function (S3503L exception) (Note: To select this option, the H34 low-noise preamplifier option corresponding to the whole machine frequency band and the corresponding noise source probe should be selected at the same time to jointly complete the test function of noise coefficient. The host can support intelligent noise source models: 18GHz intelligent noise source 16604DB, 26.5GHz intelligent noise source 16604EB, 40GHz intelligent noise
		source 16604FB, 50GHz intelligent noise source 16604HB.)
S3503-H97	Mounting Suit	Handles and accessories for S3503 mounting on standard racks.
S3503-H99	Aluminum Alloy Aviation Case	For safety transport.
S3503-S01	Absolute Power Measurement	High-precision measurement of RF signal power by connecting an external USB power probe.
S3503-S04	Phase Noise Measurement	Provide unilateral band phase noise curve and one-point band phase noise testing capability.
S3503-S09	Analogous Demodulation Analyzer	Fulfill modulation and distortion characteristics analysis of AM, FM, PM signals.
S3503-S10	Transient Analyzer	Fulfill the testing analysis of signals' instantaneous parameter spectrum, spectrum range and all sorts of modulation features; support the playback of recorded data.
S3503-S12	Vector Signal Analyzer	Provides flexible demodulation functions of multiple single-carrier digital modulation signals. It can provide vector charts, constellation diagrams, eye diagrams, spectrum diagrams, etc., to analyze the characteristics of the modulation signal. The modulation error of the signal can be obtained by demodulation, which helps to judge the cause of the signal error.
S3503-S13	Pulse Signal Analyzer	Automatically measure time, electrical level and modulation parameters of pulse wave and statistical analysis of pulse sequence.



(Frequency Range: 3Hz - 4GHz/ 9GHz/ 13.2GHz/ 18GHz/ 26.5GHz/ 40GHz/ 45GHz/ 50GHz/ 67GHz)

S3503-S40	WLAN 802.11a/b/g Measurement	Broadband wireless LAN protocol physical layer test (802.11a/b/g), covering radio frequency, modulation analysis, and modulation quality testing.
S3503-S40N	WLAN 802.11n Measurement	Broadband wireless LAN protocol physical layer test (802.11n), covering radio frequency, modulation analysis, and modulation quality testing.
S3503-S40AC	WLAN 802.11ac Measurement	Broadband wireless LAN protocol physical layer test (802.11ac), covering radio frequency, modulation analysis, and modulation quality testing.
S3503-S40AX	WLAN 802.11ax Measurement	Broadband wireless LAN protocol physical layer test (802.11ax), covering radio frequency, modulation analysis, and modulation quality testing.
S3503-S51	DTMB Signal Test	Provide one-button power and modulation analysis functions that comply with the DTMB standard.

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

