

W-Band VNA Frequency Extender 75-110GHz/WR-10

Model: TLVE-75110-10-S1

TLVE-75110-10-S1 frequency extenders are a dedicated Test & Measurement solution for extending the range of your Vector Network Analyzer (VNA) to 75-110 GHz.

Features:

- Frequency range: 75-110GHz
- Port Output Power (No Attenuation): 10dBm 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	75		110	GHz
测试端口输出功率 Test Port Output Power		10		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	100	110		dBc
方向性 Directivity		30		dB
射频输入频率 RF Input Frequency	12..5		18.33	GHz
射频输入功率 RF Input Power	3	5	7	dBm
RF倍频次数 RF Multiplication Factor		6		
本振输入频率 LO Input Frequency	12.5		18.33	GHz
本振输入功率 LO Input Power	3	5	7	dBm
LO倍频次数 LO Multiplication Factor		6		
中频频率范围 IF Frequency Range	1		1000	MHz
幅度稳定度 Amplitude stability@300 Hz BW		±0.1		dB
相位稳定度 Phase Stability@300Hz BW		±1		°

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-10/UG-387/U
供电 Power Supply Pin	FGG 0B 4 Core
尺寸 Size	185*81*46.2mm

绝对最大值 Absolute Maximum Ratings :

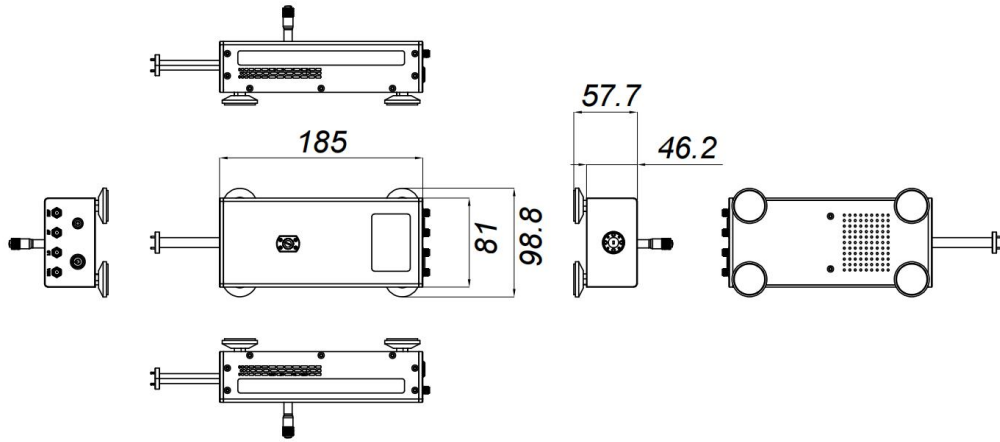
参数 Parameter	指标 Value	单位 Units
测试端输入功率 Test Port Input Power	+20	dBm
RF/LO端损坏等级 RF/LO Port Damage Level	+10	dBm
供电偏置 Supply Bias Voltage	+240 V AC	
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

环境和物理特性 Envriomental And Physical Characteristics:

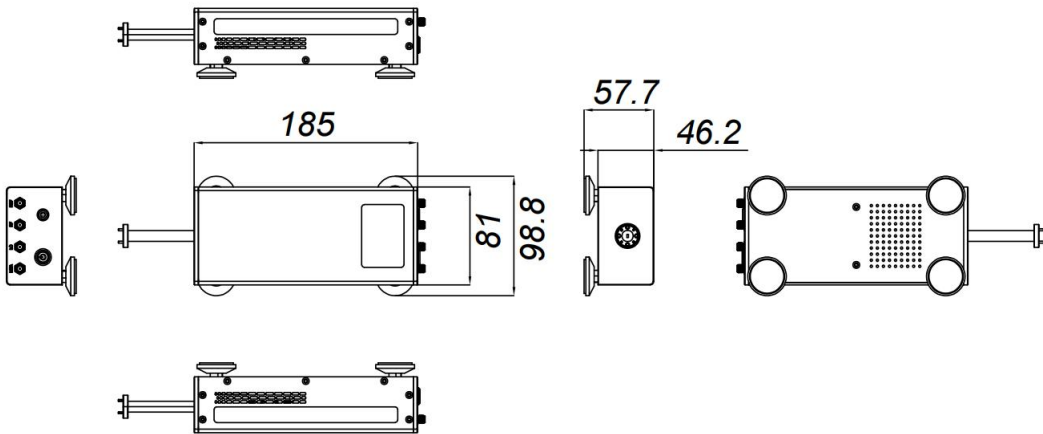
描述 Description	参数 Parameter	单位 Units
操作温度 Operating Temerature	0 to +45	°C
存储温度 Storage Temerature	-55 to +125	°C
材质 Material	Al	
表面处理 Finish	Gray spray paint	

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm

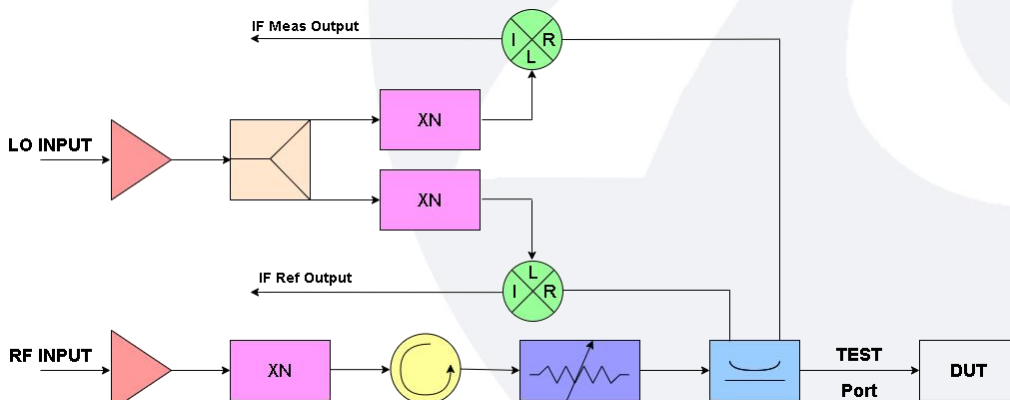


TLVE-75110-10-S1-A



TLVE-75110-10-S1

原理框图 Block Diagrams:



订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLVE-75110-10-S1	W-band VNA Frequency Extender, 75-110 GHz, Output Power: 10dBm typ; Dynamic Range: 110dB typ; Magnitude Stability @300Hz BW: $\pm 0.1\text{dB}$, Phase Stability @300Hz BW: $\pm 1^\circ$	Rev.1.0
TLVE-75110-10-S1-A	W-band VNA Frequency Extender, 75-110GHz, Output Power: 10dBm typ; Dynamic Range: 110dB typ; Magnitude Stability @300Hz BW: $\pm 0.1\text{dB}$, Phase Stability @300Hz BW: $\pm 1^\circ$, with Micrometer driven variable attenuators	Rev.1.0

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
Calibration kit	WR10	1 Pcs

Notes:

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