泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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V-Band Up/Down-conversion Extender

50-75GHz/WR-15 Model: TLUDCM-050075-04-15

TLUDCM-050075-04-15 Up/Down-conversion Extenders are a dedicated Test & Measurement solution for extending the range of your signal source to 50-75 GHz.

Features:

- Frequency range: 50-75 GHz
- Conversion Gain: -10dB Typ
- Unconditional stability

Applications:

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

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
RF频率范围 RF Frequency range	50		75	GHz
本振输入频率 LO Input Frequency	12.5		18.75	GHz
中频输入频率 IF Input Frequency	DC		26.5	GHz
本振输入功率 LO Input Power	3	5	7	dBm
倍频次数 Multiplication Factor	4			
混频器类型 Mixer Type	Fundamental Mixer			
变频增益 Conversion Gain		-10		dB
IF输入P1dB Input P1dB		6		dBm
交流供电 AC Supply Voltage	90	220	240	V AC

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机械特性 Mechanical Specifications:

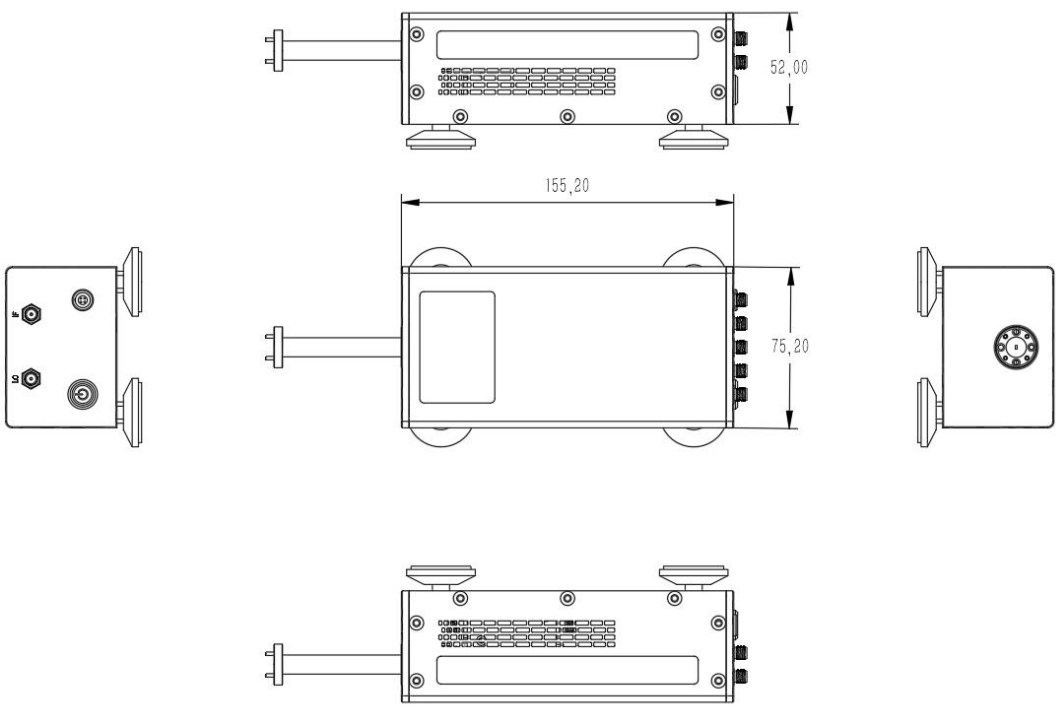
参数 Parameter	指标 Value	单位 Units
RF输入端口 RF Input Ports	WR-15/UG-385/U	
IF端口 IF Ports	2.92mm Female	
LO输入接口 LO Input Connector	SMA Female	
材质 Material	Aluminum	
表面处理 Finish	Spray gray paint	
供电引脚 Power Supply Pin	FGG 0B 4 Core	
尺寸 Size	155.2*75.2*52	mm

绝对最大值 Absolute Maximum Ratings :

参数 Parameter	指标 Value
中频/射频输入功率 IF/RF Input Power	+12 dBm
本振输入功率 LO Input Power	+10 dBm
交流电压 Supply AC Voltage	+240 V AC
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

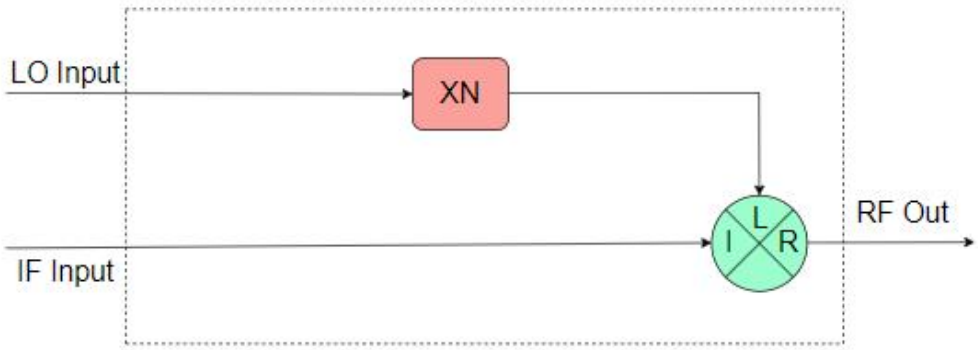
外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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原理框图 Block Diagrams:



环境和物理特性 Envrionmental And Physical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	0		+45	℃
存储温度 Non-operating Temperature	-55		+125	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLUDCM-050075-04-15	V-Band Up/Down-conversion Extender, 50-75GHz, Conversion Gain: -10 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-050075-3737-15	Power Amplifier, 50-75 GHz, Gain:50dB Min, Psat:37 dBm Min, +24V DC,WR-15,With Heatsink	Rev.1.2
TLBF-CUST	Waveguide Band-pass Filter,Support customization	Rev.1.0
TL-15SHA25-T1	Standard Gain Horn Antenna, 50-75GHz,Gain: 25dBi Typ.	Rev.1.0
TMLA-050075-3840-15	Low Noise Amplifier,50-75GHz, Noise Figure:3.0dB, Gain:38dB,+12V DC,WR-15	Rev.1.1

