

D-Band VNA Frequency Extender

110-170GHz/WR-6.5

Model: TLTE-110170-N5/TLRE-110170

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

Features:

- Frequency range: 110-170GHz
- Port Output Power: 0dBm Typ
- Dynamic Range @10Hz BW: 120dB 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
动态范围 Dynamic Range @10Hz BW	110	120		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			
接收端变频损耗 Conversion Loss of Receiver		10		dB
中频频率范围 IF Frequency Range	1		1000	MHz
幅度稳定度 Amplitude Stability @300Hz BW		±0.2		dB
相位稳定度 Phase Stability @300Hz BW		±4		°

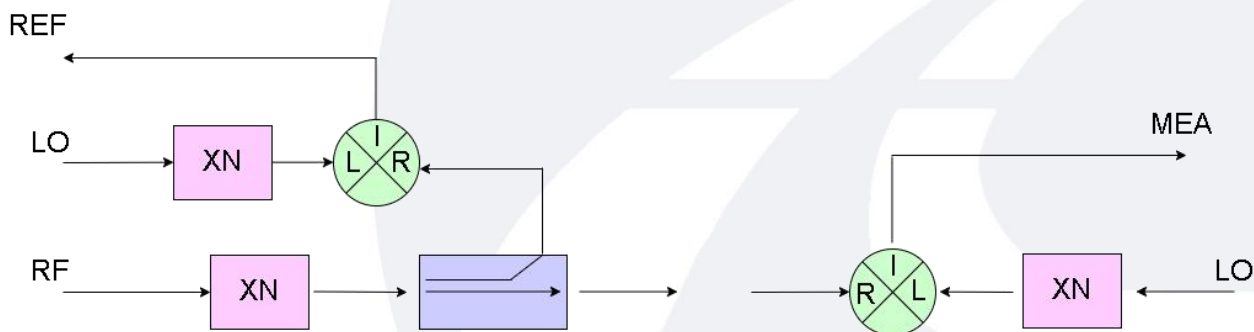
机械特性 Mechanical Specifications:

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

绝对最大值 Absolute Maximum Ratings :

描述 Description	参数 Parameter	单位 Units
RF/LO端损坏等级(发射参考模块) RF/LO Port Damage Level (Transmit Extender)	+10	dBm
RF端损坏等级(接收模块) RF Port Damage Level (Receiver Extender)	0	dBm
LO端损坏等级(接收模块) LO Port Damage Level (Receiver Extender)	+10	dBm
供电偏置 Supply Bias Voltage	+240 V AC	
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

原理框图 Block Diagrams:



环境和物理特性 Envrionmental And Physical

描述 Description	参数 Parameter	单位 Units
操作温度 Operating Temperature	0 to +45	°C
存储温度 Storage Temperature	-55 to +125	°C
材质 Material	Aluminum	
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
TLTE-110170-N5	D-band VNA Frequency Extender,110-170GHz,Output Power: 0dBm typ, Dynamic Range: 120dB typ, Magnitude Stability @300Hz BW:±0.1dB,Phase Stability @300Hz BW:±2°	Rev.1.1
TLRE-110170	D-band Receiver Module,110-170GHz,Conversion Loss:10 dB typ.	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.