

U-Band Frequency Extender 40-60GHz /WR-19

Model: TLSE-040060-1430-19

TLSE-040060-1430-19 frequency extenders are a dedicated Test & Measurement solution for extending the range of your signal source to 40-90 GHz.

Features:

- Ultra Wide Band: 40-90 GHz
- Output Power : 14 dBm Typ
- Low power consumption

Applications:

- Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	40		60	GHz
Output Power		14		dBm
Dynamic Range (Optional mechanical Attenuator)		30		dB
Input Frequency	10		15	GHz
Input Power	3	5	7	dBm
Multiplication Factor		4		
Input VSWR		2		:1
Output VSWR		2		:1

Mechanical Specifications:

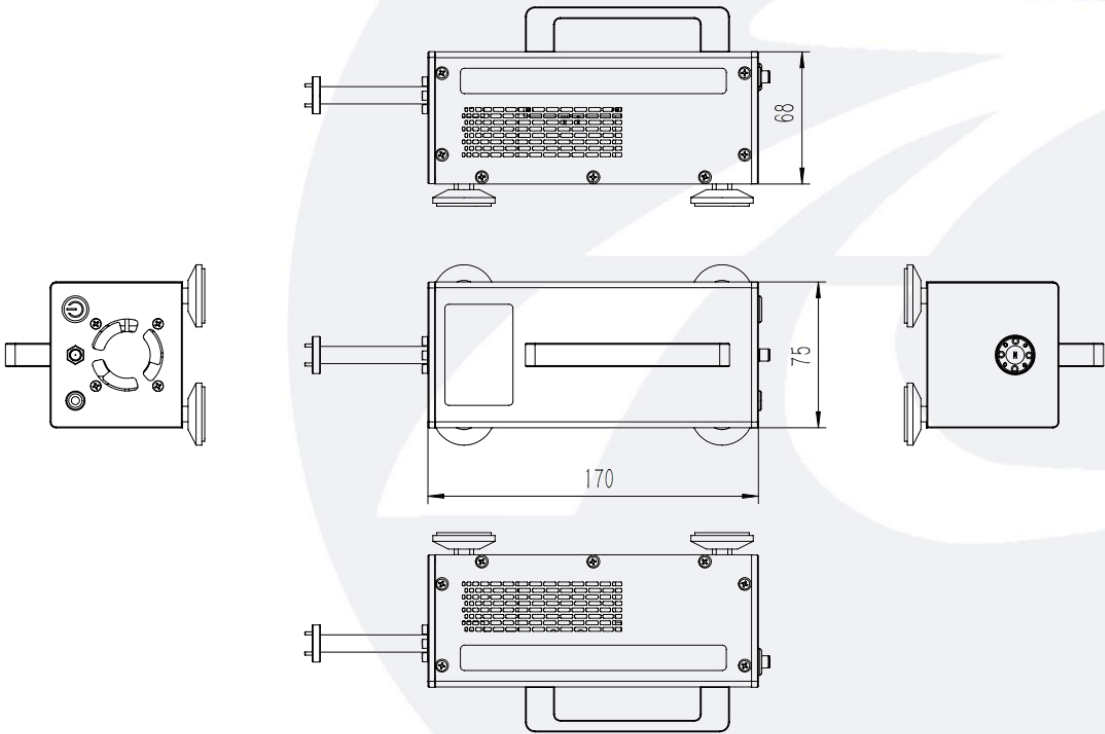
Parameter	Value	Units
Input Connector	SMA Female	
Output Connector	WR-19/UG-383/U	
Power Supply Pin	FGG 0B 4 Core	
Size	170*75*68	mm

Absolute Maximum Ratings:

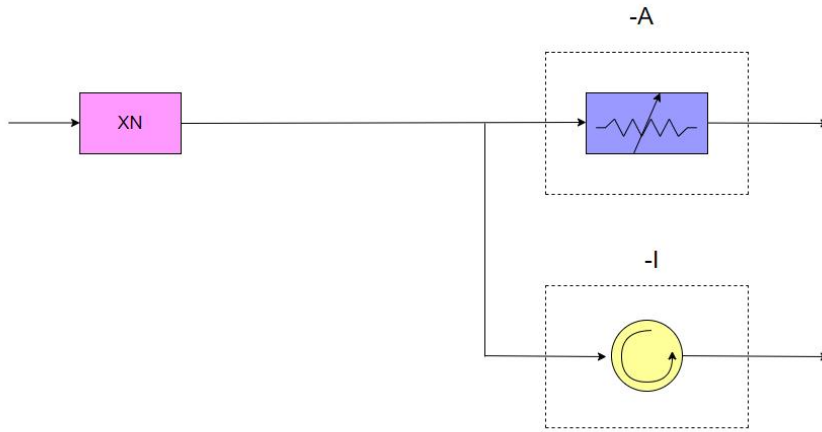
Parameter	Value
Supply Bias Voltage	+240 V AC
RF Input Power	+10 dBm
ESD sensitivity (HBM)	Class 0, passed 150V

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:

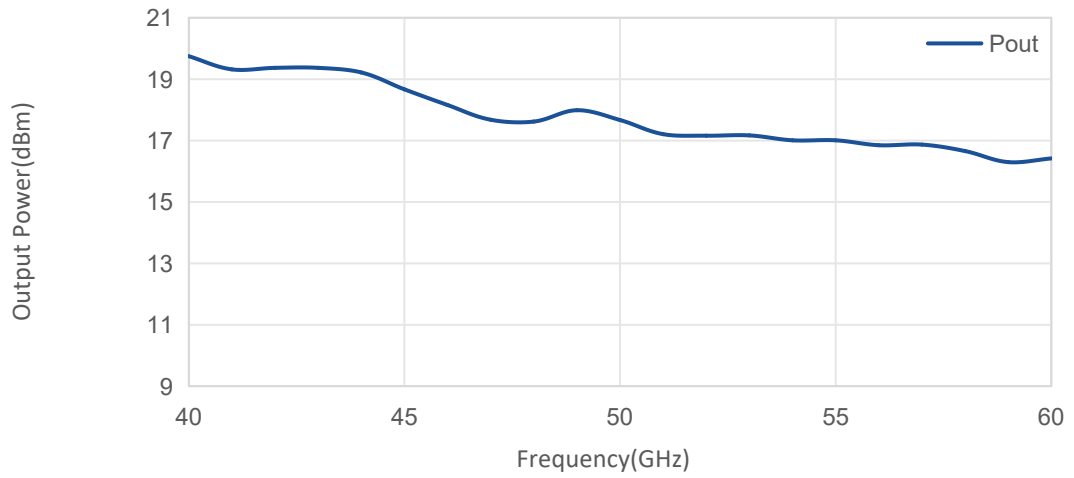
Part Number	Description	Option		Revision
		Optional Mechanical Attenuator	Isolation	
TLSE-040060-1430-19	U-Band Frequency Extender,X4,40-60GHz, Output Power: 14 dBm Typ	-A	-I	Rev.1.2

Components Included:

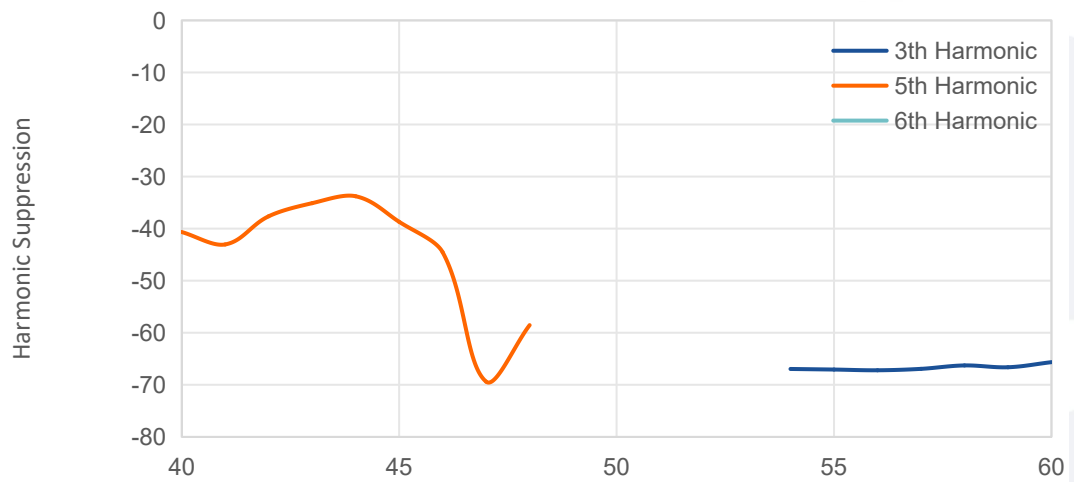
Part Number	Description	Quantity
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS

Typical Performance Data:

Output Power vs Frequency



Harmonic Suppression vs Frequency



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..