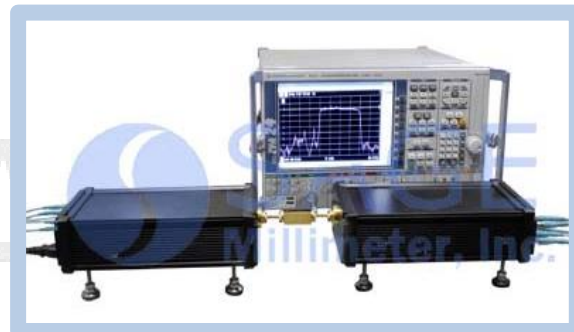


E Band VNA Frequency Extender

Description:

Model STO-12203-S1 is an E Band vector network analyzer (VNA) frequency extender designed to achieve full 2-port, S-parameter testing at 60 to 90 GHz. It is compatible with modern vector network analyzers with four port and dual source options, such as the Rohde & Schwarz ZVA Series and the Keysight PNA-X Series. The frequency extenders can achieve a dynamic range of 100 dB and are great for testing many E band devices including passive and active devices. It takes a pair to complete the full S parameter test set.



Features:

- Full Band Coverage
- Dynamic Range of 100 dB
- AC Power Input: 100 to 240 VAC

Applications:

- S-Parameter Characterization
- Test Lab Instrumentation

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
RF Operating Frequency	60 GHz		90 GHz
Test Port Output Power		0 dBm	
Dynamic Range @ 10 Hz Bandwidth	90 dB	100 dB	
Test Port Match		18 dB	
Directivity		35 dB	
RF Source Input Frequency	7.50 GHz		11.25 GHz
RF Source Input Power		+10 dBm	
LO Source Input Frequency	10 GHz		15 GHz
LO Source Input Power		+6 dBm	
IF Frequency	10 MHz		300 MHz
Magnitude Stability			0.2 dB
Phase Stability			2°
Operating Temperature	+12°C		+30°C

Mechanical Specifications:

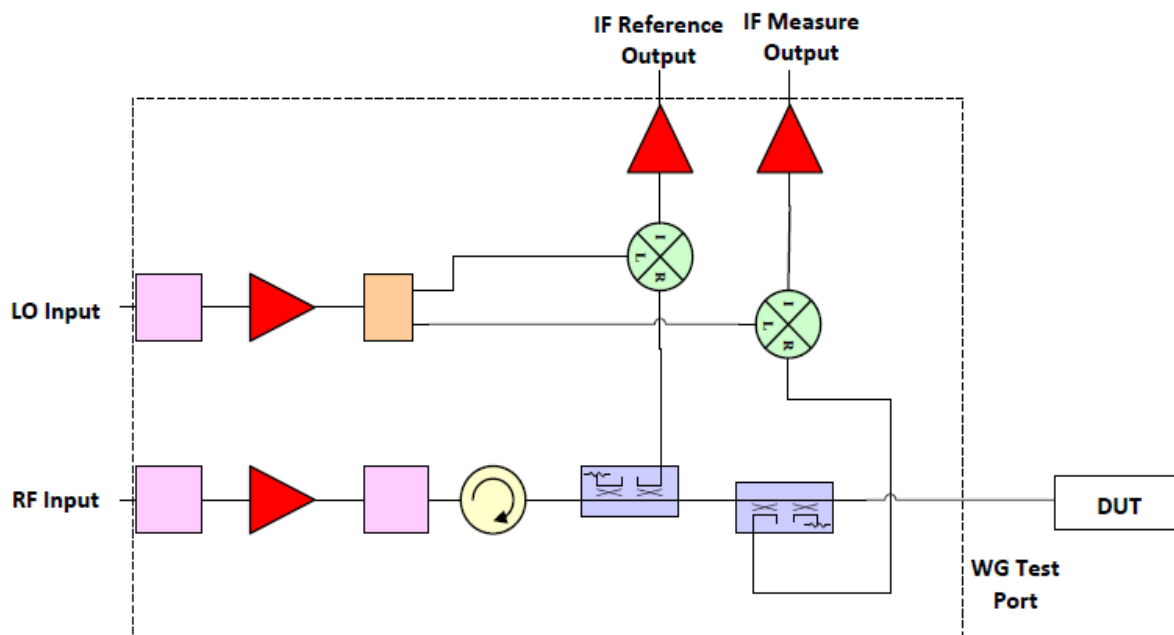
Item	Specification
RF Test Port	WR-12 Waveguide with UG387/U Anti-Cocking Flange
RF and LO Source Input Ports	SMA(F), SMA(F)
IF Output Ports	SMA(F)
AC Power Receptacle	IEC 320-C14
Finish	Black Anodized
Weight	8 Lbs Each
Size	11.11" (L) x 6.15" (W) x 4.56" (H)
Outline	TO-SE



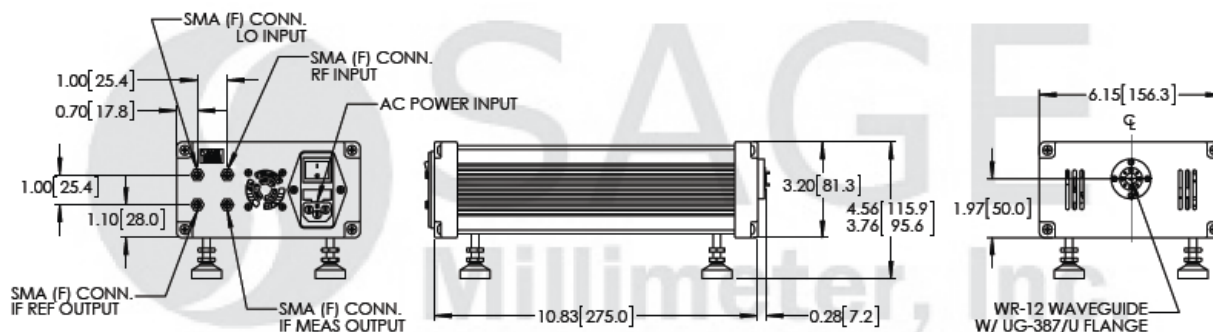
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

E Band VNA Frequency Extender

Simplified Block Diagram (Half):



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



Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Two identical units are required to complete the full S parameter test set.
- The VNA to be extended shall have four port and dual source options.

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 degrade performance and may damage the device.

