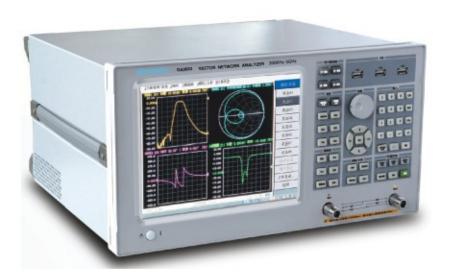# Vector Network Analyzer
GA3623

SUMMARY

GA3623 vector network analyzer is combined by a high-precision synthesized signal source with latest technology, narrow-band receiver, high-speed embedded computers and the Windows operating system. Its feature has high measurement accuracy, fast measurement speed and strong measurement adaptability. Windows user interface is more user-friendly and suitable for mass production of RF components and equipment and measurement applications in manufacturing with a very high performance - low cost factor.

GA3623 Vector Network Analyzer have powerful measurement functions, mainly used in the field of wireless communication, television broadcast, education, scientific research and other RF applications. It's also ideal for the Amplifier, Coaxial cable, Splitters, Combiners, Antennas, Couplers, Filters, Isolator, Branch distributor, Crystal, SAW these RF devices. They can make a full range of measurement for its S-parameter of these RF devices, such as the Amplitude Frequency characteristics, Reflective characteristics, Phase characteristics and Delay characteristics. It can make a fast and accurate measurement for the RF device's Insertion loss, Attenuation, Isolation, Gain, Frequency response, In-band Flatness, Phase, Group delay, Return loss, SWR, Impedance, 3dB Bandwidth ,Band rejection, Stopband bandwidth, Rectangular coefficients and so on.

Functional Feature

* System Impedance：50Ω or 75Ω(75 Ω impedance is for CATV users)

* Instrument Use Interface：Chinese or English

* Dual Port Test Mode：Can test 4 S parameters (S11、S21、S12、 S22) of the devices on both port simultaneously.

* Windows Operating Interface：10.4 inches TFT color LCD screen,touch screen, show clear,simple and quick operation.

* 4 Independent Measurement Channals：Each channel can be set independently source parameters (such as frequency, power and so on). It is convenient for users to test the same device under varying conditions.

* Save /Recall Function:User-friendly save/recall the measurement results in the hard disk or USB drive.

* Can use macros VBA programming, make automatic control test.

* GPIB Interface: Used for forming an automatic test system.

* LAN Interface: Used for connecting LAN, WLAN card, easy for users to carry out the remote data transmission. The LAN interface is the same with GPIB interface , convenient to form an automatic test system.

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Functional Feature

- Data format: Log, Phase, Group delay, Smith, Polar, Linear, SWR, Real, Imaginary, Expand Phase, Positive Phase etc.
- Various sweep mode:Linear Sweep, Log Sweep, Segment Sweep, Power Sweep.

Trigger mode: Continuous, Single, Hold

Analyzer Function

- Limit Test : With limit test (Surge limit test, Bandwidth limit test function).It is convenient for users to judge the products qualified or unqualified, thus greatly improving the testing efficiency.
- Marker: The max total 9 markers can be displayed at the same time. Different curves of marker can be operated independently.
- Marker search: Max, Min, Peak, Marker automatic tracking, Bandwidth search, Concave peak search etc.

Calibration Method

- Enhanced Response Calibration : effectively eliminates the directivity error, crosstalk, source match error, frequency response reflection tracking error, and frequency response transmission tracking error .
- Port Extension : In some cases, the users cannot make a calibration on the testing interface. Port extension can make a compensation for the shift or delay between the testing interface and the device under test and improve the testing accuracy.
- External Interface (standard) : USB, LAN, RS232, Keyboard & Mouse PS/2 interface, VGA.

        (optional): GPIB .

Main Specifications

Test Frequency Range	300kHz $\sim$ 3GHz
Frequency Accuracy	±5ppm (23℃±5℃)
Frequency Resolution	1Hz
Output Level Range	-45 dBm $\sim$ +10dBm
Level Accuracy	±0.8 (0dBm,50MHz)
Level Resolution	0.05dB
	-67dBc/Hz@10KHz
	<-30dBc(0dBm)
Noise Phase	
Harmonics/Non- harmonics Spurious	
IF Bandwidth	
Directivity	10Hz$\sim$30KHz
	44dB
	110dB
Dynamic Range	0.01dB
Resolution	+10dBm
Maximum Test Port Input Level	+20dBm, ±30VDC
Input Damage Level	
Phase Resolution	0.01°
Phase Stability	0.1°
Logarithmic scale	0.01dB/DIV~50dB/DIV
Resolution	
Sweep time	0.01dB
Monitor	25ms (201, IF Bandwidth 30KHz)
Measurement mode	10.4 Inch TFT Color LCD
Measurement channel	Two port measurement
Data format	4 channel
Sweep mode	Log, Linear, Phase, Group delay, SWR, Smith, Polar, Real, Imaginary, Impedance
Trigger mode	Linear, Segment, Log, Power
Test port	Continuous, Single, Hold
Communication interface	N female
Power supply	USB,LAN, RS232,GPIB, Keyboard interface, VGA
Weight	AC 90V ~260V/47 ~ 63Hz; 350VA
Dimension	15Kg
Working environment temperature	426×395×225mm(width x length x height)
	5 ~ 40ºC

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Option	: 250E	2-port ; 50Ω
Option	: 275E	2-port ; 75Ω
Option	: 1E10	GP-IB card
Option	: 1E4J	N-50J calibration Kit(open, short, load, adapter)
Option	: 1E4K	N-50K calibration Kit (open, short, load, adapter)
Option	: 1E5J	N-75J calibration Kit (open, short, load, adapter)
Option	: 1E5K	N-75K calibration Kit (open, short, load, adapter)
Option	: 1E6J	F-75J calibration Kit (open, short, load, adapter)
Option	: 1E6K	F-75K calibration Kit (open, short, load, adapter)
Option	: 1E7J	SMA-50J calibration Kit (open, short, load, adapter)
Option	: 1E7K	SMA-50K calibration Kit (open, short, load, adapter)