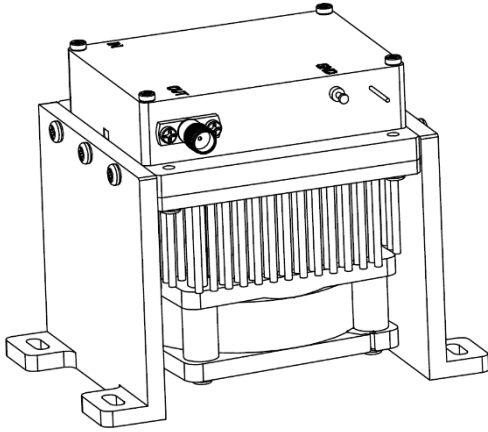


### 18-40GHz Broadband Amplifier, +30dBm

2023-7-5



Module with-HF Option

### Product Overview

AT-PA-1840-3330GN is high gain power amplifier with +30dBm output power in the frequency of 18-40GHz. The DC power requirement is +24V/0.65A. Supply voltage can be from +22 to +28V. The module is with 2.92mm connector.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

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

### Advantages

- ✓ Frequency: 18-40GHz
- ✓ Pout:+30dBm
- ✓ Small signal gain: 30dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		18-40GHz	
Gain	30dB 27dB	18-38GHz: 33dB 38-40GHz: 30dB	
Gain Flatness		+/-3dB	+/-4.5dB
P1dB		+27dBm	
Psat		+30dBm	
Drain Supply	+22V	+24V	
Current/Quiscent		0.55A	
IDD Psat		0.65A	
Input Return Loss		-10dB	
Output Return Loss		-5dB	
Spec Temp		25C	





# AT-PA-1840-3330GN

18-40GHz Power Amplifier

## Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	230g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+28V
RF Input Power	+10 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-50 to +125C

## 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.

## Part Number Selection

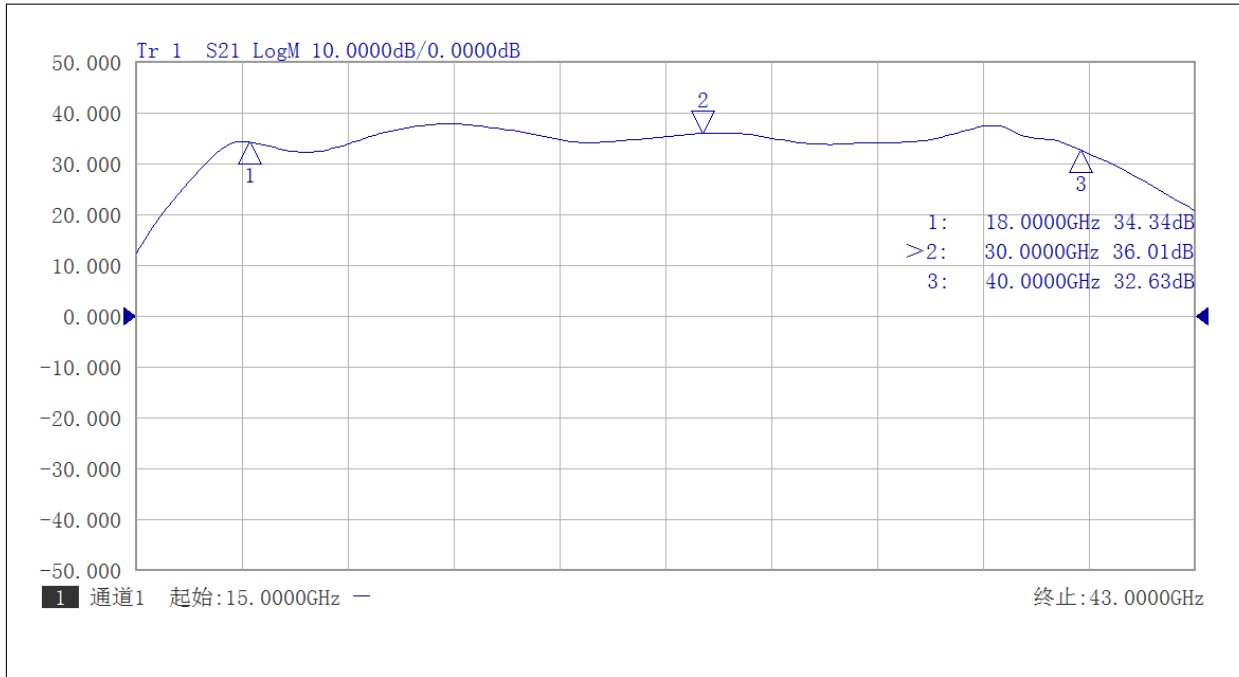
Item	Description
AT-PA-1840-3330GN	In defaulted without heatsink and Fan. Heatsink and Fan required during operation.
AT-PA-1840-3330GN <b>-HF</b>	Including Heatsink and Fan. Fan bias is connected with PA Module's Vdd supply
AT-PA-1840-3330GN <b>-LCBT</b>	<u>L</u> ow Cost, <u>C</u> ompact <u>B</u> ench- <u>T</u> op, Heatsink included. +220V Supply with AC/DC Adapter
AT- <b>BT</b> PA-1840-3330GN	Bench-top Option AC Power Supply Directly



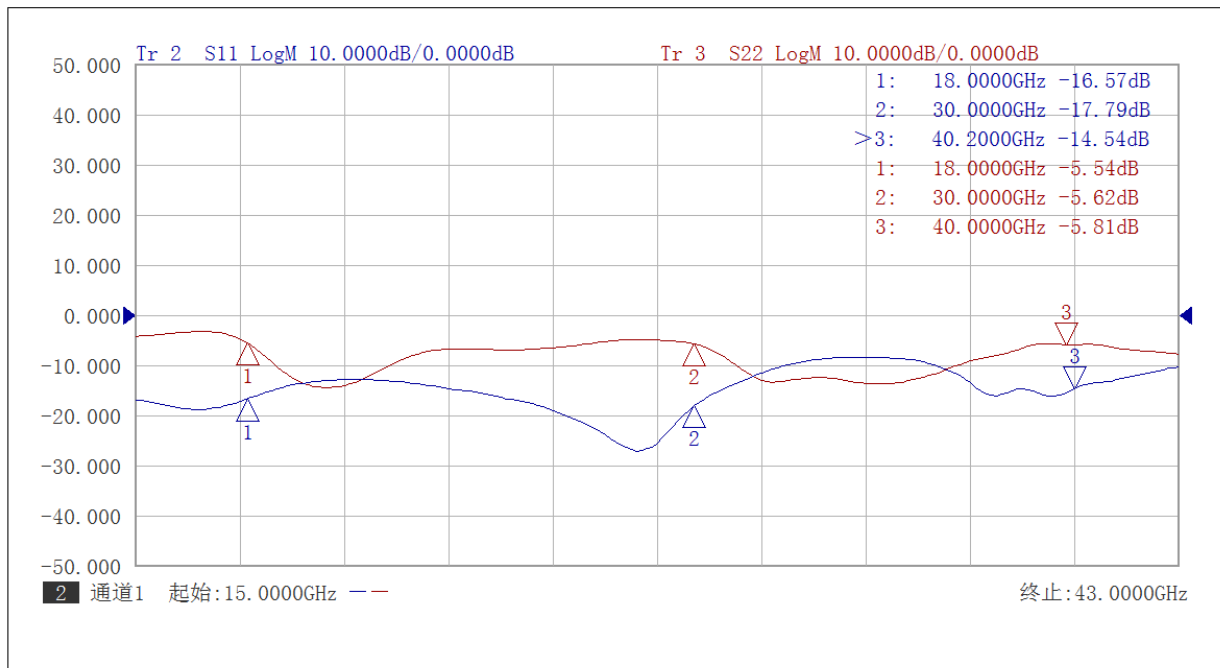
### Test Data (25C)

Please note that test curves will vary slightly from unit to unit.

Vdd=+24V, Idd=0.54A, IDD=0.65A at Psat, 25C



Gain vs Frequency



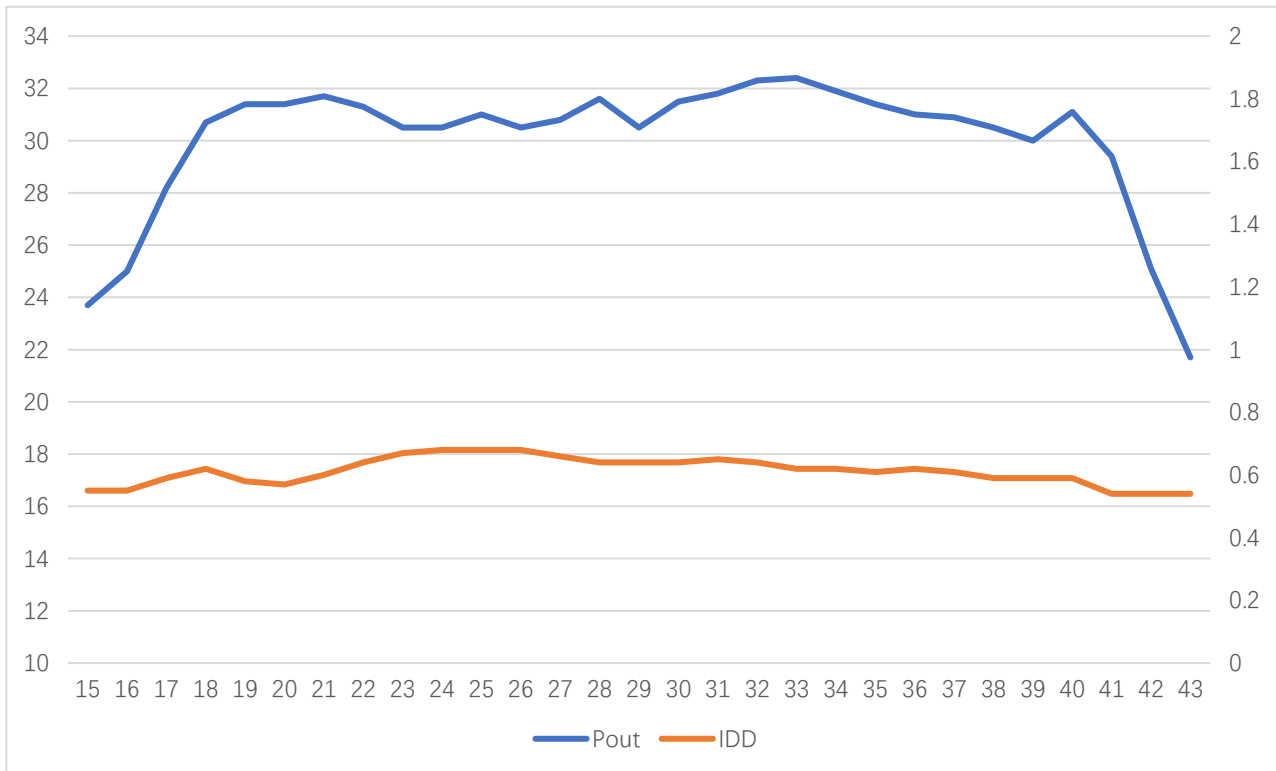
Return Loss vs Frequency





# AT-PA-1840-3330GN

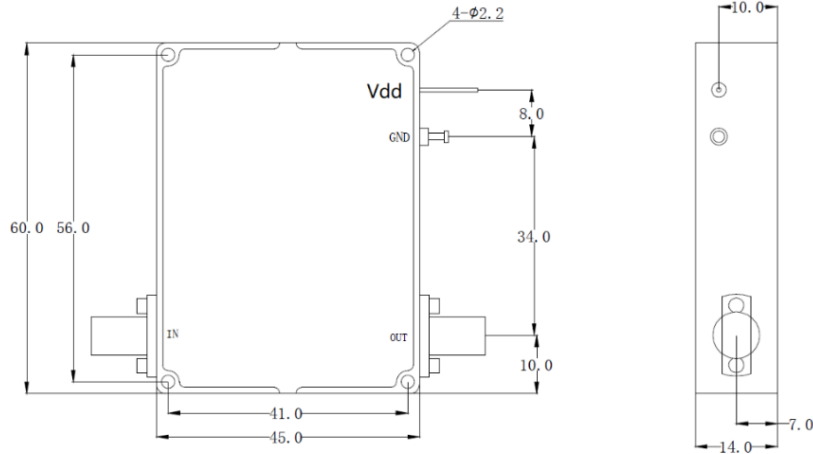
18-40GHz Power Amplifier



Psat and IDD vs Frequency, Pin=+5dBm



### Dimension without Heatsink: (unit mm)

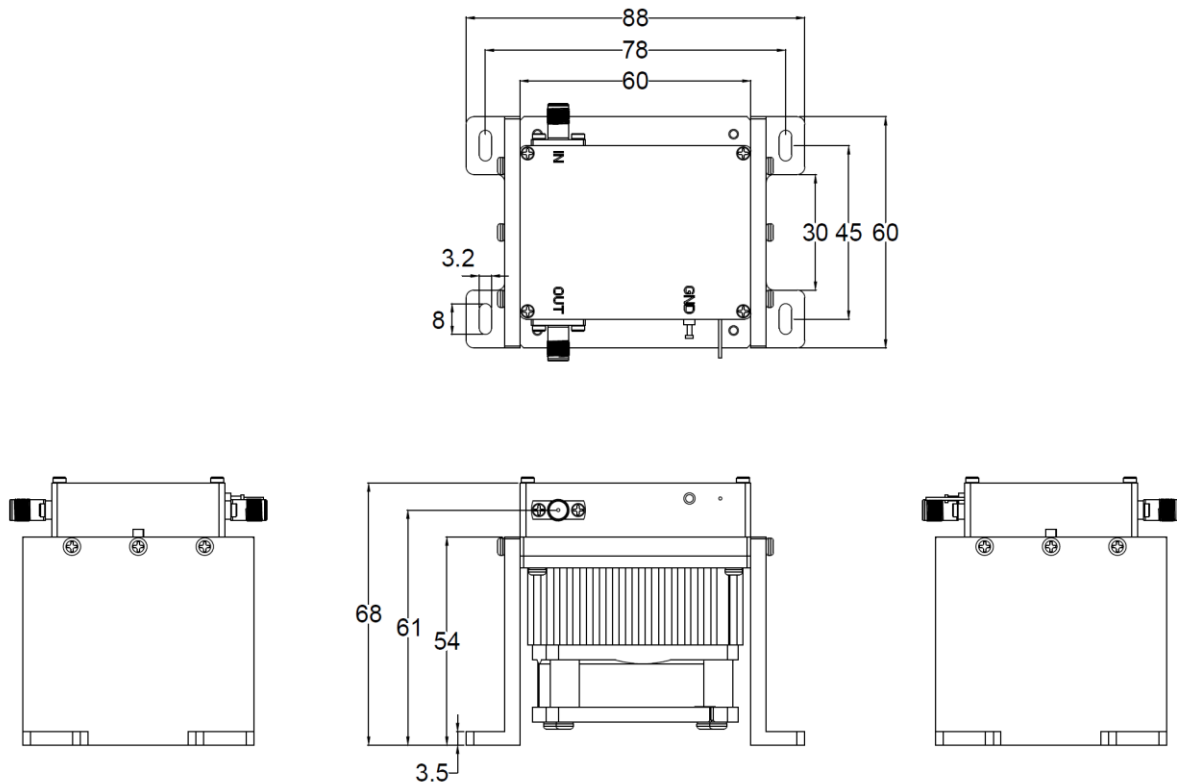


	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Length of a	9.4mm	9.5mm	10.8mm	11.3mm

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

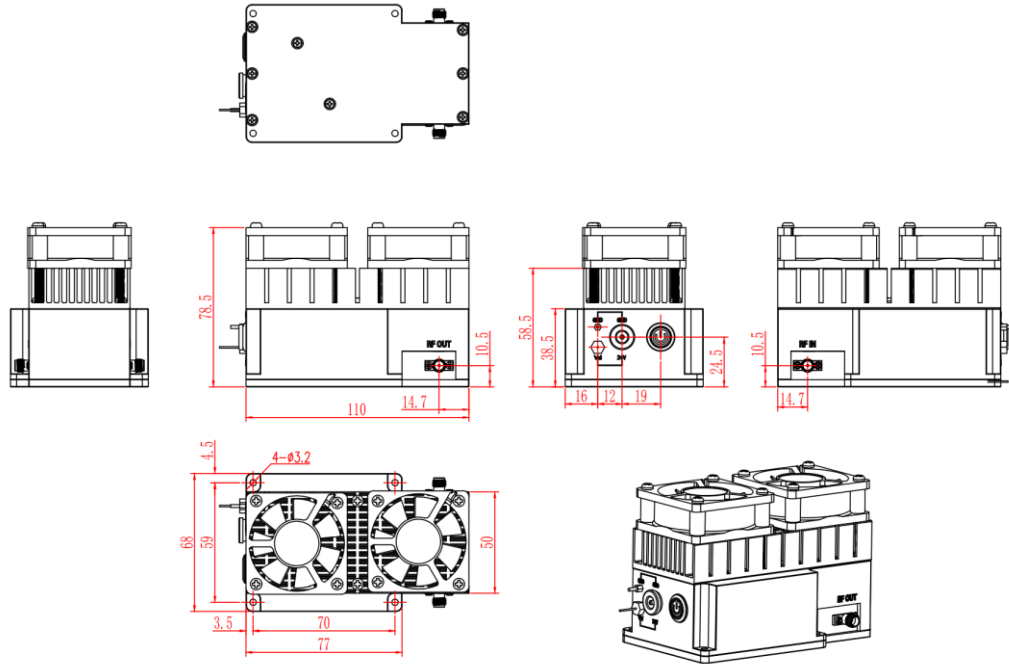
Outline without heatsink. Heat Sink Required During Operation

### -HF Option Dimension with Heatsink and Fan: (unit mm)



### -LCBT Option Dimension (unit mm)

Low Cost, Compact Bench-Top with 220V AC/DC Adapter



### -BT Bench-top Dimension (unit mm)

