

BN1000 Series Bench-top Vector Network Analyzer



Overview

BN1000 series vector network analyzer, with high measurement accuracy, stable test performance and fast measurement speed, is a factory level test instrument with high cost performance. Its frequency range covers 300kHz ~ 8GHz, which can be widely used in the R&D and production testing of radio frequency devices and components in the fields of mobile communication, semiconductor, radio and television, scientific research and education, etc.



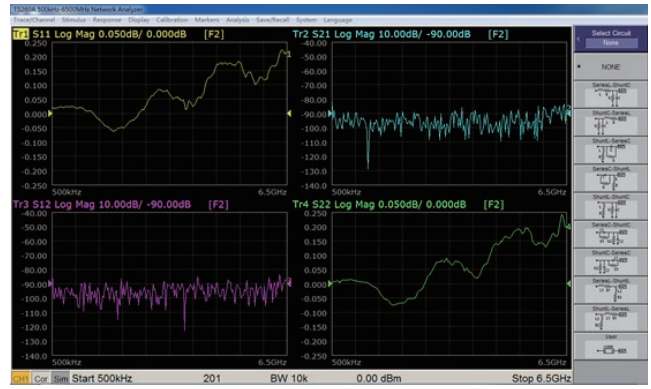
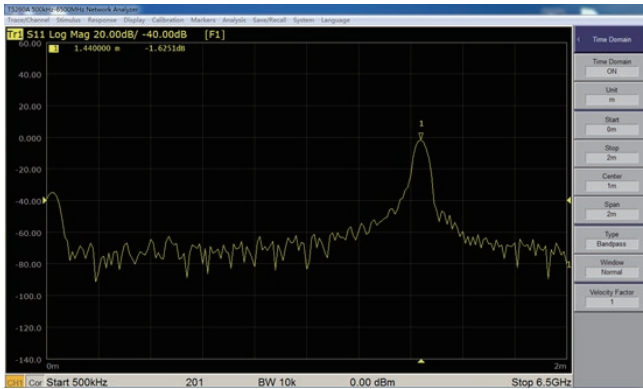
Key Facts

- Frequency range: 300kHz~8GHz
- Large dynamic range: >125 dB @(IFBW=10 Hz), typ. 130 dB
- Low trace noise: 2 mdB rms @(IFBW=3 kHz)
- Measurement speed: 42 μs/point @(IFBW=500 kHz)
- High effective directivity: > 45 dB
- Support remote control: LAN



Innovative Features & Benefits

- Multiple analysis options (such as time domain analysis and circuit simulation function)
- Support standard VISA communication protocol
- Efficient communication interface for multi-types testing instruments
- Support expanding to 4 ports



Control Elements



Specifications

测量范围	
Product model	T5260C
Impedance	50Ω
Test port connector	N-type, female
Number of test ports	2/4
Frequency range	300kHz ~6.5GHz (option 265/465) 300kHz ~8.5GHz (option 285/485)
Frequency accuracy	±5ppm (选件 0.05ppm)
Frequency resolution	1Hz
Measurement points	2~20,001
Measurement bandwidth	1Hz to 2MHz
Dynamic range	97 dB, typ. 115 dB (100kHz ~ 300kHz) 112 dB, typ. 115 dB (300kHz ~ 10MHz) 125 dB, typ. 130 dB (10MHz ~ 6GHz) 124 dB, typ. 129 dB (6GHz ~ 7GHz) 123 dB, typ. 128 dB (7GHz ~ 8.5GHz)
Measurement parameters	S11, S21, S12, S22
Effective directivity ①	
Effective directivity	38~49dB
Effective source match	35~41dB
Effective load match	37~49dB
① Applies over the temperature range of 23° C ± 5° C after 40 minutes of warming-up, with the full two-port calibration, at output power of 0 dBm and IF bandwidth 10 Hz	
Measurement accuracy	
Accuracy of Transmission Measurements (magnitude / phase)	
+ 5dB to +15dB	0.2dB/2°
- 50dB to +5dB	0.1dB/1°
- 70dB to -50dB	0.5dB/3°
- 90dB to -70dB	2.5dB/8°
Accuracy of Reflection Measurements (magnitude / phase)	
-15dB to 0dB	0.4dB/3°
-25dB to -15dB	1.0dB/6°
-35dB to -25dB	3.0dB/20°
Trace stability	
Trace noise (IFBW=3kHz)	2mdB rms
Temperature stability	0.01dB/°C
Measurement speed	
Measurement time per point	42μs
Source to receiver port switchover time	< 10ms
Sweep points (IFBW 30kHz)	51 201 401 1601
Without calibration (300kHz~10MHz)	51points: 13ms 201points: 52ms 401points: 104ms 1601points: 413ms

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Full 2-port calibration (10MHz~6.5GHz)	51points: 34ms 201points: 73ms 401points: 125ms 1601points: 434ms
Test port output	
Match (W/O System Calibration)	18dB
Power range (Option -70~+10dBm)	- 50dBm to + 5dBm (100kHz ~ 300kHz)
	- 50dBm to + 10dBm (300kHz ~ 7GHz)
	- 50dBm to + 8dBm (7GHz ~ 8.5GHz)
Power accuracy	±1.5 dB
Power resolution	0.05dB
Test port input	
Match (W/O System Calibration)	18dB
Max input level	+ 26dBm
Max input voltage	+ 35V
Noise level	- 97dBm/Hz(100kHz~300kHz)
	- 107dBm/Hz (300kHz~10MHz)
	- 123dBm/Hz (10MHz~5GHz)
	- 124dBm/Hz (5GHz~6GHz)
	- 120dBm/Hz (6GHz~8.5GHz)
Other parameters	
Display	12.1 inch TFT color LCD, touch screen
External trigger input port	BNC female, input level range: 0~+5 V
External reference input port	BNC female, 10 MHz; 2 dBm ± 2 dB
External reference output port	BNC female, 10 MHz; 2 dBm ± 2 dB
Video output	DVI / HDMI
USB port	8 ports (include 2 USB 3.0 ports)
LAN port	10/100/1000 Base T Ethernet, 8-pin
Working temperature	+5° C ~ +40° C
Storage temperature	-20° C ~ +60° C
Working humidity	90% (25° C)
Working pressure	84 to 106.7 kPa
System calibration interval	3 years
Power supply	220 ± 22 V (AC) , 50 Hz
Power consumption	130W
Dimension	440 × 230 × 360 mm

Ordering List

Ordering list	
Model	Description
Console	
BN1000-265	2-port 300kHz~6.5GHz VNA
BN1000-465	4-port 300kHz~6.5GHz VNA
BN1000-285	2-port 300kHz~8.5GHz VNA
BN1000-485	4-port 300kHz~8.5GHz VNA
Calibration module	
SK-CAL-NM_60	High precision, 6.5G N-type (M) calibration kit T-shaped 4 pieces set
SK-CAL-NF_60	High precision, 6.5G N-type (F) calibration kit T-shaped 4 pieces set
SK-CAL-SMAM_60	High precision, 6.5G SMA (M) calibration kit 4 pieces set
SK-CAL-SMAF_60	High precision, 6.5G SMA (F) calibration kit 4 pieces set
SK-CAL-NM_90	High precision, 9G N-type (M) calibration kit T-shaped 4 pieces set
SK-CAL-NF_90	High precision, 9G N-type (F) calibration kit T-shaped 4 pieces set
SK-CAL-SMAM_90	High precision, 9G SMA (M) calibration kit 4 pieces set
SK-CAL-SMAF_90	High precision, 9G SMA (F) calibration kit 4 pieces set
C9502A	2-port 3.5mm female electronic calibration module 9.5GHz
C9502A_N	2-port N-type female electronic calibration module 9.5GHz
C9504A	4-port 3.5mm female electronic calibration module 9.5GHz
C9504A_N	4-port N-type female electronic calibration module 9.5GHz
RF cable	
T5_RFCAB-NmNm_60101	6.5G high precision 50Ω N-N cable
T5_RFCAB-NmSMAM_60101	6.5G high precision 50Ω N-SMA cable
T5_RFCAB-NmNm_90101	9G high precision 50Ω N-N cable
T5_RFCAB-NmSMAM_90102	9G high precision 50Ω N-SMA cable
Other options	
T5260-010	Time domain option
T5260-1C5	Frequency range expansion 100kHz~300kHz
T5260-1E5	High stability clock option 0.05ppm
T5260-1F5	Fixture circuit simulation function
T5260-710	Power range expansion -70~+10dBm