Suzhou Talent Microwave,Inc
sales@talentmw.com
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W-Band Up/Down-conversion Extender

75-110GHz/WR-10 Model: TLUDCM-075110-06-10

TLUDCM-075110-06-10 Up/Down-conversion Extenders are a dedicated Test & Measurement solution for extending the range of your signal source to 75-110 GHz.

Features:

- Frequency range: 75-110GHz
- Conversion Gain: -12dB Typ
- Unconditional stability

Applications:

- Frequency extenders for communication systems measurement
- 5G Backhaul Equipment Testing
- Antenna Testing
- 6G system chip measurement

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
RF Frequency range	75		110	GHz
LO Input Frequency	12.5		18.33	GHz
IF Input Frequency	DC		35	GHz
LO Input Power	3	5	7	dBm
Multiplication Factor	6			
Mixer Type	Fundamental Mixer			
Conversion Gain		-12		dB
Input P1dB		4		dBm
AC Supply Voltage	90	220	240	V AC

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Mechanical Specifications:

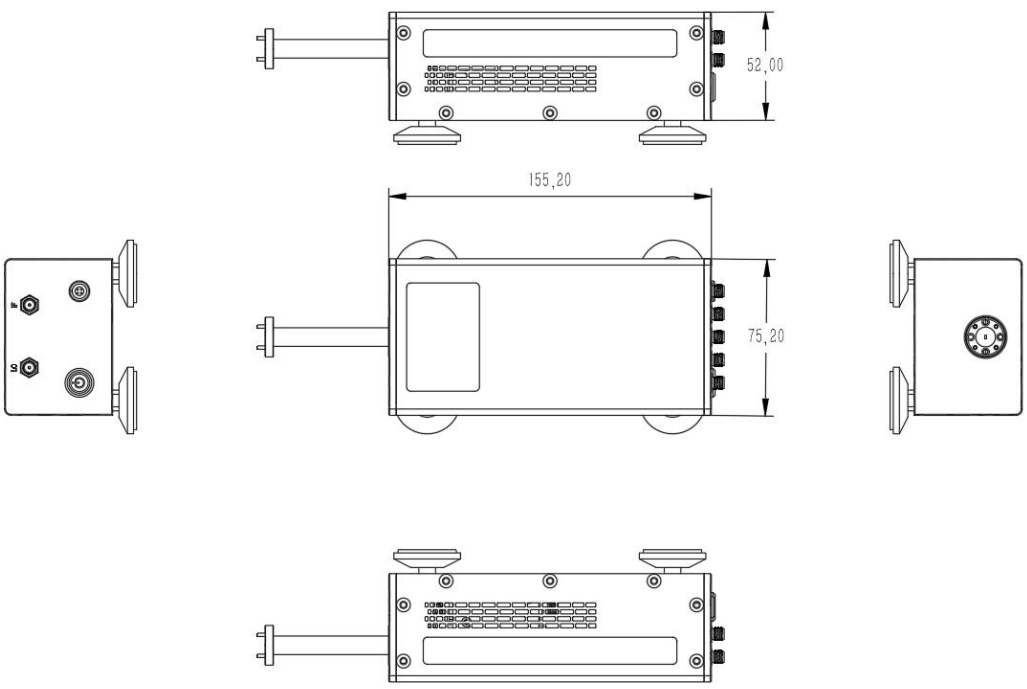
Parameter	Value	Units
RF Input Ports	WR-10/UG-387/U	
IF Ports	2.92mm Female	
LO Input Connector	SMA Female	
Material	Aluminum	
Finish	Spray gray paint	
Power Supply Pin	FGG 0B 4 Core	
Size	155.2*75.2*52	mm

Absolute Maximum Ratings :

Parameter	Value
IF/RF Input Power	+13 dBm
LO Input Power	+10 dBm
Supply AC Voltage	+240 V AC
ESD sensitivity (HBm)	Class 0, passed 150V

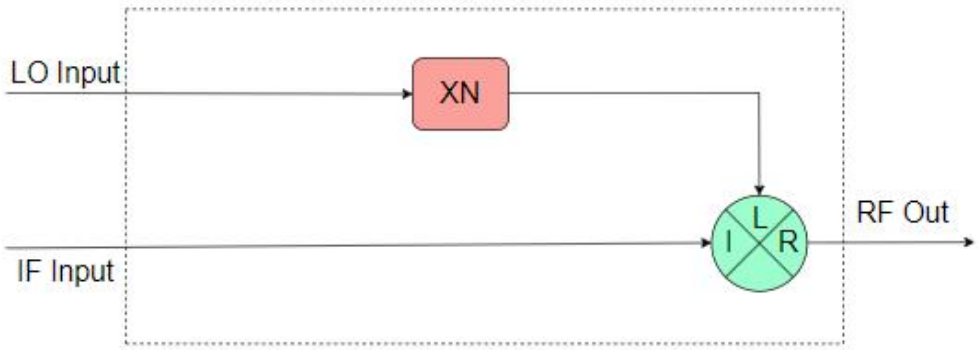
Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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Block Diagrams:



Envrionmental And Physical Characteristics:

Parameter	Min	Typ	Max	Units
Operating Temperature	0		+45	℃
Non-operating Temperature	-55		+125	℃
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	Revision
TLUDCM-075110-06-10	W-Band Up/Down-conversion Extender, 75-110GHz, Conversion Gain: -12 dB Typ	Rev.1.0

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外部配件 External Accessories:

标准型号 Part Number	描述 Description	版本号 Revision
TMPA-075110-3028-10	Power Amplifier, 75-110 GHz, Gain:30 dB Type, Psat:27dBm Typ, +16V DC,WR-10,Without Heatsink	Rev.1.1
TLBF-CUST	Waveguide Band-pass Filter,Support customization	Rev.1.0
TL-10SHA25-T1	Standard Gain Horn Antenna, 75-110GHz,Gain: 25 dBi Typ.	Rev.1.1
TMLA-075110-4240-10	Low Noise Amplifier,75-110GHz, Noise Figure:4.0dB, Gain:42dB,+12V DC,WR-10	Rev.1.1

