

Datasheet

Description

The FEV-12 Series will expand your existing Vector Network Analyzer (VNA) capabilities so you can conduct industry leading millimeter wave S-parameters measurement in E band. These frequency extension modules connect to your existing test ports, and leverage the inherent microwave network analyzer's performance and features to display full port S-parameters: Two measurement architectures are available: 1-path/2-port and fully reversing 2-port. Waveguide calibration kits are available as separate accessories.



Features

- Full simultaneous 2-port or 4-port network analysis
- Excellent dynamic Range
- Excellent stability
- Compact and robust design
- Convection cooled – no fans – hence no vibration.
- T/R and T heads available
- Electronic power control compatibility with Agilent PNA-X
- 25 dB integrated manual variable attenuator on Port 1 heads
- 2-Port controller available as standard
- 4-port controller available for balanced and multi-port measurements to special order

Applications

- Test and measurement frequency range extension
- Balanced S-parameters
- Multi-port S-parameters
- Wafer probe measurement
- Antenna measurements
- Dielectric material characterisation

Accessories

- Calibration kits
- Cables
- Manuals
- Flight cases

Datasheet

| Specification | Unit | Min | Typ | Max |
|---|-------------|----------------|------------|------------|
| System Operating Frequency | GHz | 60 | | 90 |
| Test Port Output Power (2) | dBm | 0 | +4 | |
| System Dynamic Range (3) | dB | 100 | 110 | |
| Raw Coupler Directivity | dB | 40 | 45 | |
| Trace Stability Magnitude (4) | dB | | ±0.1 | |
| Trace Stability Phase (4) | degree | | 1 | |
| Test Port Input 0.1dB Compression Point | dBm | | +10 | |
| Manual Variable Attenuator | dB | 0 | | 25 |
| RF Input Frequency | GHz | 10 | | 15 |
| RF Input Power | dBm | +5 | | +10 |
| LO Input Frequency | GHz | 10 | | 15 |
| LO Input Power | dBm | +5 | | +10 |
| IF Output Frequency | MHz | 5 | | 50 |
| Test Port Damage Level | dBm | +20 | | |
| RF/LO Port Damage Level | dBm | +15 | | |
| | | | | |
| Test Port Interface | - | WR-12 UG-387/U | | |
| RF/LO Connector | - | 3.5 mm (F) | | |
| IF Connector | - | SMA (F) | | |
| DC Power Requirements | - | +6V at 1500 mA | | |
| Weight | kg | | 3.5 | |
| Dimensions (L x W x H) | - | 290 x 130 x 85 | | |
| Operating Temperatures | °C | 0 | | 30 |

- (1) Specifications are typical and subject to change without a notice.
- (2) For frequencies greater than 110 GHz traceable only to FTL calorimeter.
- (3) Measured with PNA-X 5242A at 10 Hz of IF bandwidth.
- (4) Measured at 1h after 2h warm up and calibration. Assuming ideal RF and LO cables.