

D-Band Phase Noise Analyzer Down-Converter

110-170GHz/WR-6.5**Model: TLPNA-110170-12-06**

TLPNA-110170-12-06 phase noise analyzer (PNA) down-converter is a dedicated Test & Measurement solution for extending the range of the microwave PNA to perform the phase noise to 110-170GHz.

Features:

- Frequency range: 110-170GHz
- Unconditional stability

Applications:

- Transmit Extension
- Material characterisation

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Input Frequency range	110		170	GHz
LO Input Frequency	9.16		14.17	GHz
LO Input Power	3	5	7	dBm
LO Multiplication Factor	12			
IF Output Frequency range	0.01		1.6	GHz
Mixer Conversion Loss		12		dB
Harmonic Suppression		-20		dBc
Input P1dB		-10		dBm
Power Supply		220		V

Absolute Maximum Ratings:

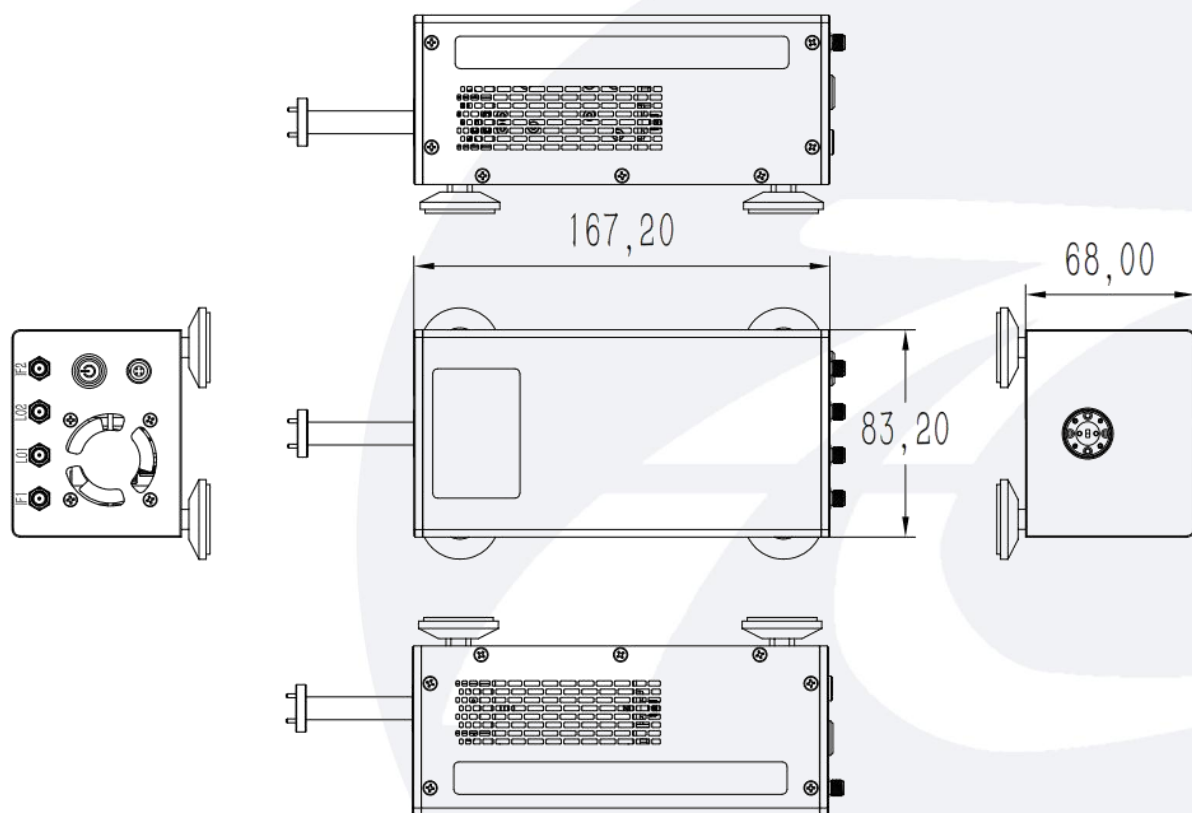
Parameter	Value	Units
RF Input Power	+20	dBm
Supply Bias AC Voltage	240	V
ESD sensitivity (HBm)	Class 0, passed 150V	

Environmental And Physical Characteristics:

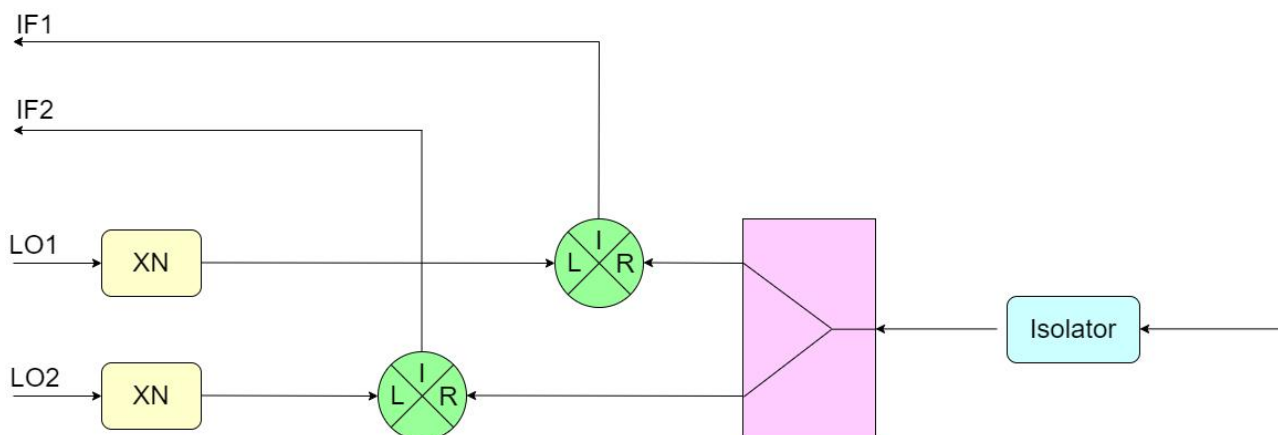
Parameter	Value	Units
Operating Temperature	-10 to +50	°C
Storage Temperature	-50 to +80	°C
RF Input Connector	WR-6.5/UG-387/U	
LO 1/LO 2 Input Connector	SMA Female	
IF 1/IF 2 Output Connector	SMA Female	
Power Supply Pin	FGG 0B 4 Core	
Material	Aluminum	
Finish	Gray spray paint	

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Block Diagrams:



Ordering Information:

Part Number	Description	Revision
TLPNA-110170-12-06	D-Band Phase Noise Analyzer Down-Converters, 110-170GHz, Mixer Conversion Loss: 12dB Typ	Rev.1.0

Components Included:

Part Number	Description	Quantity
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.