HPORTEK

PRODUCT DATASHEET

SYVNA-2P-B20G

Dual-Port Vector Network Analyzer

The SYVNA-2P-B20G is a low-cost, high-performance, portable dual-port VNA covering 10 MHz to 20 GHz. It features a 10.1" LCD touchscreen and built-in battery for field use, delivering bench-level performance with open interfaces.



Features

• Low cost, high performance, compact

• Integrated 10.1" LCD touchscreen

• User-friendly interface

• Battery life over 2 hours

• Bench-top VNA performance

• Dual-channel, dual-path full S-parameter

• Open interface, secondary development

Published technical information

Parameter	Specification / typical value
Functional Specifications	
Independent S-parameter measurement	Supported
Swept/fixed-frequency modes; time-domain analysis (cable fault distance, reflection distance)	Supported
Friendly display & control software	Supported
Technical Specifications	
Frequency Range	10MHz ~ 20GHz

Parameter	Specification / typical value
Output Power	-45dBm ~ 10dBm(10MHz≤f≤8GHz)；-45dBm ~ 0dBm(8GHz≤f≤18GHz)；-45dBm ~ -5dBm(18GHz≤f≤20GHz)
Min. Time per Point	500μs/point (IFBW=10kHz)
Sweep Points	2 to 10001 points
Frequency Accuracy	±2.5×10-6
Frequency Resolution	50Hz
IF Bandwidth	10Hz ~ 300kHz
Cable Loss Range	30dB
Transmission Coeff. Accuracy	±0.2dB/±2°（0dB ~ 10dB）；±0.1dB/±2°（-45dB ~ 0dB）；±0.2dB/±2°（-65dB ~ -45dB）；±1dB/±6°（-70dB ~ -65dB）
Reflection Coeff. Accuracy	±0.5dB/±5°（-15dB ~ 0dB）；±1.5dB/±10°（-25dB ~ -15dB）；±5.5dB/±30°（-35dB ~ -25dB）
Trace Noise	0.010dBrms（IFBW=3kHz）
Temperature Dependency	0.05dB/℃
Effective Directivity	35dB
Effective Source Match	30dB
Effective Reflection Tracking	±0.5dB
Effective Load Match	29dB
Effective Transmission Tracking	±0.5dB
Burn-out Power	+25dBm
Ext. Ref. I/O Frequency	20MHz
Ext. Ref. I/O Power	0dBm ~ 5dBm
General Specifications	
Dimensions	320 mm × 240 mm × 60 mm (excluding corner guards and handle)
Weight	≤5 kg (including battery)
Supply & Power	12Vdc/35W
Battery Life	≥2h
Operating Temperature	-10℃ ~ +40℃
Storage Temperature	-20℃ ~ +55℃

Prepared from the existing product catalogue. Specifications may change; typical values are not guaranteed limits. Confirm operating conditions, interfaces and ordering configuration with engineering. This document does not replace the equipment operating manual.

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https://www.hportek.com/en/product/vector-network-analyzer-syvna-2p-b20g/