

F-band Frequency Extension Systems

90-140GHz/WR-08

Model: TLSE-090140-1030-08

TLSE-090140-1030-08 Spectrum Frequency Extension Systems are a dedicated Test & Measurement solution for extending the range of your signal source to 90-140 GHz.

Features:

- Frequency range: 90-140 GHz
- Output Frequency : 10 dBm Typ
- Low power consumption

Applications:

- Frequency Extension
- Antenna measurements
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	90		140	GHz
Output Power		10		dBm
Dynamic Range (Optional mechanical Attenuator)	0		30	dB
Input Frequency	11.25		17.5	GHz
Input Power	3	5	7	dBm
Multiplication Factor		8		
Harmonic Suppression		-20		dBc
Input VSWR		2		:1
Output VSWR		2		:1
Supply Voltage	100	220	240	V

Mechanical Specifications:

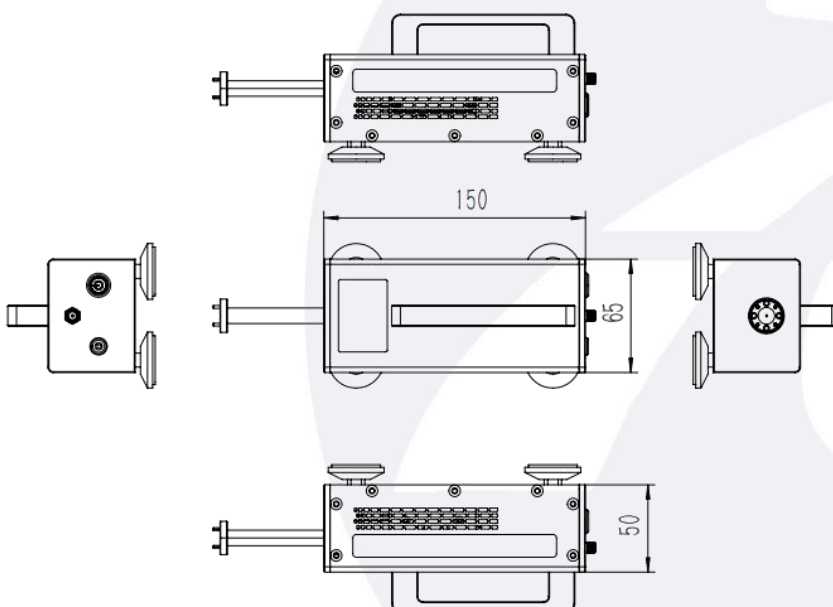
Parameter	Value	Units
RF Input Ports	SMA Female	
RF Output Ports	WR-08/UG-387/UM	
Power Supply Pin	FGG 0B 4 Core	
Size	150*65*50	mm

Absolute Maximum Ratings:

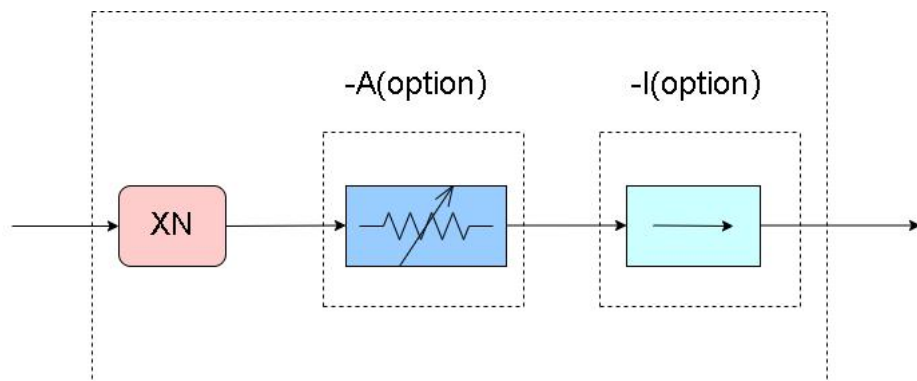
Parameter	Value
Supply Bias Voltage	+240 V AC
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

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-090140-0130-08	F-Band Frequency Extension Systems,X8,90-140GHz, Output Frequency : 10 dBm Typ	-A	-I	Rev.1.2

Components Included:

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