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## 1. General Description

The SIGLENT SNA5000A series of Vector Network Analyzers have a frequency range of 9 kHz to 8.5 GHz, which support 2/4-ports scattering-parameter, differential-parameter, and time-domain parameter measurements. The SNA5000A series of VNAs are effective instrumentation for determining the Q-factor, bandwidth and insertion loss of a filter, They feature impedance conversion, movement of measurement plane, limit testing, ripple test, fixture simulation and adapter removal/insertion adjustments. The VNAs have five sweep types: Linear-Frequency mode, Log-Frequency mode, Power-Sweep mode, CW-Time mode and Segment-Sweep mode. The SNA5000A series VNAs also support scattering-parameter correction of SOLT, SOLR, TRL, Response and Enhanced Response for increased flexibility in R&D and manufacturing applications.

## 2. Features

- ◆ Frequency range: 9 kHz - 8.5 GHz
- ◆ Frequency resolution: 1 Hz
- ◆ Level resolution: 0.05 dB
- ◆ Range of IFBW: 10 Hz~3 MHz
- ◆ Setting range of output level: -55 dBm ~ +10 dBm
- ◆ Dynamic range: 125 dB
- ◆ Types of calibration: Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, Full-three port calibration, Full-four port calibration, TRL calibration
- ◆ Types of measurement: Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal/insertion, spectrum analysis
- ◆ Support Bias-Tees
- ◆ Interface: LAN, USB Device, USB Host(USB-GPIB)
- ◆ Remote control: SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet/WebServer
- ◆ 12.1-inch touch screen
- ◆ Video output: HDMI

### 3. Models and key specifications

Model	SNA5002A	SNA5012A	SNA5004A	SNA5014A
Frequency range	9 kHz- 4.5 GHz	9 kHz- 8.5 GHz	9 kHz- 4.5 GHz	9 kHz- 8.5 GHz
Ports	2	2	4	4
Frequency resolution	1 Hz			
Level resolution	0.05 dB			
Range of IFBW	10 Hz~3 MHz			
Setting range of output level	-55 dBm ~ +10 dBm			
Dynamic range	125 dB			
Types of calibration	Response calibration, Enhanced Response calibration, Full-one port calibration, Full-two port calibration, Full-three port calibration, Full-four port calibration, TRL calibration			
Types of measurement	Scattering-parameter measurement, differential-parameter measurement, receiver measurement, time-domain parameter analysis, limit test, ripple test, impedance conversion, fixture simulation, adapter removal/insertion, enhanced time-domain parameter analysis(TDR), spectrum analysis.			
Bias-Tees	Support			
Interface	LAN, USB Device, USB Host(USB-GPIB)			
Remote control	SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet/WebServer			
Display	12.1-inch touch screen			
Video output	HDMI			