

## Datasheet

### Description

The FEV-10 Series will expand your existing Vector Network Analyzer (VNA) capabilities so you can conduct industry leading millimeter wave S-parameters measurements in W 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

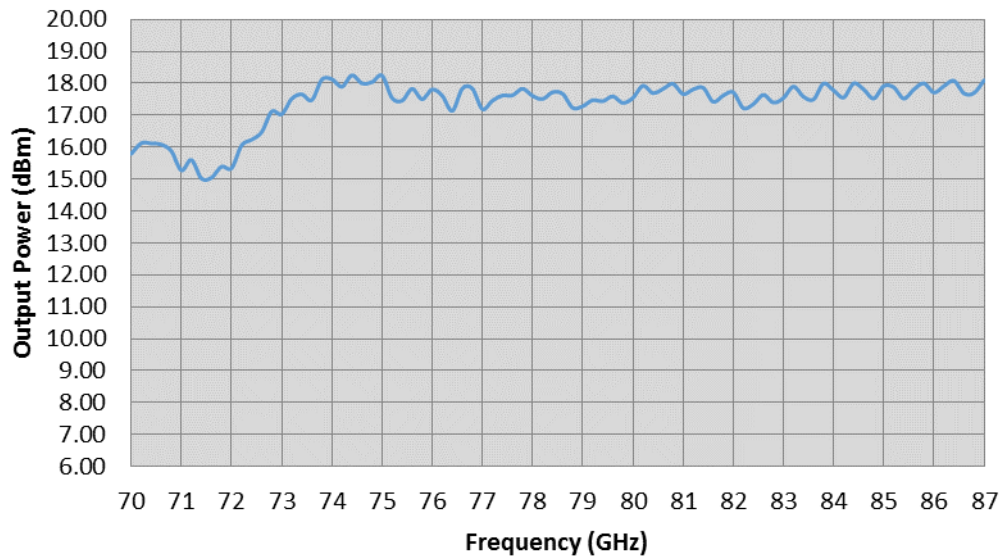
- Calibration kits
- Cables
- Manuals
- Flight cases



**Datasheet**

Specification	Unit	Min	Typ	Max
System Operating Frequency (standard)	GHz	70		110
System Operating Frequency (high power)	GHz	70		87
Test Port Output Power (standard) (2)	dBm	-5	+2	
Test Port Output Power (high power) (2)	dBm	+14	+18	
System Dynamic Range (3)	dB	90	100	
Raw Coupler Directivity	dB	40	45	
Trace Stability Magnitude (4)	dB		±0.2	
Trace Stability Phase (4)	degree		2	
Test Port Input 0.1dB Compression Point	dBm		+10	
Manual Variable Attenuator	dB	0		25
RF Input Frequency	GHz	11.67		18.33
RF Input Power	dBm	+5		+10
LO Input Frequency	GHz	8.75		13.75
LO Input Power	dBm	+5		+10
IF Output Frequency	MHz	5		50
Test Port Damage Level	dBm	+15		
RF/LO Port Damage Level	dBm	+15		
Test Port Interface	-	WR-10 UG-387/UM		
RF/LO Connector	-	3.5 mm (F)		
IF Connector	-	SMA (F)		
DC Power Requirements	-	+6V at 2500 mA		
TTL Control	-	D-sub 9-pin		
Weight	kg		4.5	
Dimensions (L x W x H)	-	320 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.

**Datasheet**
**Output Power (High Power) vs Frequency**

**Output Power (Standard) vs Frequency**
