

### 18-50GHz Down-Converter High gain 25dB, Low NF=6dB

2022-9-1



#### Product Overview

AT-BTDC-1850R is 18-50GHz down-converter with X4 frequency multiplier inside. The down converter RF-IF gain is 25dB with high gain RF amplifier.

The down-converter can be used for NF test and general receiver application. The RF Port is with standard 2.4mm. LO input port and IF Output port are SMA Female.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

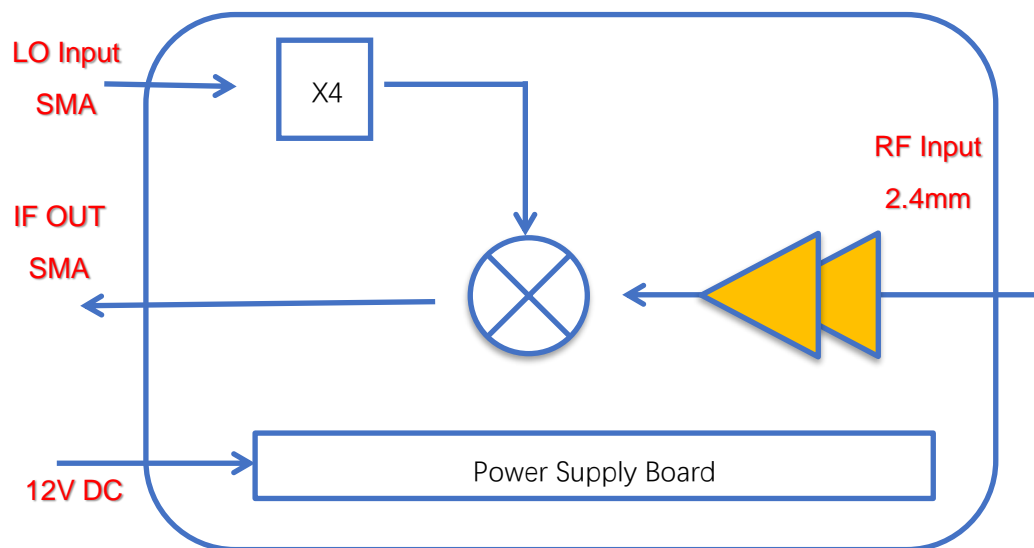
#### Advantages

- ✓ Frequency: 18-50GHz
- ✓ Gain: 25dB
- ✓ IF: DC-20GHz
- ✓ LO X4 inside
- ✓ Bench-Top Labs Test

#### Application

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

#### Diagram Block:





# AT-BTDC-1850R

Bench-Top 18-50GHz Down-Converter

## Key Features

Parameter	Min	Typical	Max
RF Frequency	18GHz		50GHz
LO Frequency	4.5GHz		12.5GHz
LO Multiplier Factor		X4	
LO Driver	+10	+13dBm	+15dBm
IF Frequency		DC-20GHz	
RF-IF Gain	20dB	25dB	
Noise Figure		6dB	8dB
RF Input Return Loss		-10dB	
IF Output Return Loss		-10dB	
Power Supply (with AC/DC Adapter)	+90V	+220V	+240V
Spec Temp		25C	

## Mechanical Information:

Parameter	Value
RF Port	2.4mm Female
LO/IF Port	SMA Female
DC Bias	+12V Supply, AC to DC Power Converter included
DC Bias Switch	ON-OFF switch with light indicator
Dimension	204x127x74.6mm

## Absolute Maximum Ratings Table

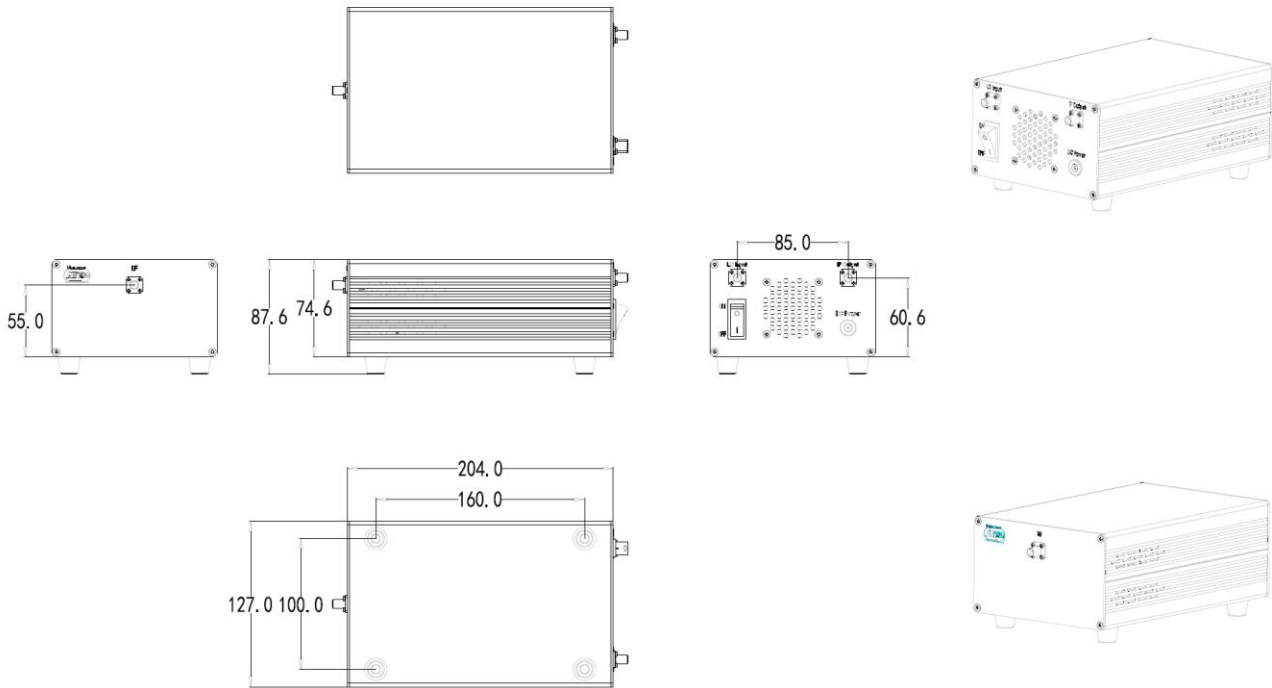
Parameter	Value
AC Supply	+260V
RF Input Power	+10dBm
LO Port Power	+18dBm
Operating Temperature	0 to 50 C
Storage Temperature	-65 to +150C



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### Dimension: (mm)



### 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.

