Suzhou Talent Microwave,Inc
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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

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	220		330	GHz
Test Port Output Power	-10			dBm
Test Port Input Power (Damage)			20	dBm
Uncalibrated raw port Return Loss			-10	dB
Dynamic Range @10Hz BW	90			dB
Directivity	10			dB
RF Input Frequency	12.22		18.33	GHz
RF Input Power	3	5	7	dBm
RF Multiplication Factor		18		
LO Input Frequency	9.16		13.75	GHz
LO Input Power	3	5	7	dBm
LO Multiplication Factor		24		
IF Frequency Range	1		1000	MHz
Amplitude stability@300 Hz BW			±0.25	dB
Phase Stability@300Hz BW			±3.5	°

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Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Effective Directionality @10Hz BW	30			dB
Payload Matching @10Hz BW	40			dB
ReflectionTracking @10Hz BW			±0.3	dB
Transmission Tracking @10Hz BW			±0.15	dB
端口输出谐波抑制 Output Harmonic Suppression	10			dBc

Mechanical Specifications:

Parameter	Value
RF/LO Input Connector	SMA Female
MEA/REF IF Output Connector	SMA Female
Test Port Connector	WR-3.4/UG-387/U
Power Supply Pin	FGG 0B 4 Core
Size	240*93.2*68mm

Absolute Maximum Ratings :

Parameter	Value	Units
Test Port Input Power	+20	dBm
RF/LO Port Damage Level	+10	dBm
Power Consumption of a Single Module	15	W
Supply Bias Voltage	+240 V AC	
ESD sensitivity (HBm)	Class 0, passed 150V	

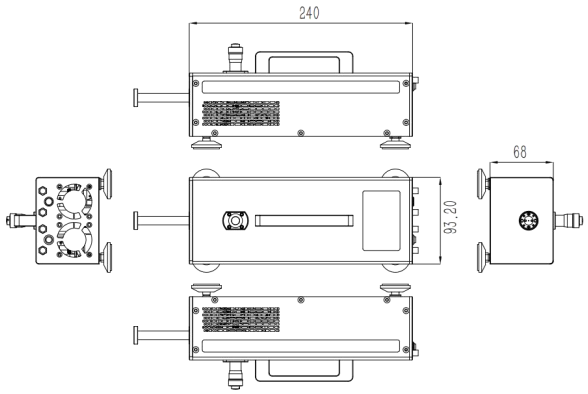
Envrionmental And Physical Characteristics:

Parameter	Value	Units
Operating Temerature	0 to +45	℃
Storage Temerature	-55 to +125	℃
Material	Al	
Finish	Gray spray paint	

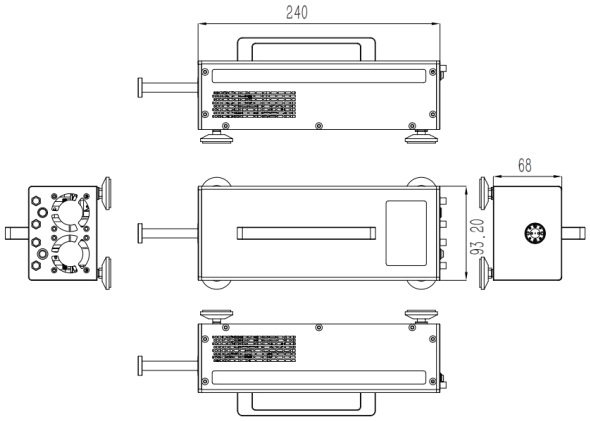
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Outline Drawing:

Unit:mm; Tolerance:±0.1mm

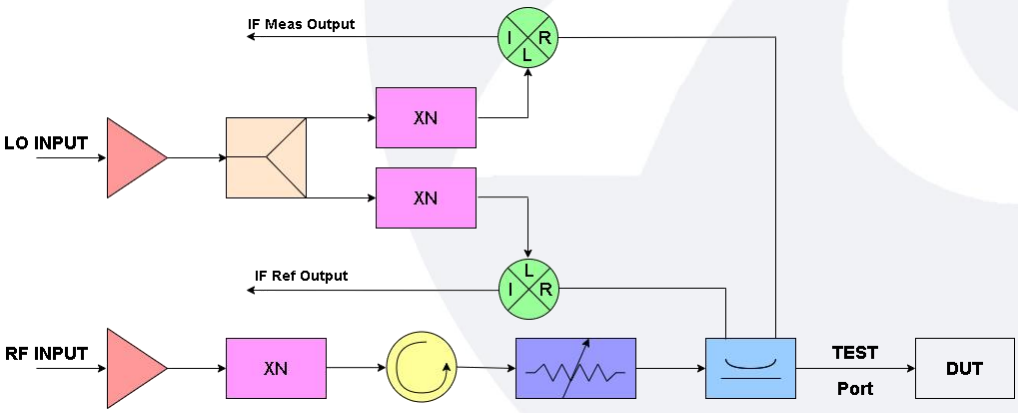


TLVE-220330-N8-A



TLVE-220330-N8

Block Diagrams:



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Ordering Information:

Part Number	Description	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

Components Included:

Part Number	Description	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.