泰莱微波
Talent Microwave

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J–Band VNA Frequency Extender

220-330GHz/WR-3.4 Model: TLVE-220330-N8-A/TLVE-220330-N8

TLVE-220330-N8-A/TLVE-220330-N8 frequency extenders are a dedicated Test & Measurement solution for extending the range of your Vector Network Analyzer (VNA) to 220-330 GHz.

Features:

- Frequency range: 220-330GHz
- Port Output Power (No Attenuation): -10dBm Typ
- Dynamic Range @10Hz BW: 90dB 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	220		330	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
未校准的原始端口回波 Uncalibrated raw port Return Loss			-10	dB
动态范围 Dynamic Range @10Hz BW	90			dB
方向性 Directivity	10			dB
射频输入频率 RF Input Frequency	12.22		18.33	GHz
射频输入功率 RF Input Power	3	5	7	dBm
RF倍频次数 RF Multiplication Factor		18		
本振输入频率 LO Input Frequency	9.16		13.75	GHz
本振输入功率 LO Input Power	3	5	7	dBm
LO倍频次数 LO Multiplication Factor		24		
中频频率范围 IF Frequency Range	1		1000	MHz
幅度稳定度 Amplitude stability@300 Hz BW			±0.25	dB
相位稳定度 Phase Stability@300Hz BW			±3.5	°

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电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
有效方向性 Effective Directionality @10Hz BW	30			dB
有效负载匹配 Payload Matching @10Hz BW	40			dB
反射追踪 ReflectionTracking @10Hz BW			±0.3	dB
传输追踪 Transmission Tracking @10Hz BW			±0.15	dB
端口输出谐波抑制 Output Harmonic Suppression	10			dBc

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-3.4/UG-387/U
供电 Power Supply Pin	FGG 0B 4 Core
尺寸 Size	240*93.2*68mm

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
单个模块功耗 Power Consumption of a Single Module	15	W
供电偏置 Supply Bias Voltage	+240 V AC	
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

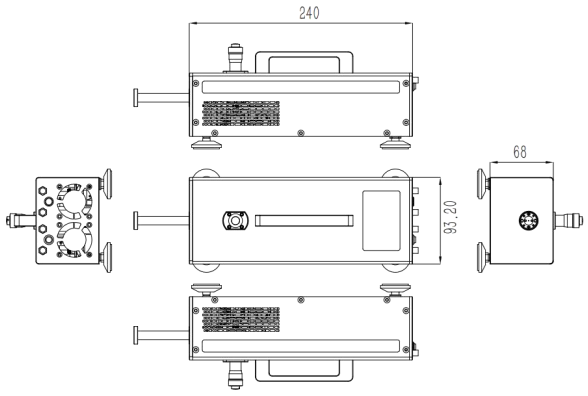
环境和物理特性 Envrionmental And Physical Characteristics:

参数 Parameter	指标 Value	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	

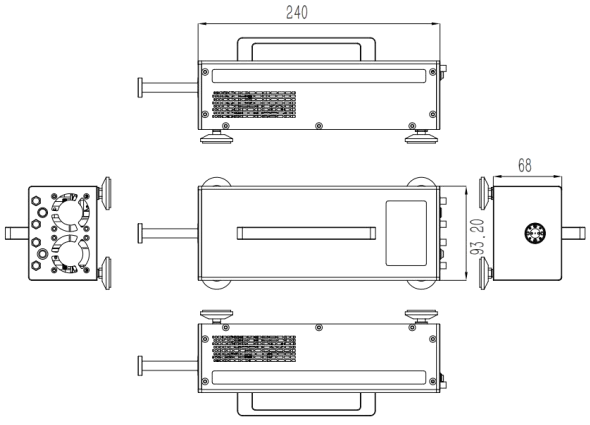
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外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm

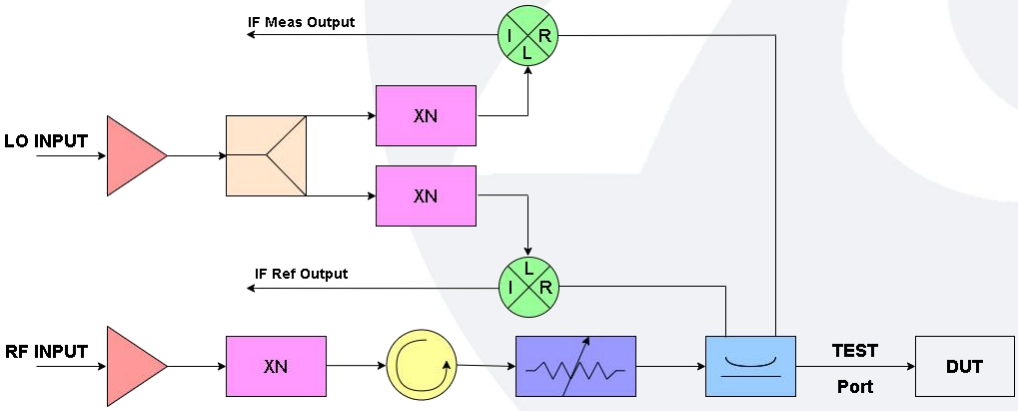


TLVE-220330-N8-A



TLVE-220330-N8

原理框图 Block Diagrams:



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订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLVE-220330-N8	J-band VNA Frequency Extender, 220-330 GHz, Output Power: -10dBm min; Dynamic Range: 90dB@10Hz BW min; Magnitude Stability @300Hz BW: ±2.5dB, Phase Stability @300Hz BW: ±3.5°	Rev.1.0
TLVE-220330-N8-A	J-band VNA Frequency Extender, 220-330 GHz, Output Power: -10dBm min; Dynamic Range: 90dB@10Hz BW min; Magnitude Stability @300Hz BW: ±2.5dB, Phase Stability @300Hz BW: ±3.5°,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	WR3.4	1 PCS

Notes:

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