



D-Band Network Analyzer Extender

Description:

Model STN-SF906-00-D2 is a D-band scalar network analyzer extender that extends low frequency scalar network analyzers to 110 to 170 GHz. The extender offers a low cost means of producing D-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-SF906-00-S1), direct reading attenuator (model STA-60-06-D1), directional coupler (model SWD-1040H-06-SB), and waveguide detectors (model STD-06SF-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	110.00 GHz		170.00 GHz
Input Frequency Range	12.22 GHz		18.89 GHz
Output Power		-3 dBm	
Input Power		+5 dBm	+20 dBm
Insertion Loss Dynamic Range		20 dB	
Return Loss Dynamic Range		10 dB	
DC Voltage	+8 V _{DC}	+8 V _{DC}	+12 V _{DC}
DC Current		550 mA	750 mA

Mechanical Specifications:

Item	Specification
RF Input	SMA (F)
RF Output	WR-06 Waveguide with UG-387/U-M Flange
Detector Output	SMA (F)
Extender Bias	Banana Jack
Finish	Black Anodized and Gold Plated
Weight	6.8 lb
Outline	TN-DD2

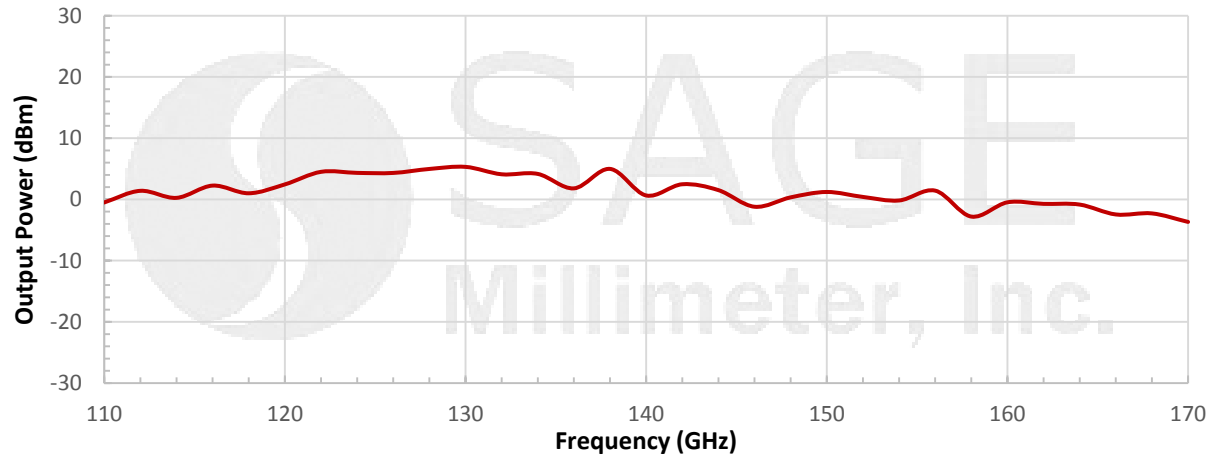




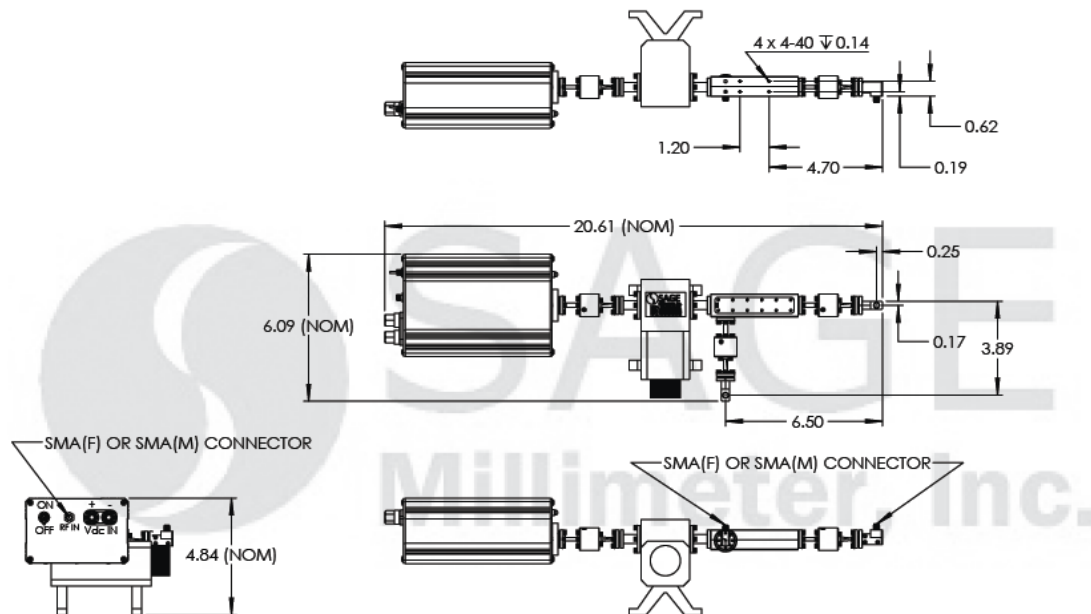
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Typical Performance vs. Frequency

P_{in} : +0 dBm, Bias: +8 V_{DC}/550 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.



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