



TURVE-90140N3 frequency extenders are a dedicated Test & Measurement solution for extending the range of your Vector Network Analyzer (VNA) to 90-140 GHz.

Features:

- Ultra Wide Band: 90-140 GHz
- Port Output Power (No Attenuation): -3 dBm Typ
- Dynamic Range @ 10 Hz BW: 100dB Typ
- Unconditional stability

Applications:

- VNA Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

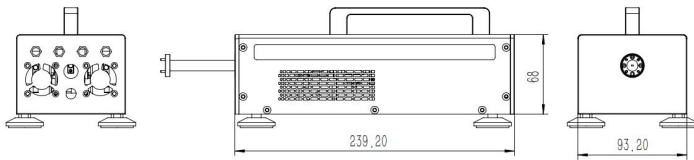
Parameter	Min	Typ	Max	Units
Frequency range	90		140	GHz
Test Port Output Power		-3		dBm
Test Port Input Power (Damage)			20	dBm
Output Power Attenuation (Option:Variable attenuators)	0		30	dB
Dynamic Range @ 10Hz BW		100		dB
Directivity		30		dB
RF Input Frequency	11.25		17.5	GHz
RF Input Power	+3	+5	+7	dBm
RF Multiplication Factor		8		
LO Input Frequency	11.25		17.5	GHz
LO Input Power	+3	+5	+7	dBm
LO Multiplication Factor		8		
IF Frequency Range	1		1000	MHz

Absolute Maximum Ratings :

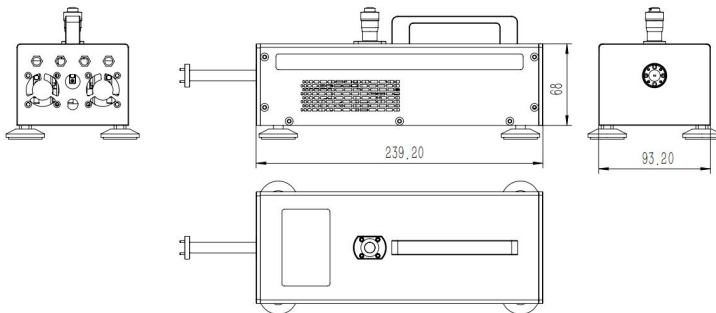
Description	Parameter	Units
Test Port Input Power	+20	dBm
RF/LO Port Damage Level	+10	dBm
ESD sensitivity (HBm)	Class 0, passed 150V	
Supply Bias AC Voltage	240	V

Outline Drawing:

Unit:mm



TURVE-90140N3



TURVE-90140N3 A

Block Diagrams:

Environmental And Physical Characteristics:

Description	Parameter	Units
Operating Temperature	0 To +45	°C
Storage Temperature	-55 to +125	°C
Material	Al	
Finish	Gray spray paint	
Size	239.2*68*93.2mm	

Connector Information:

Parameter	Value
RF Input Connector	SMA Female
LO Input Connector	SMA Female
IF Output Connector	SMA Female
Test Port Connector	WR-08/UG-387
Power Supply Pin	FGG 0B 4 Core

Ordering Information:

Part Number	Description	Revision
TURVE-90140N3	VNA Frequency Extender, 90-140 GHz, Output Power:-3dBm typ., Dynamic Range:100 dB typ., Magnitude Stability @ 300 Hz BW:±0.15dB,Phase Stability @ 300 Hz BW:3°	Rev.1.1
TURVE-90140N3	VNA Frequency Extender, 90-140GHz, Output Power:-3dBm typ., Dynamic Range:100 dB typ., Magnitude Stability @ 300 Hz BW:±0.15dB,Phase Stability @ 300 Hz BW:3°,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