泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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D–Band VNA Frequency Extender

110-170GHz/WR-6.5

Model: TLVE-110170-N5

TLVE-110170-N5 frequency extenders are a dedicated Test & Measurement solution for extending the range of your Vector Network Analyzer (VNA) to 110GHz to 170GHz.

Features:

- Frequency range: 110-170GHz
- Port Output Power (No Attenuation): 0dBm Typ
- Dynamic Range @10Hz BW: 110dB Typ
- Unconditional stability

Applications:

- VNA Frequency Extension
- Antenna measurements
- Material characterisation

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	110		170	GHz
测试端口输出功率 Test Port Output Power		0		dBm
测试端口输入功率 Test Port Input Power (Damage)			20	dBm
输出功率衰减 Output Power Attenuation (Option:Variable attenuators)	0		30	dB
动态范围 Dynamic Range @ 10Hz BW		110		dB
射频输入频率 RF Input Frequency	9.16		14.17	GHz
射频输入功率 RF Input Power	3	5	7	dBm
RF倍频次数 RF Multiplication Factor		12		
本振输入频率 LO Input Frequency	9.16		14.17	GHz
本振输入功率 LO Input Power	3	5	7	dBm
LO倍频次数 LO Multiplication Factor		12		
中频频率范围 IF Frequency Range	1		1000	MHz
有效方向性 Effective Directionality@10Hz BW	45	50		dB
有效负载匹配 Payload Matching@10Hz BW	50	55		dB
反射追踪 ReflectionTracking@10Hz BW		±0.05	±0.1	dB
传输追踪 Transmission Tracking@10Hz BW		±0.05	±0.1	dB
幅度稳定度 Amplitude stability@300 Hz BW		±0.1		dB
相位稳定度 Phase Stability@300Hz BW		±4		°

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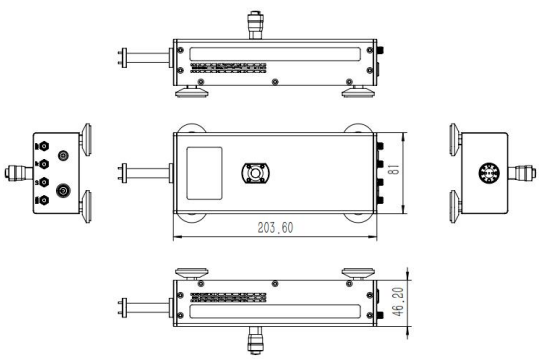
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value
RF/LO输入接口 RF/LO Input Connector	SMA Female
MEA/REF IF输出接口 MEA/REF IF Output Connector	SMA Female
测试端口 Test Port Connector	WR-6.5/UG-387/U
供电 Power Supply Pin	FGG 0B 4 Core
尺寸 Size	203.6*81*46.2mm

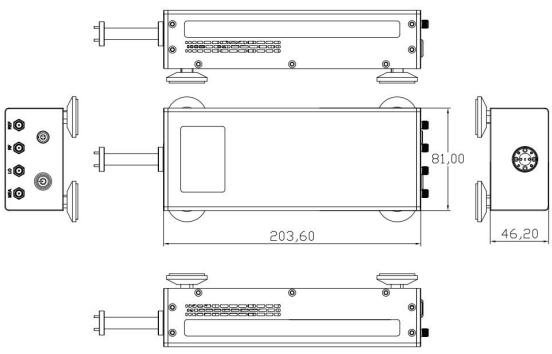
绝对最大值 Absolute Maximum Ratings :

描述 Description	参数 Parameter	单位 Units
测试端输入功率 Test Port Input Power	+20	dBm
RF/LO端损坏等级 RF/LO Port Damage Level	+10	dBm
供电偏置 Supply Bias Voltage	+240 V AC	
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

外形图 Outline Drawing: Unit:mm



TLVE-110170-N5-A



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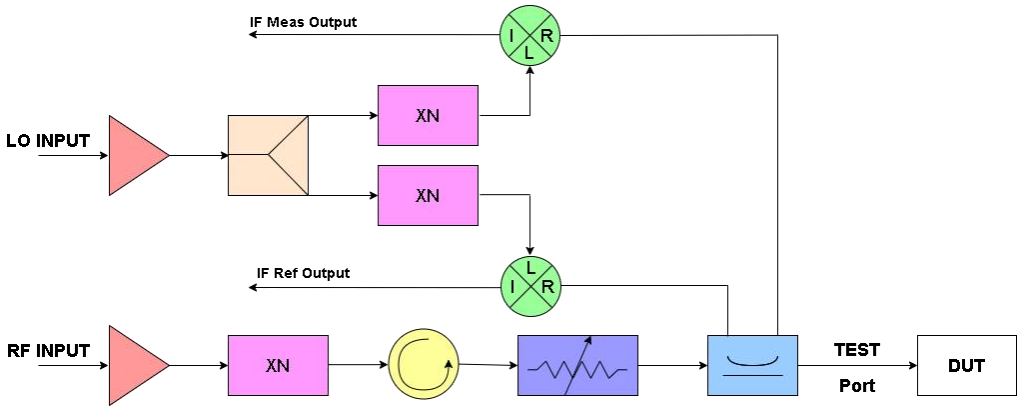
原理框图 Block Diagrams:



环境和物理特性 Envrionmental And Physical Characteristics:

描述 Description	参数 Parameter	单位 Units
操作温度 Operating Temerature	0 To +45	℃
存储温度 Storage Temerature	-55 to +125	℃
材质 Material	Al	
表面处理 Finish	Gray spray paint	

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLVE-110170-N5	D-band VNA Frequency Extender, 110-170GHz, Output Power: 0dBm typ; Dynamic Range: 110dB@10Hz BW typ; Magnitude Stability @300Hz BW: ±0.1dB, Phase Stability @300Hz BW: ±4°	Rev.1.1
TLVE-110170-N5-A	D-band VNA Frequency Extender, 110-170GHz, Output Power: 0dBm typ; Dynamic Range: 110dB@10Hz BW typ; Magnitude Stability @300Hz BW: ±0.1dB, Phase Stability @300Hz BW: ±4°,with Micrometer driven variable attenuators	Rev.1.1

随货配件 Components Included:

标准型号 Part Number	描述 Description	数量 Quantity
S1-SMAMSMAM-1.2m	COAXIAL CABLE ASSEMBLY	4 PCS
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS

Notes:

1. Dimensions and specifications may be changed without prior notice.
2. Standard Warranty:three years.

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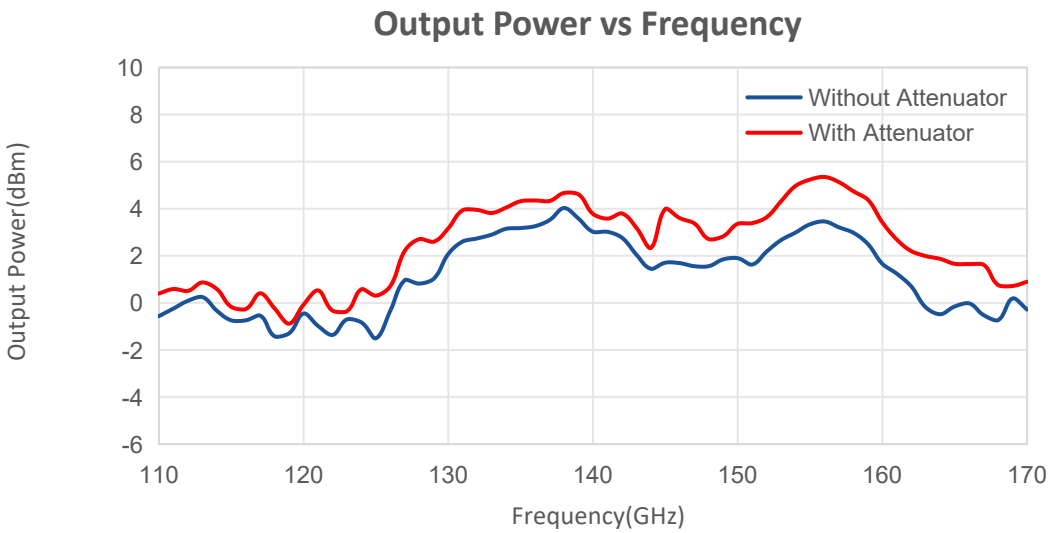
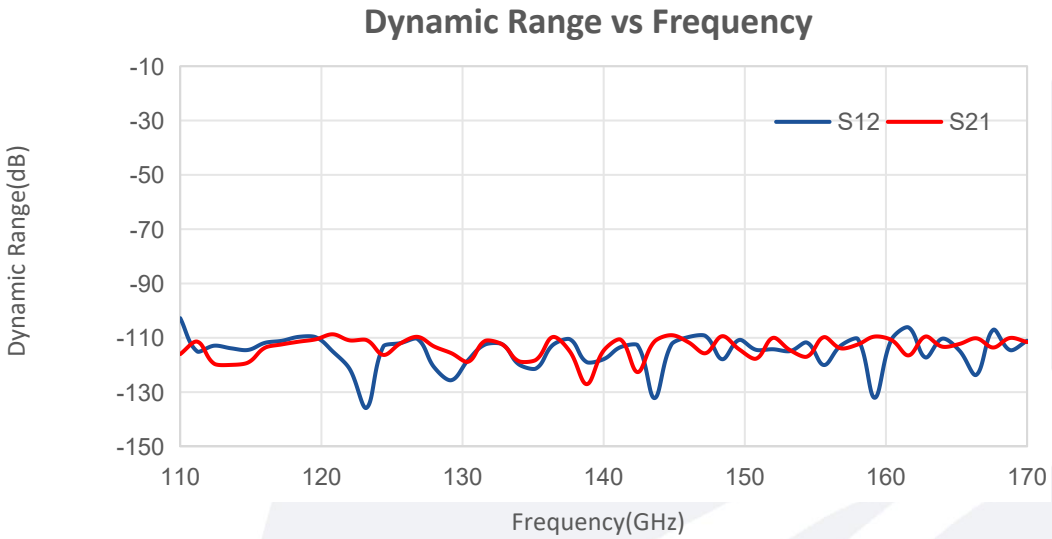
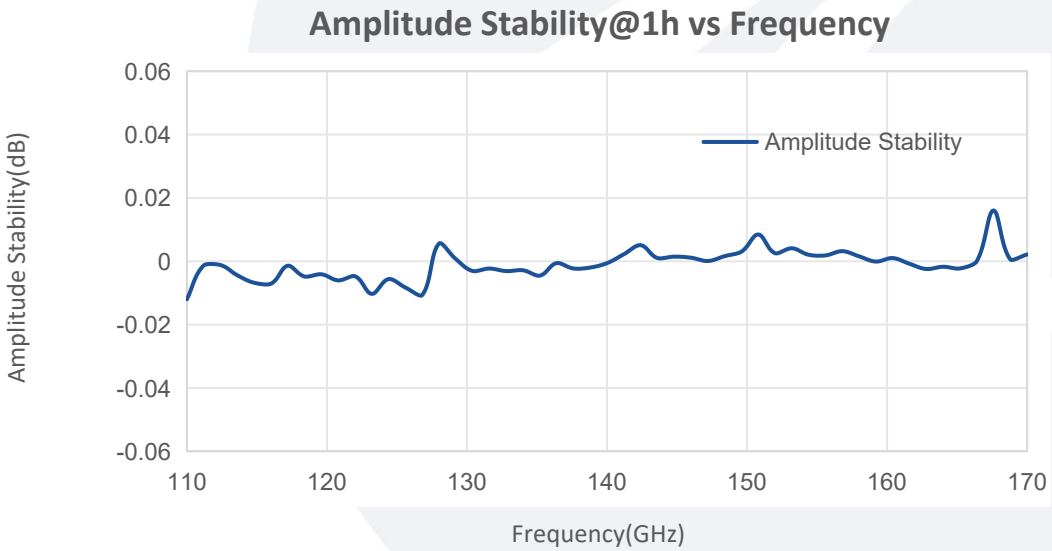
典型曲线 Typical Performance Data:







Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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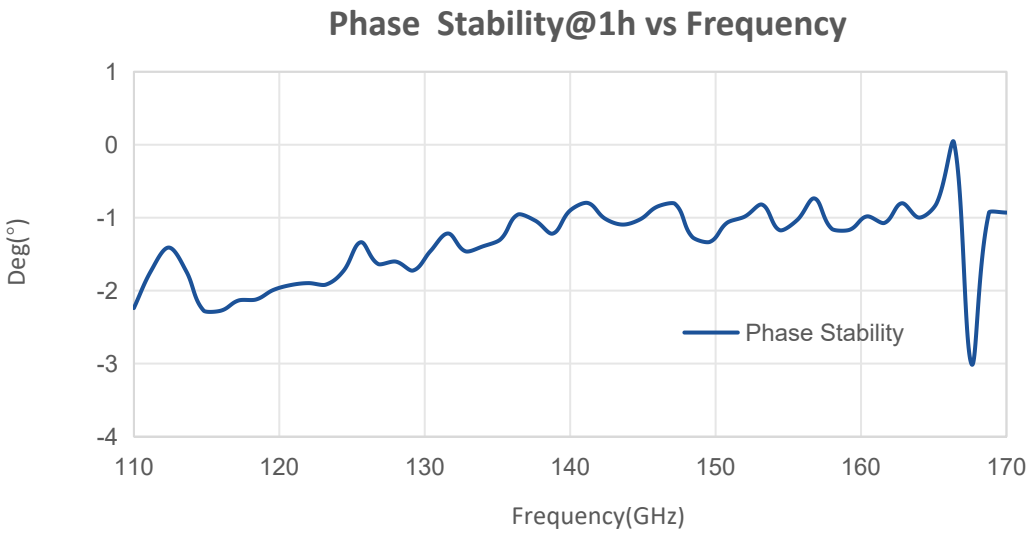

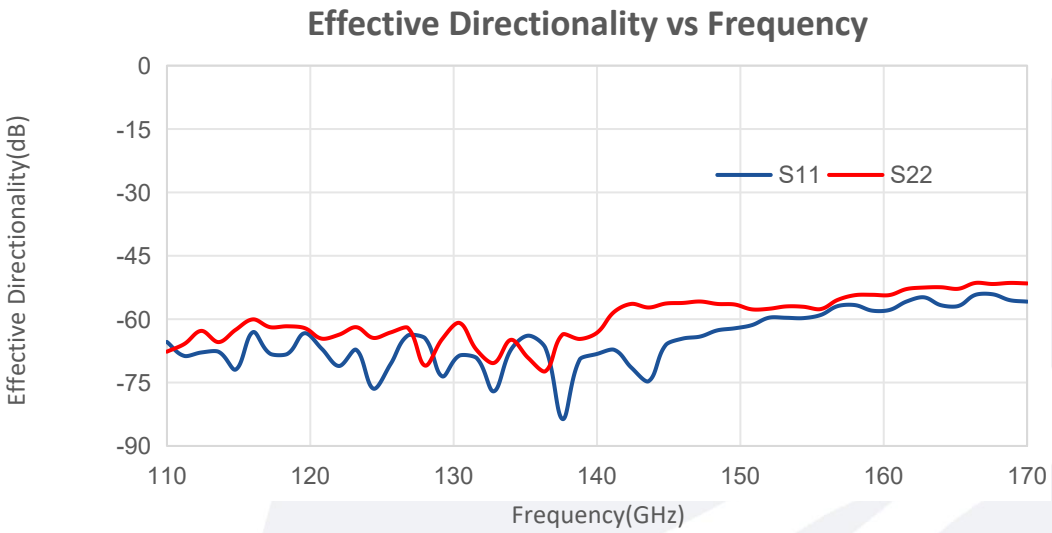

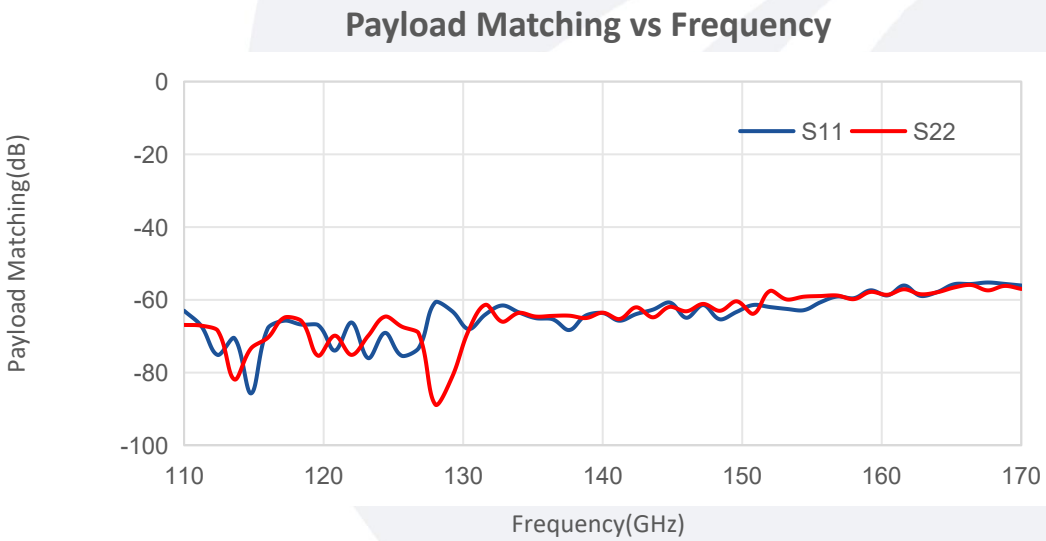

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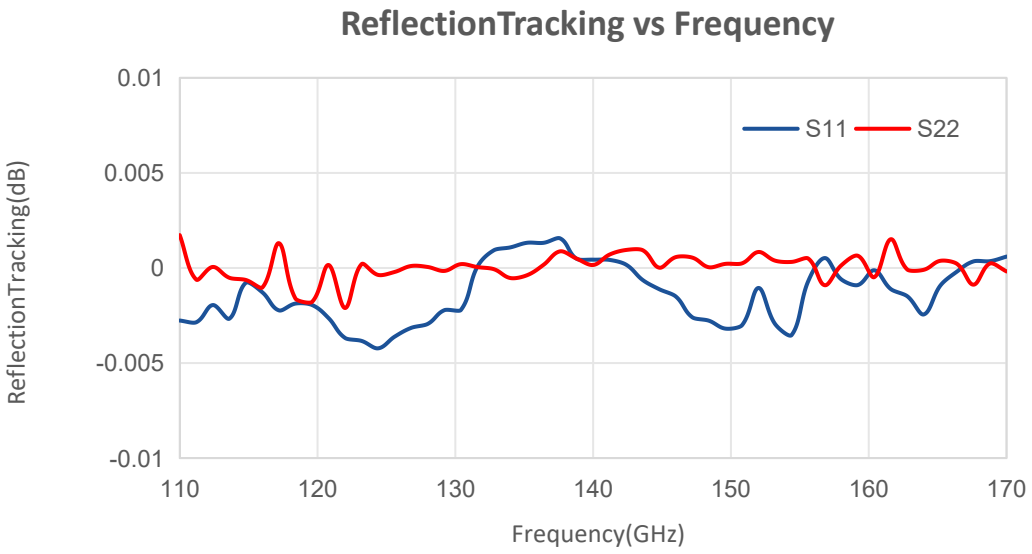

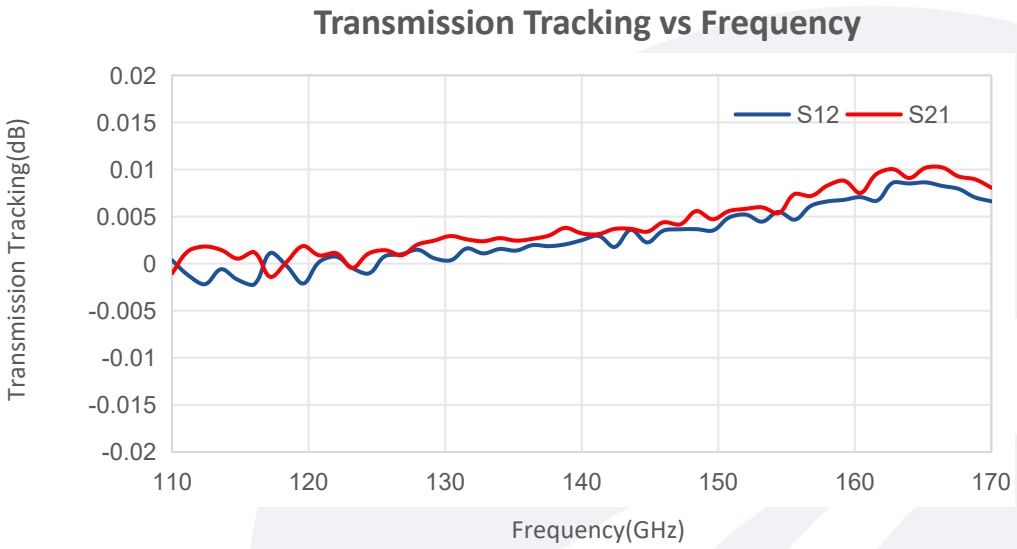

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