AT-DC6-10R

Bench-Top W Band Down-Converter

W Band (75-110GHz) Down-Converter Low NF Receiver, WR-10

2025-11-3

Product Overview

AT-DC6-10R is low NF full W Band down-converter with X6 frequency multiplier insider. The down converter gain is 20dB with RF amplifiers. Isolator is integrated at RF Port to improve test stability.

The down-converter can be used for NF test and general receiver application. The RF Port is with standard WR-10. LO port is SMA Female, and IF port is 2.92mm Female.

More information, please visit www.atmicrowave.com

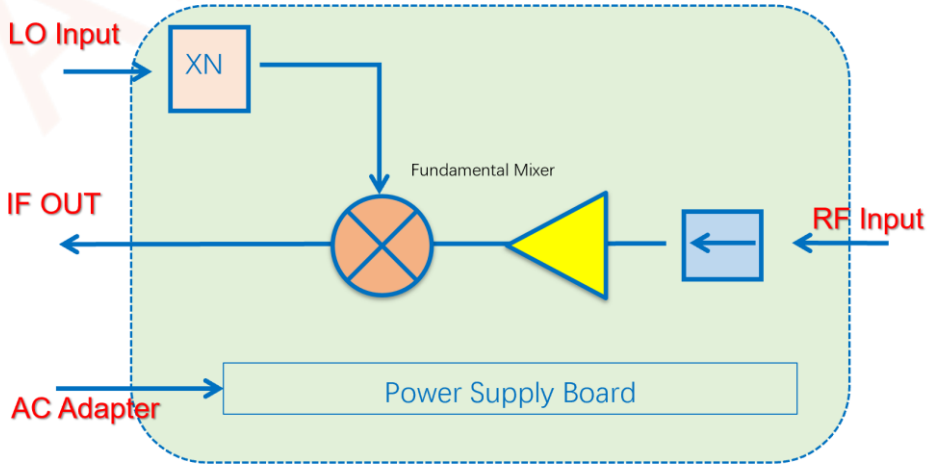
Advantages

- ✓ Frequency: 75-110GHz
- ✓ Gain:20dB
- ✓ IF: DC-35GHz
- ✓ LO Input: 12.5-18.3GHz, +3dBm
- ✓ Bench-Top Labs Test

Application

- ✓ Noise Figure Test
- ✓ 5G Communication
- ✓ ROF (RF Over Fiber)
- ✓ Radar System
- ✓ RCS Test

Diagram Block:



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Tel:021-6229 1233 sales@atmicrowave.com
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Key Features（Test condition IF=100MHz）

Parameter	Min	Typical	Max
RF Frequency	75GHz		110GHz
6XLO Frequency	75GHz		110GHz
LO Frequency	12.5GHz		18.33GHz
LO Multiplier Factor		X6	
LO Driver	+3dBm	+5dBm	+8dBm
Mixer Type		Fundamental Mixer	
IF Frequency		DC-35GHz	
RF-IF Gain		20dB	
RF Input P1dB		-27dBm	
RF Input Damage Level			+0dBm
Noise Figure		6dB	10dB
RF Input Return Loss		-8dB	
IF Output Return Loss		-10dB	
Power Supply (With AC/DC Adapter)	+90V	+220V	+240V
Spec Temp		25C	

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Mechanical Information:

Parameter	Value
RF Port	WR-10 Waveguide with UG-387/U-M Flange
LO Port	SMA Female
IF Port	2.92mm Female
DC Bias	+12V Supply, AC to DC Power Converter included
DC Bias Switch	ON-OFF switch with light indicator
Dimension	See outline

Absolute Maximum Ratings Table

Parameter	Value
AC Supply	+260V
RF Input Power	0dBm
LO Port Power	+15dBm
Operating Temperature	0 to 50 C
Storage Temperature	-45 to +85C

Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

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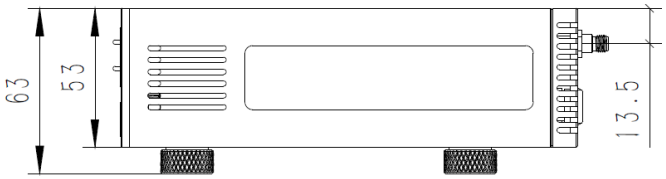
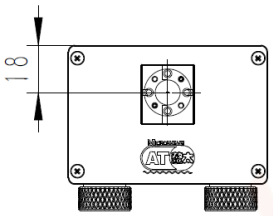
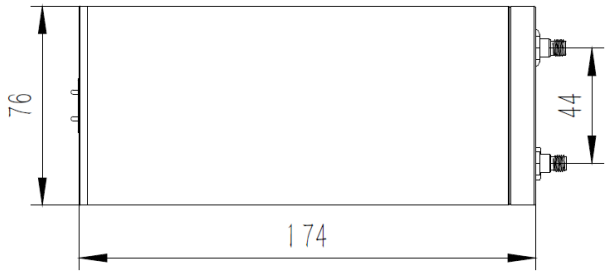
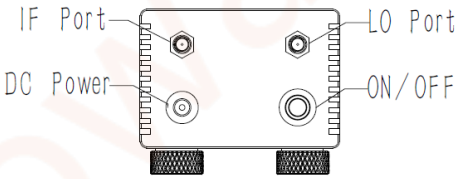
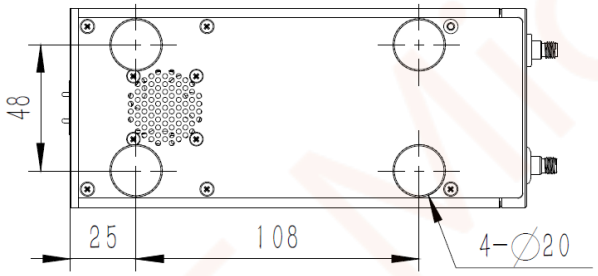
Dimension: (mm)

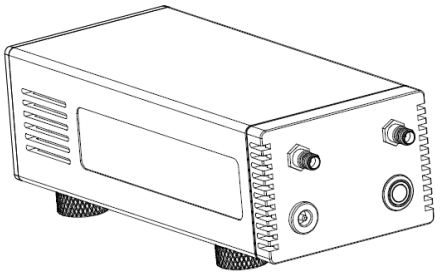












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