



Test More. Test Faster. Test for Less.



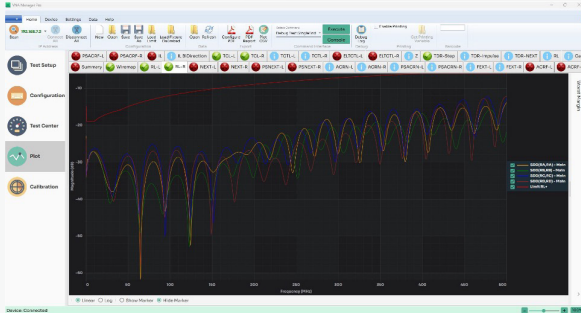
DATASHEET

6GHz Vector Analyzer Adapter (K6GVNA)

Optimized for Manufacturing Testing
A Multiport Vector Network Analyzer
Capable of Simultaneously Measuring All



Multi-Port Component Testing



The small, portable form-factor makes TestPro-K6GVNA easy to integrate in the manufacturing environment. Measuring all possible combinations of RF S-parameters on all ports, K6GVNA greatly reduces test time over other RF test systems. Additionally, multiple test ports eliminate the need of connecting and disconnecting different test fixtures repeatedly. No external RF switch matrix is required, further simplifying the test setup.

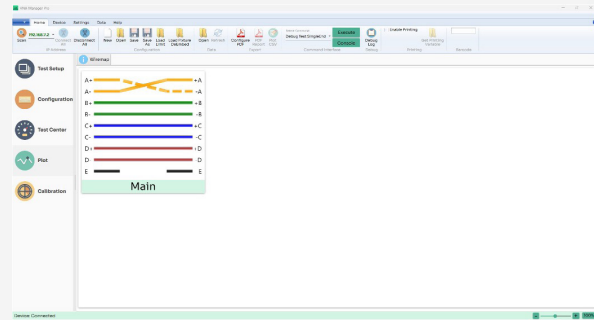
VNA Manager is a required companion software utility that facilitates control of the analyzer including customization of the Autotest through S-parameter based settings.

The system is IP addressable enabling remote view of test data across geographical locations.

While K6GVNA measures multiple S-parameters in every sweep, yet it enables focusing on critical parameters by allowing flexible configuration, and easy-to-understand PASS/FAIL results.

These features make K6GVNA one of the most versatile RF analyzer for the engineers interested in deep-dive, and at the same time fast and easy for the operators.

A large number of test applications can be supported by user configurable parameters and test limits. These are several built-in configurations for widely used test applications such as automotive single-pair Ethernet test.



KEY CAPABILITIES

- Measurements of multi-port devices under test (up to 4-ports)
- All S-parameter combinations automatically measured during every autotest, with ability to choose parameters of interest
- Adheres to Open Alliance, BroadR-Reach, 802.3bw, 802.3bp and 802.3ch (draft) for the s-parameter and TDR tests:



SPECIFICATIONS

| Parameter | Specification |
|---|------------------------------------|
| Frequency Range | 1-6,000 MHz |
| Frequency Resolution | 1 MHz |
| Frequency Accuracy | ± 2ppm |
| Test Ports (Single-Ended) | 4 |
| IF Bandwidth | 100 Hz (Range Setting = 7) |
| Test Interface | SMA (Female) |
| Independence of Test Port | 50Ω |
| Test Port Power Output | -1.0 dBm |
| Max DC voltage at Test Port (Damage Level) | 60V |
| Sweep Speed | 0.3 msec/step (80 db Noise Floor) |
| | 3.4 msec/step (110 db Noise Floor) |
| Measurement Floor - Cross-Talk | 105 db @ 1 MHz |
| | 85 db @ 1000 MHz |
| | 50 db @ 3000 MHz |
| | 40 db @ 6000 MHz |
| Measurement Floor - Return Loss # | 60 db @ 1 MHz |
| | 40 db @ 1000 MHz |
| | 15 db @ 3000 MHz |
| | 15 db @ 6000 MHz |
| Dynamic Range Transmission Measurement | 90 db @ 0.1 MHz |
| | 100 db @ 1 MHz |
| | 100 db @ 100 MHz |
| | 85 dB @ 1000 MHz |
| | 50 dB @ 3000 MHz |
| | 50 dB @ 6000 MHz |
| Accuracy - Transmission Measurements (Regular Sweep Mode) Mid Dynamic Range Measurements | ± 0.1 db @ 1 MHz |
| | ± 0.1 dB @ 100 MHz |
| | ± 0.1 dB @ 600 MHz |

SPECIFICATIONS

| Parameter | Specification |
|---|---|
| Accuracy - Transmission Measurements (Regular Sweep Mode) Mid Dynamic Range Measurements | ± 0.3 dB @ 1000 MHz |
| | ± 0.5 dB @ 6000 MHz |
| Accuracy - Reflection Measurements Mid Dynamic Range Measurements | ± 0.4 dB |
| Directivity | 40 dB @ 0.1 MHz |
| | 60 dB @ 1 MHz |
| | 60 dB @ 100 MHz |
| | 45 dB @ 600 MHz |
| | 30 dB @ 1000 MHz |
| | 25 dB @ 6000 MHz |
| Tracking Error | 0.05 dB (0.1 to 1000 MHz) |
| Source Return Loss | 50 dB @ 1 MHz |
| | 40 dB @ 100 MHz |
| | 20 dB @ 1000 MHz |
| Insertion Loss Measurement Range-Dual Ended | 80 dB @ 0.1 MHz |
| | 80 dB @ 1 MHz |
| | 70 dB @ 100 MHz |
| | 65 dB @ 1000 MHz |
| | 40 dB @ 6000 MHz |
| File Format for S-Parameter Results | CSV and Touchstone (s8p, s16p) |
| Plots | Frequency Domain S-Parameter (Magnitude) |
| | Time-Domain Impulse Response (Linear or dB) |
| | Time-Domain Step Response (Impedance or dB) |
| | Phase v/s Frequency, Real Part v/s Frequency, Imaginary Part v/s Frequency |
| | Power Sum Measurements of Selected Combinations of S-Parameters |
| Size | 17.5 cm (Depth) x 16.5 cm (Width) x 5.5 cm (Height) |
| File Format for S-Parameter Results | CSV and Touchstone (s8p, s16p) |
| Weight | 1.0 kg |

SPECIFICATIONS

| Parameter | Specification |
|-----------------------|---|
| Power Supply | 5 V DC Adapter |
| Power Consumption | 8 W |
| Battery Operation | 8 Hours with Full Charge and 1 test/min |
| Connectivity | USB, 10/100/1000 Ethernet |
| Operating System | Linux |
| Operating Temperature | 0 °C to 45 °C |
| Storage Temperature | -50 °C to +70 °C |
| Humidity | 90 % at 25 °C |
| Atmospheric Pressure | 70.0 kPa to 106.7 kPa |

Orderable Part Numbers:

K6GVNA-KIT: Kit for 6 GHz VNA testing

6 GHz VNA testing kit comprises of a measurement platform unit, AD-6G-4P-MMVNA adapter, charger, carry case, 4 coax test cords, VNA Manager Pro software site license

AD-6G-4P-MMVNA: Test Adapter for 4-port 6GHz VNA

4-port 6 GHz VNA test adapter that attaches to measurement platform unit.

Contact Us

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