

# 10MHz-67GHz Broadband Amplifier



### Product Overview

AT-BB-0067-1815C is broadband amplifier from 10MHz-67GHz, with  $P_{out}=+15\text{dBm}$ ,  $NF=6\text{dB}$ . It can be used both as Power amplifier or low noise amplifier. The DC power requirement is  $+8\text{V}/250\text{mA}$ . The module is with 1.85mm Female

The broadband amplifier has high gain, high linearity, low input/output return loss and flat gain response. Bench-top test equipment type with 110-240V power supply is available according to request.

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

### Advantages

- ✓ Frequency: 10MHz-67GHz
- ✓  $P_{sat}: +15\text{dBm}$
- ✓ Small signal gain: 18dB
- ✓ Single Power Supply

### Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Key Features

Parameter	Min	Typical	Max
Frequency		10MHz-67GHz	
Gain		18dB	
P1dB		10MHz-50GHz: +14dBm 50GHz-67GHz: +12dBm	
Psat		10MHz-50GHz: +15dBm 50GHz-67GHz: +13dBm	
Drain Supply	+5.5V	+8V	+10V
Current		250 mA	
NF		6dB	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





# AT-BB-0067-1815C

10MHz-67GHz Broadband Amplifier

## Mechanical Information

Item	Description
Input Port	1.85mm Female
Output Port	1.85mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	80g
Size:	30x30x14 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+15 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

### Caution:

Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

## Ordering

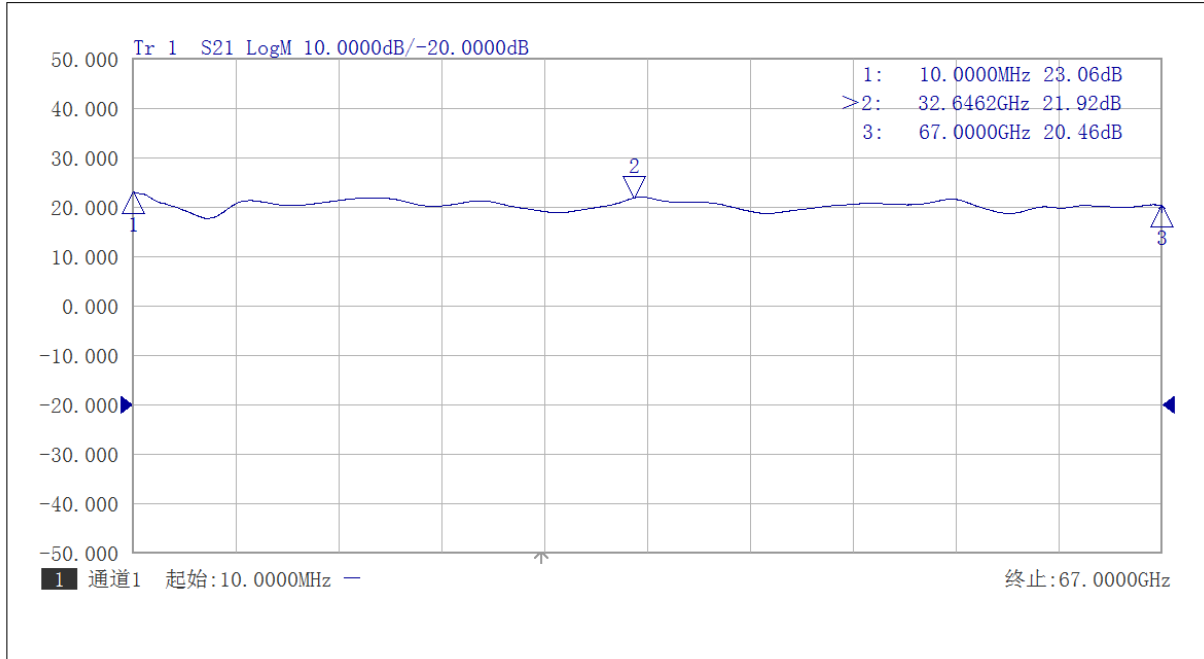
PN	Description
AT-BB-0067-1815C	10MHz-67GHz, Gain=18dB, +8V Supply
AT-BB-0067-2515C	10MHz-67GHz, Gain=25dB, +8V Supply
AT-BTBB-0067-1815C	Bench-Top +220V Supply, Gain=18dB
AT-BTBB-0067-2515C	Bench-Top +220V Supply, Gain=25dB

## Notes:

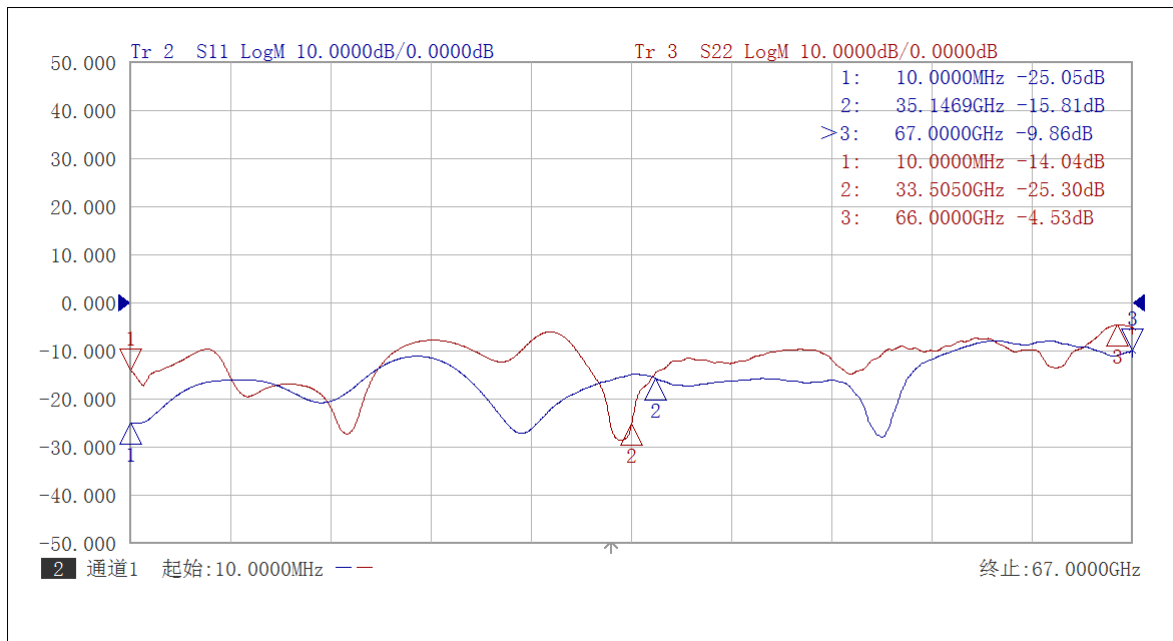
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test Data:

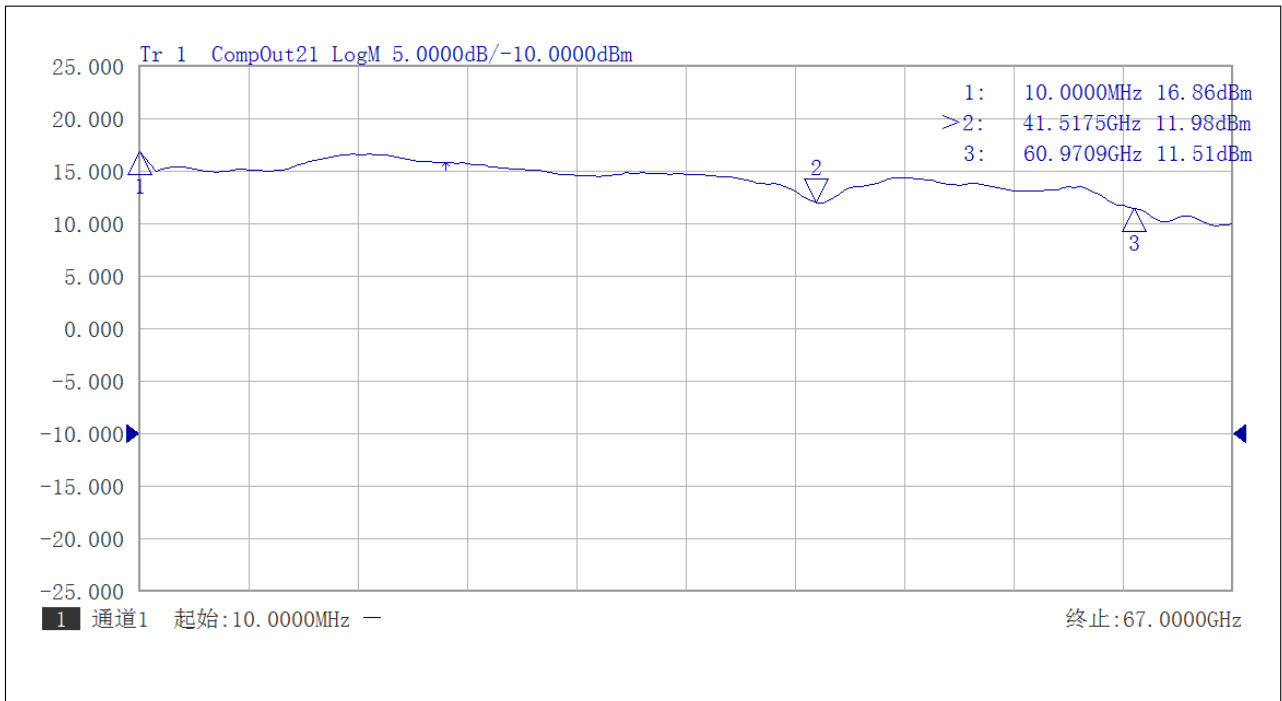


Gain vs Frequency 10MHz-67GHz

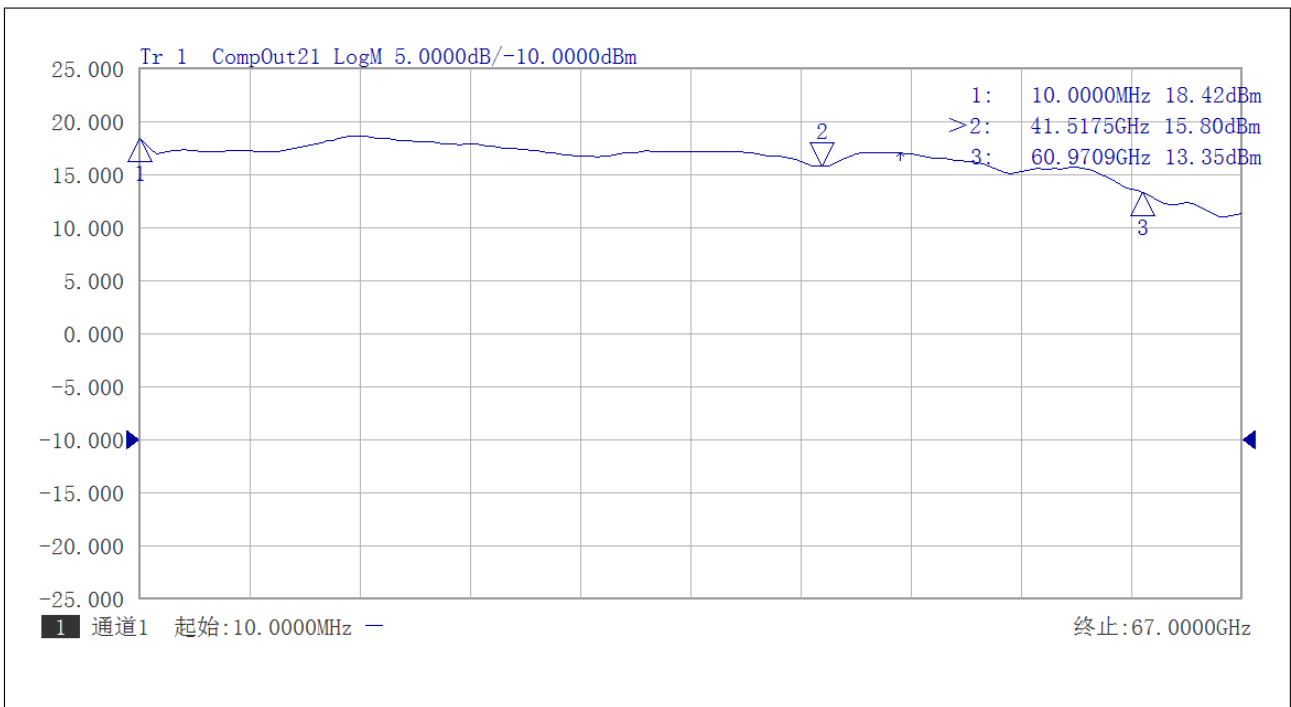


S11/S22 Return Loss vs Frequency 10MHz-67GHz



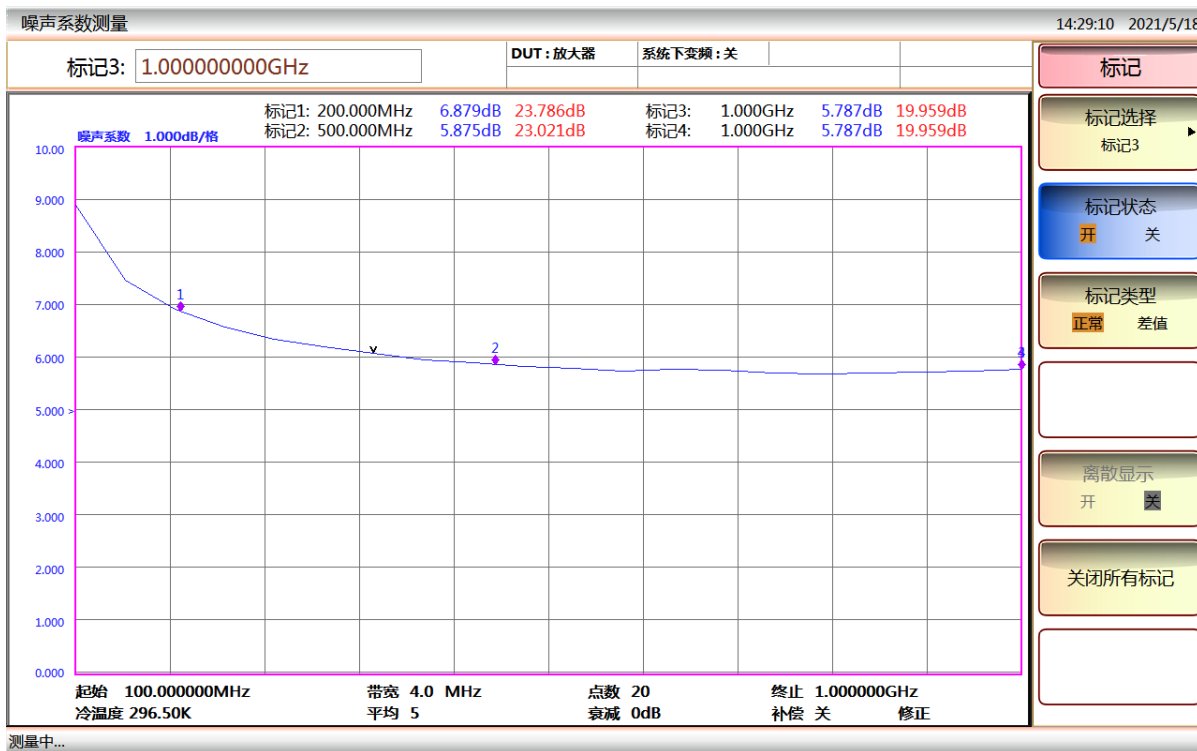


P1dB Test 10MHz-67GHz

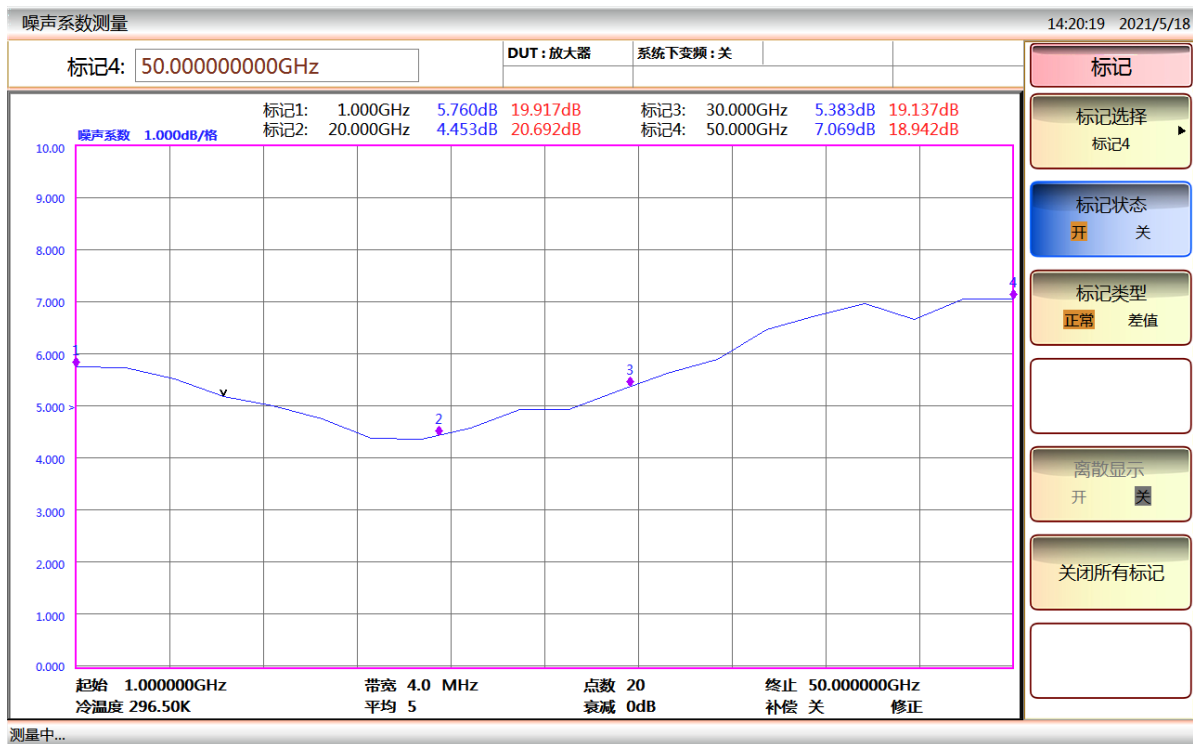


P3dB test 10MHz-67GHz





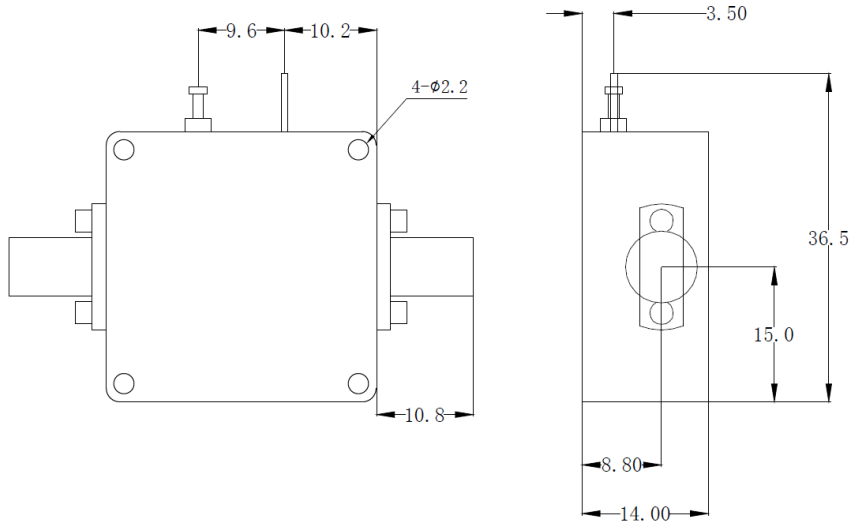
NF test from 10MHz to 1GHz



NF test From 1-50GHz

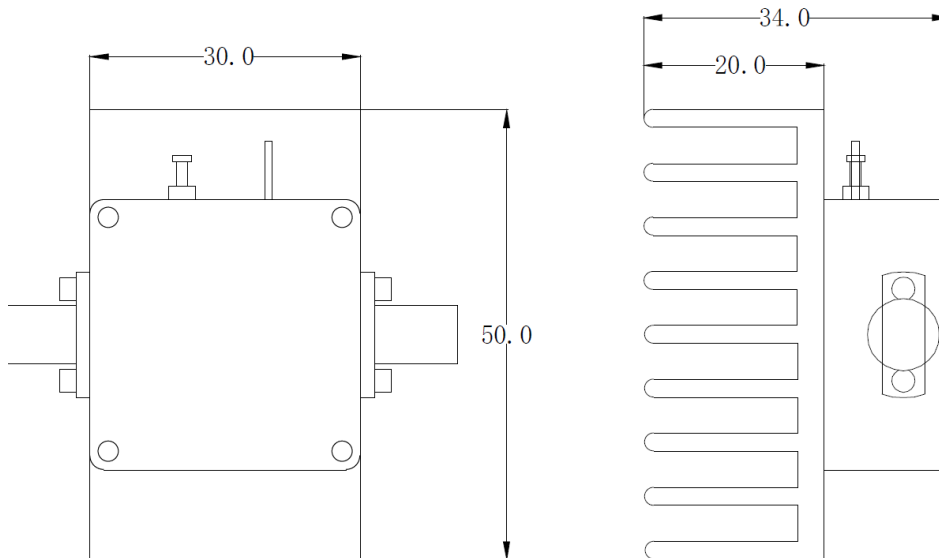


### Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.

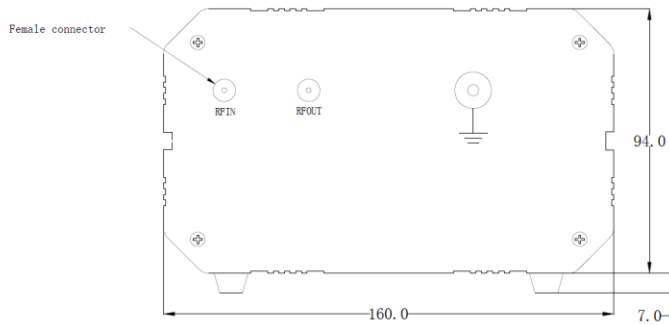


Including a small heatsink without Fan if output Power higher than +20dBm.  
Customers can removed it or use their own heatsink according to actual situation.

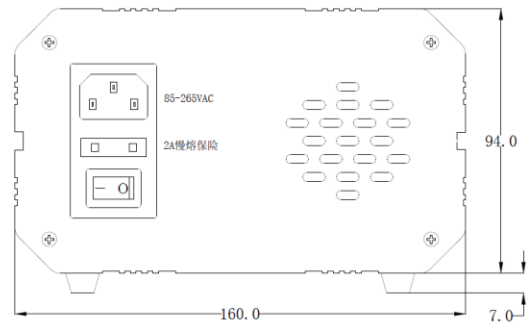
**Heat Sink Required During Operation**



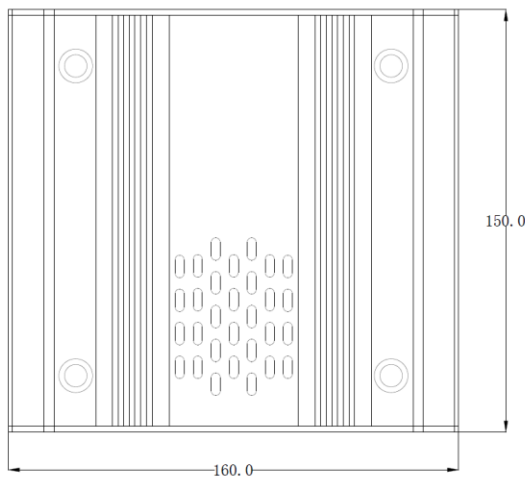
### Bench-Top Dimension (unit in mm)



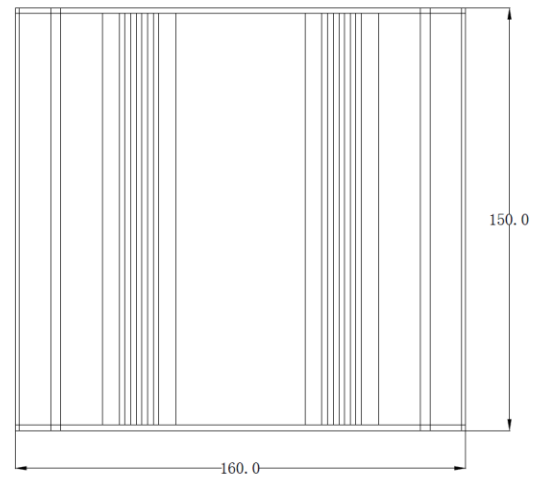
Front View



Rear View



Bottom View



Top View

