

V-Band VNA Frequency Extender

50-75GHz/WR-15

Model: TLTE-050075-15/TLRE-050075

TLTE-050075-15/TLRE-050075 frequency extenders are a dedicated Test & Measurement solution for extending the range of your Vector Network Analyzer (VNA) to 50-75 GHz.

Features:

- Frequency range: 50-75GHz
- Port Output Power: 15dBm Typ
- Dynamic Range @10Hz BW: 130dB Typ
- Unconditional stability

Applications:

- VNA Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	50		75	GHz
Test Port Output Power		15		dBm
Dynamic Range @10Hz BW	110	130		dB
RF Input Frequency	12.5		18.75	GHz
RF Input Power	3	5	7	dBm
RF Multiplication Factor	4			
LO Input Frequency	12.5		18.75	GHz
LO Input Power	3	5	7	dBm
LO Multiplication Factor	4			
Conversion Loss of Receiver		10		dB
IF Frequency Range	1		1000	MHz
Amplitude Stability @300Hz BW		±0.1		dB
Phase Stability @300Hz BW		±2		°

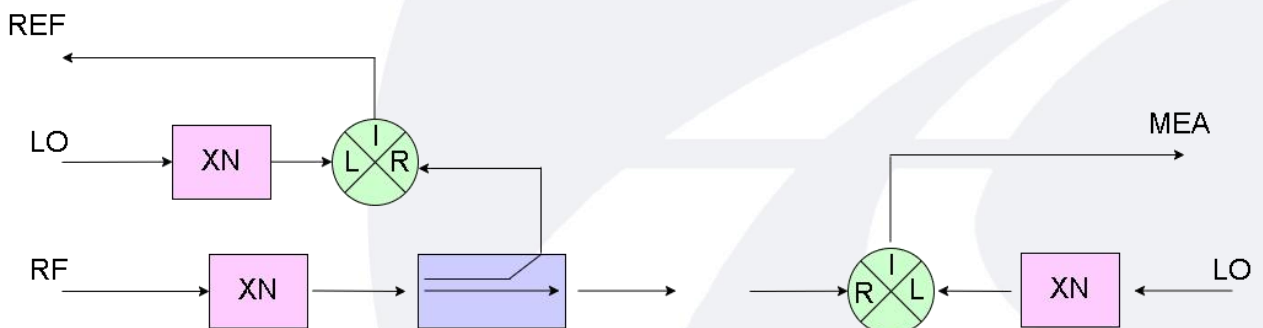
Mechanical Specifications:

Parameter	Value
RF/LO Input Connector	SMA Female
MEA/REF IF Output Connector	SMA Female
Test Port Connector	WR-15/UG-385/U
Power Supply Pin	FGG 0B 4 Core

Absolute Maximum Ratings :

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

Block Diagrams:



Envrionmental And Physical Characteristics:

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

Ordering Information:

Part Number	Description	Revision
TLTE-050075-15	V-band VNA Frequency Extender, 50-75GHz,Output Power: 15dBm typ, Dynamic Range: 130dB typ.,Magnitude Stability @300Hz BW:±0.1dB,Phase Stability @300Hz BW:±2°	Rev.1.1
TLRE-050075	V-band Receiver Module,50-75GHz,Conversion Loss:10 dB typ.	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

Notes:

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