



V-Band Network Analyzer Extender

Description:

Model STN-SF415-04-D2 is a V-band scalar network analyzer extender that extends low frequency scalar network analyzers to 50 to 75 GHz. The extender offers a low cost means of producing V-band measurements while preserving the functionality and features of standard models. The extender is constructed with SAGE Millimeter’s high performance millimeterwave frequency extender (model STE-SF415-04-S1), direct reading attenuator (model STA-60-15-D1), directional coupler (model SWD-1040H-15-SB), and waveguide detectors (model STD-15SF-NI).



Features:

- Full Waveguide Band Operation
- Moderate Dynamic Range
- Cost Effective Solution

Applications:

- Test Lab
- Test Instrumentations

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Output Frequency Range	50.00 GHz		75.00 GHz
Input Frequency Range	12.50 GHz		18.75 GHz
Output Power		+4 dBm	
Input Power		+5 dBm	+20 dBm
Insertion Loss Dynamic Range		30 dB	
Return Loss Dynamic Range		20 dB	
DC Voltage	+8 V _{DC}	+8 V _{DC}	+12 V _{DC}
DC Current		450 mA	750 mA

Mechanical Specifications:

Item	Specification
RF Input	SMA (F)
RF Output	WR-15 Waveguide with UG-385/U Flange
Detector Output	SMA (F)
Extender Bias	Banana Jack
Finish	Black Anodized and Gold Plated
Weight	6.8 lb
Outline	TN-DV2

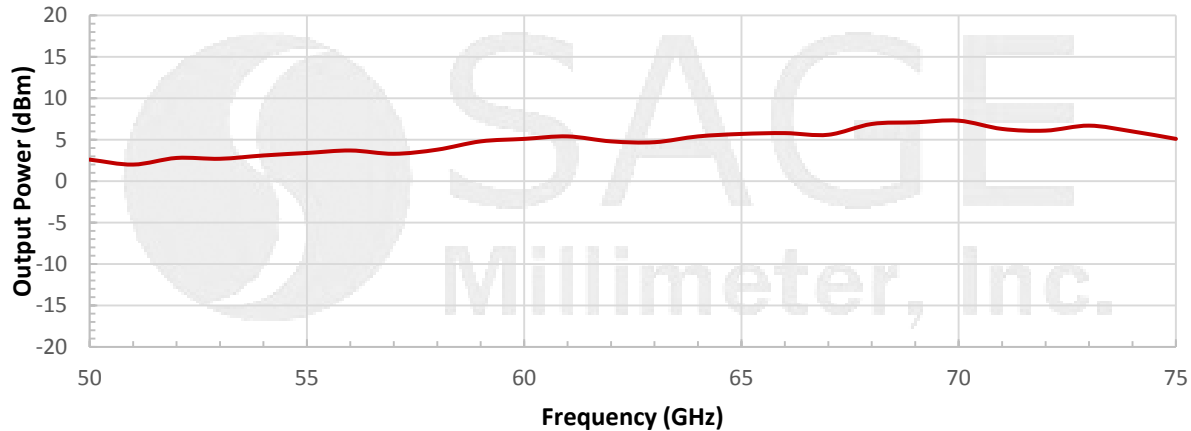




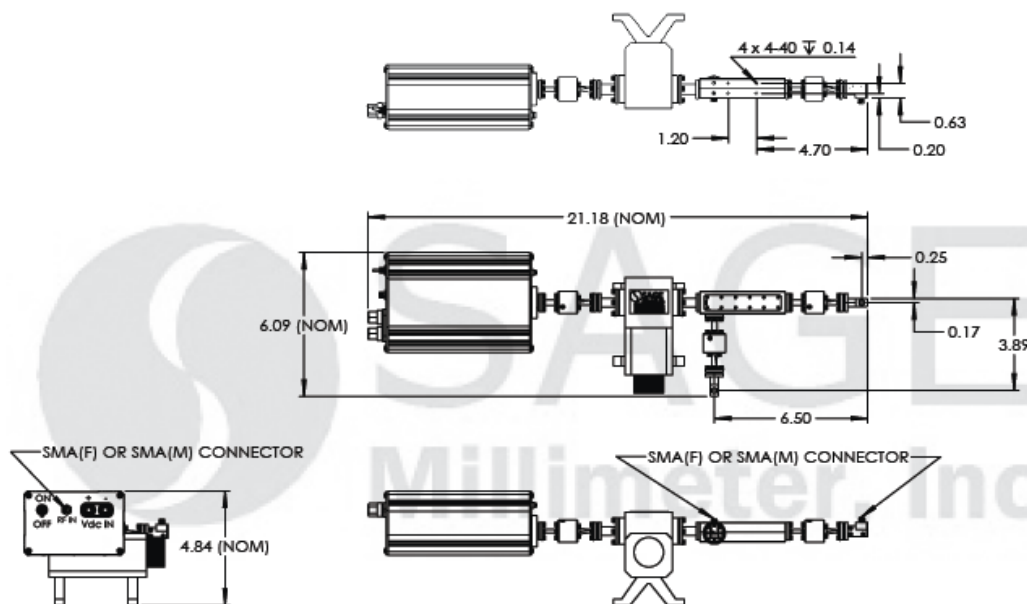
V-Band Network Analyzer Extender

Typical Performance vs. Frequency

P_{in} : +0 dBm, Bias: +8 V_{DC}/450 mA



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- All data are presented using a limited sample lot. Actual data may vary unit to unit.
- All testing was performed under +25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings of the device will damage the device.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**
- Any foreign objects in the waveguide will cause performance degradation or damage the device.



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com