

VNA Frequency Extender 330-500GHz/WR-2.2

Model: TLVE-330500-N9

TLVE-330500-N9 frequency extenders are a dedicated Test & Measurement solution for extending the range of your Vector Network Analyzer (VNA) to 330-500 GHz.

Features:

- Frequency range: 330-500 GHz
- Port Output Power (No Attenuation): -9dBm Typ
- Dynamic Range @10 Hz BW: 80dB Min
- Unconditional stability

Applications:

- VNA Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	330		500	GHz
Test Port Output Power		-9		dBm
Test Port Input Power (Damage)			20	dBm
Output Power Attenuation (Option:Variable attenuators)	0		30	dB
Dynamic Range @10Hz BW	80	90		dB
RF Input Frequency	9.16		13.88	GHz
RF Input Power	3	5	7	dBm
RF Multiplication Factor		36		
LO Input Frequency	13.75		20.83	GHz
LO Input Power	3	5	7	dBm
LO Multiplication Factor		24		
IF Frequency Range	1		1000	MHz
Magnitude Stability@300Hz BW		±0.8		dB
Phase Stability@300Hz BW		±10		°

Mechanical Specifications:

Parameter	Value
RF/LO Input Connector	SMA Female
MEA/REF IF Output Connector	SMA Female
Test Port Connector	WR-2.2/UG-387/U
Power Supply Pin	FGG 0B 4 Core
Size	240*83*68mm

Absolute Maximum Ratings :

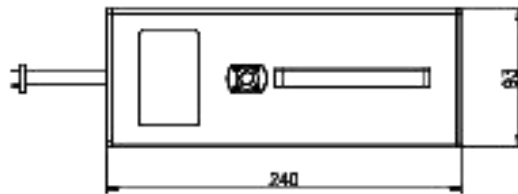
Parameter	Value	Units
Test Port Input Power	+10	dBm
Supply Bias Voltage	+240 V AC	
ESD sensitivity (HBm)	Class 0, passed 150V	

Envrionmental And Physical Characteristics:

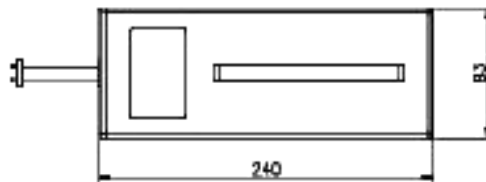
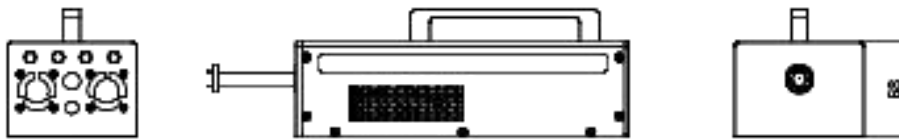
Parameter	Value	Units
Operating Temerature	0 to +45	°C
Storage Temperature	-55 to +125	°C
Material	Aluminum	
Finish	Gray spray paint	

Outline Drawing:

Unit:mm; Tolerance:±0.1mm

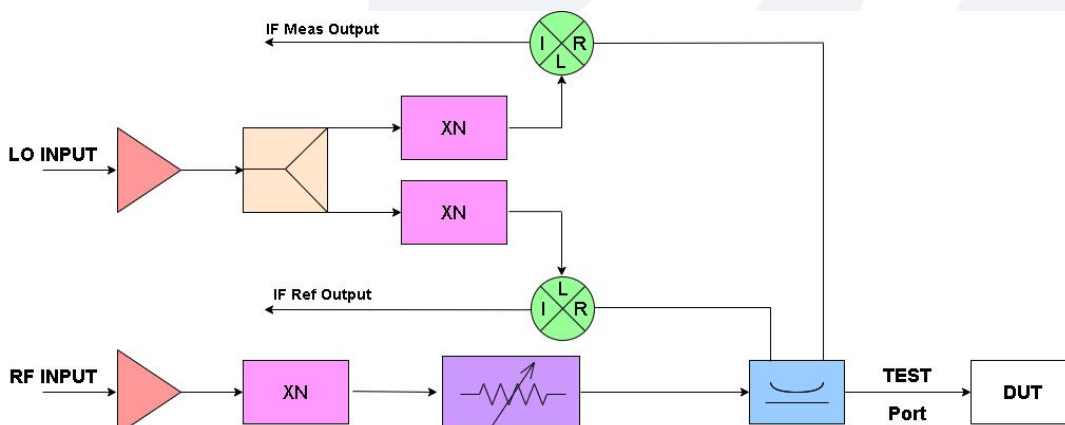


TLVE-330500-N9-A



TLVE-330500-N9

Block Diagrams:



Ordering Information:

Part Number	Description	Revision
TLVE-330500-N9	VNA Frequency Extender, 330-500GHz, Output Power:-9 dBm Typ., Dynamic Range:80dB Min	Rev.1.1
TLVE-330500-N9-A	VNA Frequency Extender, 330-500GHz, Output Power:-9 dBm Typ., Dynamic Range:80dB Min ,with Micrometer driven variable attenuators	Rev.1.1

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	Connector: WR-2.8/UG-387/U	1 PCS

Notes:

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