HPORTEK

PRODUCT DATASHEET

SYVNA-1P-20G-A

Single-Port Vector Network Analyzer

The SYVNA-1P-20G-A is a low-cost, high-performance, compact single-port VNA covering 10 MHz to 20 GHz. It is small enough to connect directly to the DUT for both indoor and outdoor applications, supporting VSWR, phase, impedance measurements, cable fault detection, and non-destructive microwave testing of non-metallic materials.



Features

• Compact, lightweight, low power, portable

• Multi-site parallel testing

• LAN interface for secure PC control

Published technical information

Parameter	Specification / typical value
Functional Specifications	
Independent reflection parameter measurement	Supported
Swept/fixed-frequency modes; time-domain analysis (cable fault distance, reflection distance)	Supported
Measurement & calibration via host software	Supported
Technical Specifications	
Frequency Range	10MHz ~ 20GHz
Output Power	-45dBm ~ 0dBm(10MHz≤f≤50MHz)；-45dBm ~ 5dBm(50MHz≤f≤8GHz)；-45dBm ~ 0dBm(8GHz < f≤16GHz)；-45dBm ~ -10dBm(16GHz < f≤20GHz)
Min. Time per Point	650μs/point (IFBW=10kHz)

Parameter	Specification / typical value
Sweep Points	2 to 10001 points
Frequency Accuracy	±2.5×10-6
Frequency Resolution	50Hz
IF Bandwidth	10Hz ~ 300kHz
Cable Loss Range	30dB
Reflection Coeff. Accuracy	±0.5dB/±5°（-15dB ~ 0dB）；±1.5dB/±10°（-25dB ~ -15dB）；±5.5dB/±30°（-35dB ~ -25dB）
Trace Noise	0.010dBrms（IFBW=3kHz）
Effective Directivity	35dB
Effective Source Match	30dB
Effective Reflection Tracking	±0.5dB
Burn-out Power	+25dBm
General Specifications	
Supply Voltage	+12V DC
Power Consumption	≤15W
Operating Temperature	+5℃ ~ +40℃
Storage Temperature	-50℃ ~ +70℃
Dimensions (excl. connectors)	≤150 mm (L) × 100 mm (W) × 50 mm (H)
Weight	≤0.6kg

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.

Engineering enquiries: george@hportek.com

https://www.hportek.com/en/product/vector-network-analyzer-syvna-1p-20g-a/