

W-Band Frequency Extender

75-110GHz /WR-10

Model: TLSE-075110-1030-10

TLSE-075110-1030-10 frequency extenders are a dedicated Test & Measurement solution for extending the range of your signal source to 75-110 GHz.

Features:

- Ultra Wide Band: 75-110 GHz
- Output Power : 13 dBm Typ
- Low power consumption

Applications:

- Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	75		110	GHz
Output Power		13		dBm
Dynamic Range (Optional mechanical Attenuator)		30		dB
Input Frequency	12.5		18.33	GHz
Input Power	3	5	7	dBm
Multiplication Factor		6		
Harmonic Suppression	25			dBc
Input VSWR		2		:1
Output VSWR		2		:1
power stability		±0.08		dB

Mechanical Specifications:

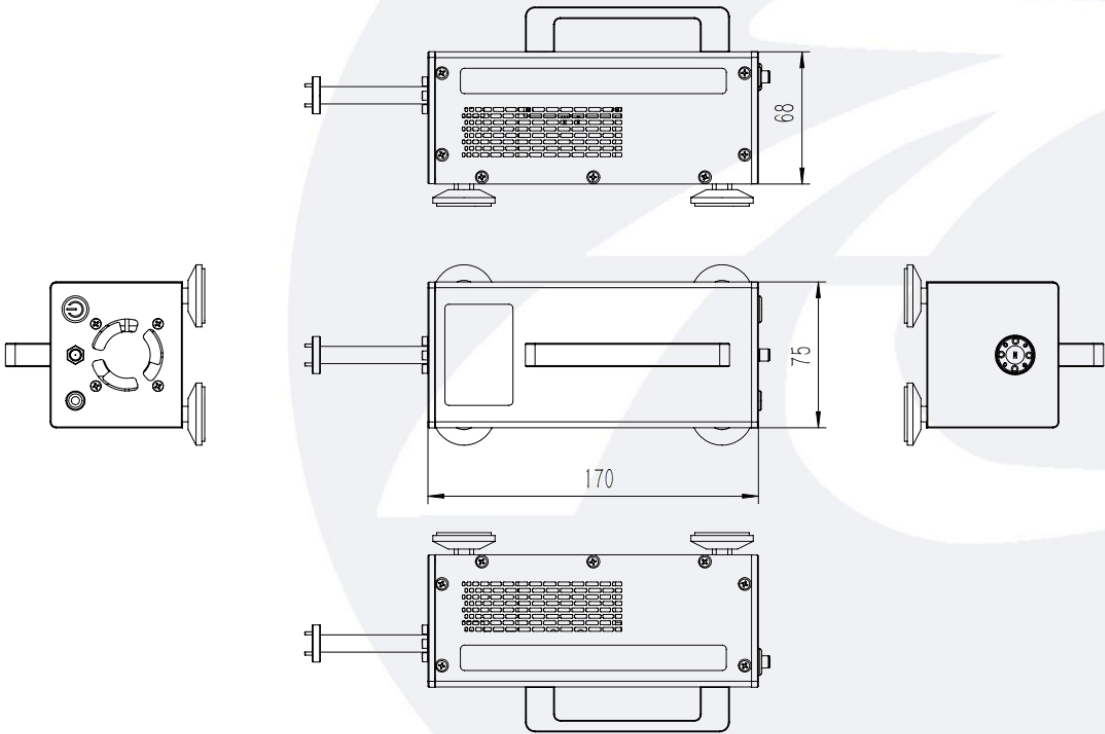
Parameter	Value	Units
Input Connector	SMA Female	
Output Connector	WR-10/UG-387/U	
Power Supply Pin	FGG 0B 4 Core	
Size	170*75*68	mm

Absolute Maximum Ratings:

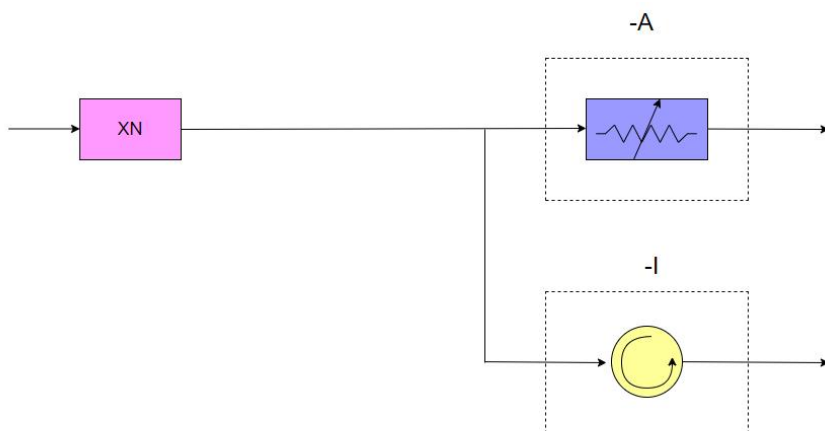
Parameter	Value
Supply Bias Voltage	+240 V AC
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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:

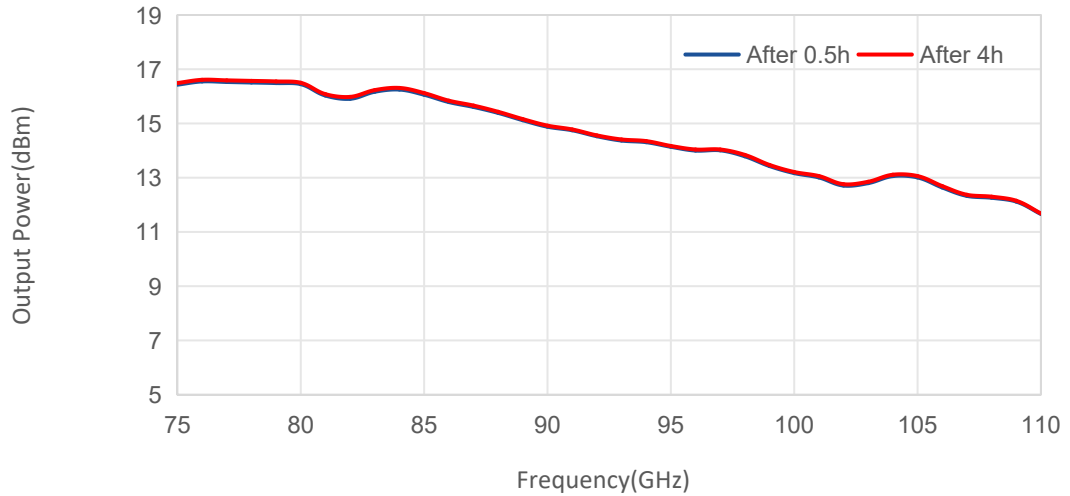
Part Number	Description	Option		Revision
		Optional Mechanical Attenuator	Isolation	
TLSE-075110-1030-10	W-Band Frequency Extender,X6,75-110GHz, Output Power: 13 dBm	-A	-I	Rev.1.2

Components Included:

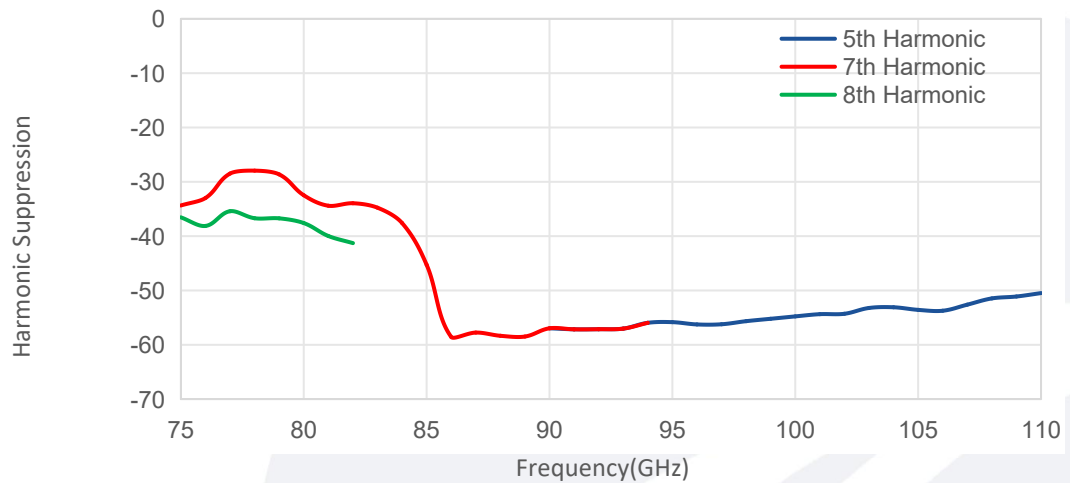
Part Number	Description	Quantity
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS

Typical Performance Data:

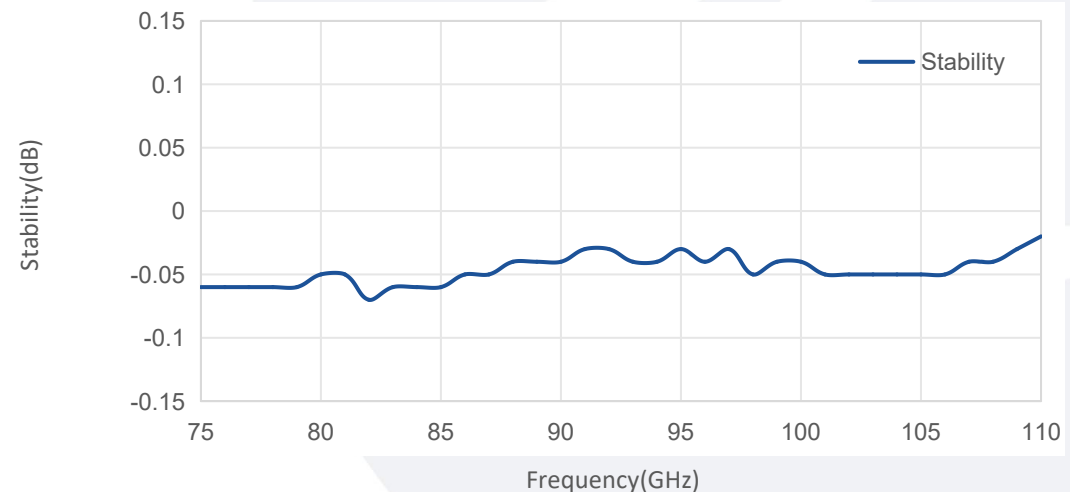
Output Power vs Frequency



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, P1dB test points are taken at intervals of 5 GHz for curve testing..