

V-Band Frequency Extender 50-75GHz/WR-15

Model: TLSE-050075-1430-15

TLSE-050075-1430-15 frequency extenders are a dedicated Test & Measurement solution for extending the range of your signal source to 50-75 GHz.

Features:

- Frequency range: 50-75 GHz
- Output Power : 17 dBm Typ
- Low power consumption

Applications:

- Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	50		75	GHz
Output Power		17		dBm
Dynamic Range (Optional mechanical Attenuator)	0		30	dB
Input Frequency	12.5		18.75	GHz
Input Power	3	5	7	dBm
Multiplication Factor		4		
Harmonic Suppression			-35	dBc
Input VSWR		2		:1
Output VSWR		2		:1
power stability		±0.08		dB
Supply Voltage	100	220	240	V

Mechanical Specifications:

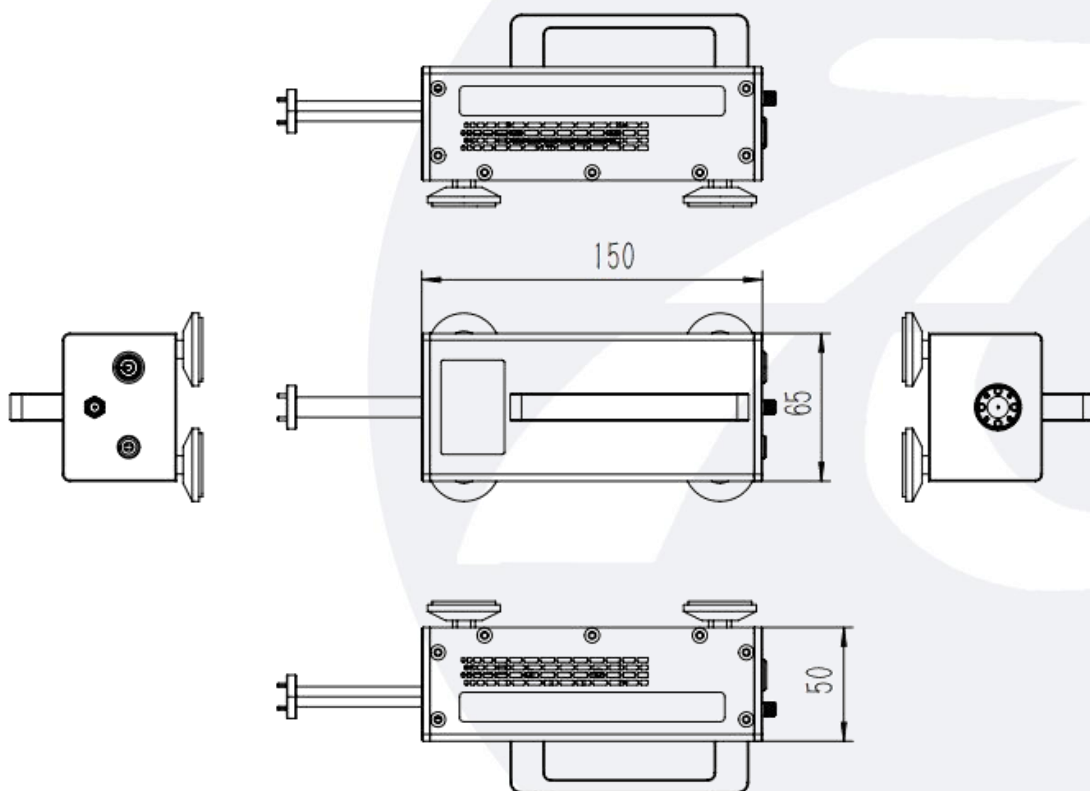
Parameter	Value	Units
Input Connector	SMA Female	
Output Connector	WR-15/UG-385/U	
Power Supply Pin	FGG 0B 4 Core	
Size	150*65*50	mm

Absolute Maximum Ratings:

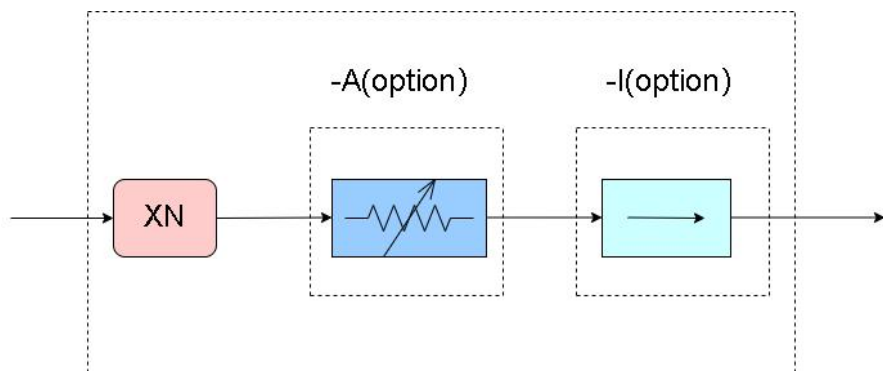
Parameter	Value
Supply Bias Voltage	+240 V AC
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Block Diagrams:



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

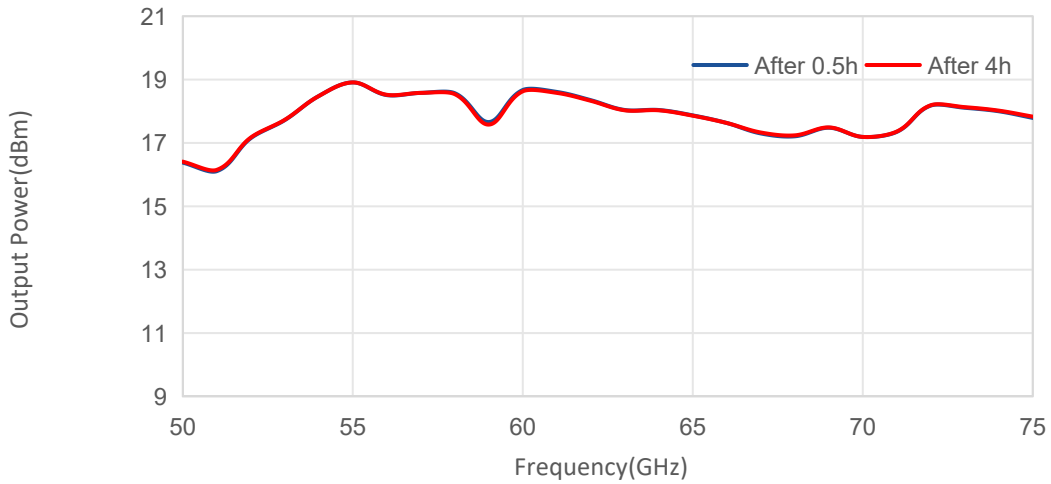
Part Number	Description	Option		Revision
		Optional Mechanical Attenuator	Isolation	
TLSE-050075-1430-15	V-Band Frequency Extender,X4,50-75GHz, Output Power: 17 dBm Typ	-A	-I	Rev.1.2

Components Included:

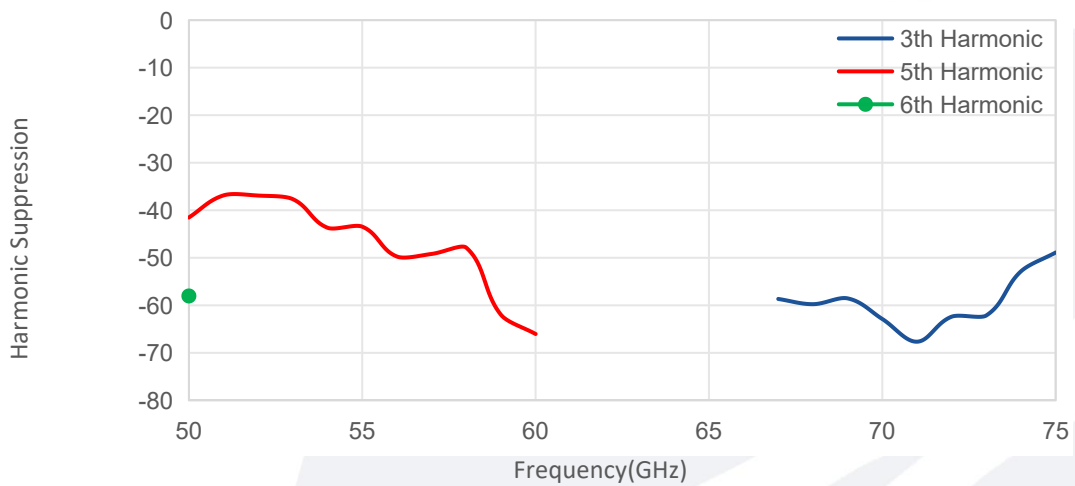
Part Number	Description	Quantity
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS

Typical Performance Data:

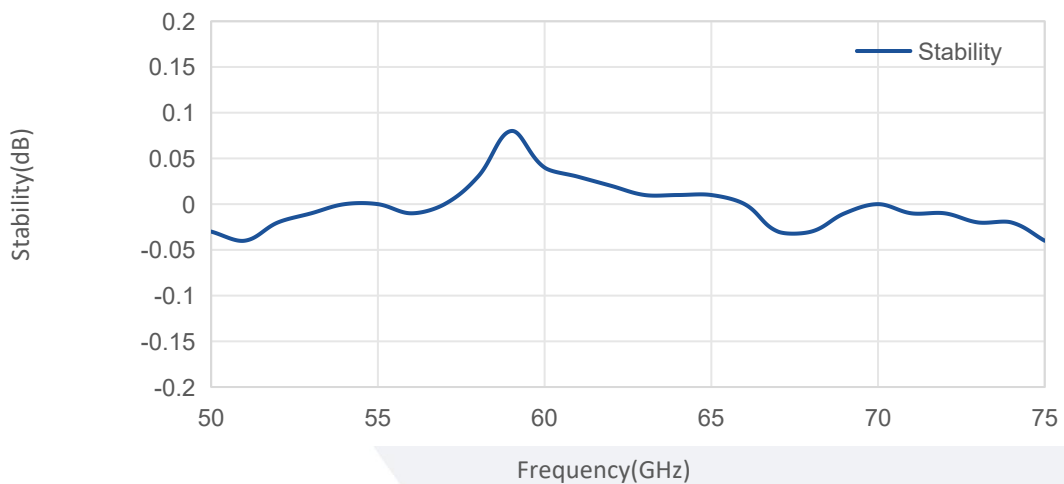
Output Power vs Frequency



Harmonic Suppression vs Frequency



Power Stability vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.