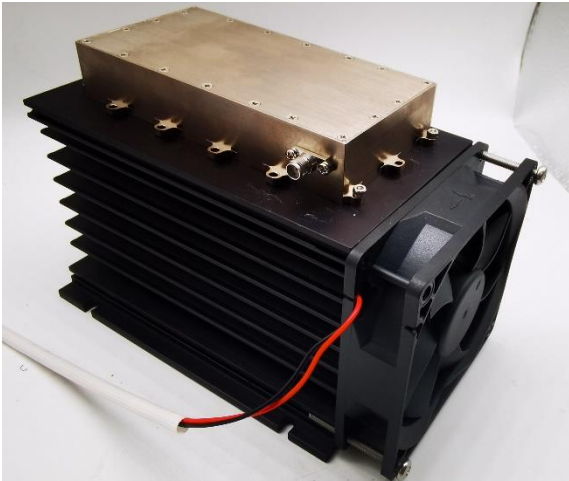


## 18-40GHz High Power Amplifier

### Gain=33dB, Pout=+36dBm



-HF Option with heatsink and Fan

### Product Overview

AT-HPA-1840-3336GT is GaN Based high gain power amplifier with +36dBm output power in the frequency of 18-40GHz. The DC power requirement is +20V/2.5A at Psat. The module is with 2.92mm connector.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response. There is no heatsink and fan in default. Option with suffix "-HF" is part number with heatsink and Fan, -BT option is for bench-top system amplifier.

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

### Advantages

- ✓ Frequency: 18-40GHz
- ✓ Psat:+36dBm
- ✓ Small signal gain: 33dB
- ✓ 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	33dB	
P1dB		+31dBm	
Psat (18-39GHz)	+35dBm	+36dBm	
Drain Supply		+20V	+22V
Idd NO RF		1.5A	
IDD Psat		2.5A	2.9A
Input Return Loss		-10dB	
Spec Temp		25C	





# AT-HPA-1840-3336GT

18-40GHz High Power Amplifier

## Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Aluminum
Finish	Nickel Plated
Weight (With Heatsink and Fan)	TBD
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+24V
RF Input Power	+16 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

## Very Important:

1. MUST Apply to heatsink and Fan during operation, or the amplifier will be damaged due to the high power consumption;
2. Do NOT leave Output OPEN with Bias and input power. Connect to 50 Ohms system during operation.
3. Take care that Vdd never touch Case/GND when Power ON, or the amplifier will be damaged.





# AT-HPA-1840-3336GT

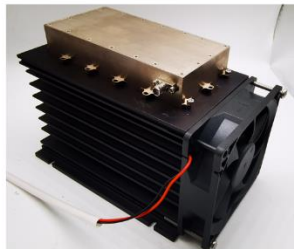
18-40GHz High Power Amplifier

## Part Number Selection

Item	Description
AT-HPA-1840-3336GT	In defaulted without heatsink and Fan. Heatsink and Fan required during operation.
AT-HPA-1840-3336GT-HF	Including Heatsink and Fan. Fan bias is same with Vdd normally.
AT-BTHPA-1840-3336GT	Bench-top System Amplifier, 90-220V AC Power Supply Please note gain will be 1-2db lower than standard module, while Pout will keep the same. Please contact with us for more information.



In default  
without heatsink



-HF Option  
With Heatsink and Fan



-BT Option  
Bench-top System Amplifier



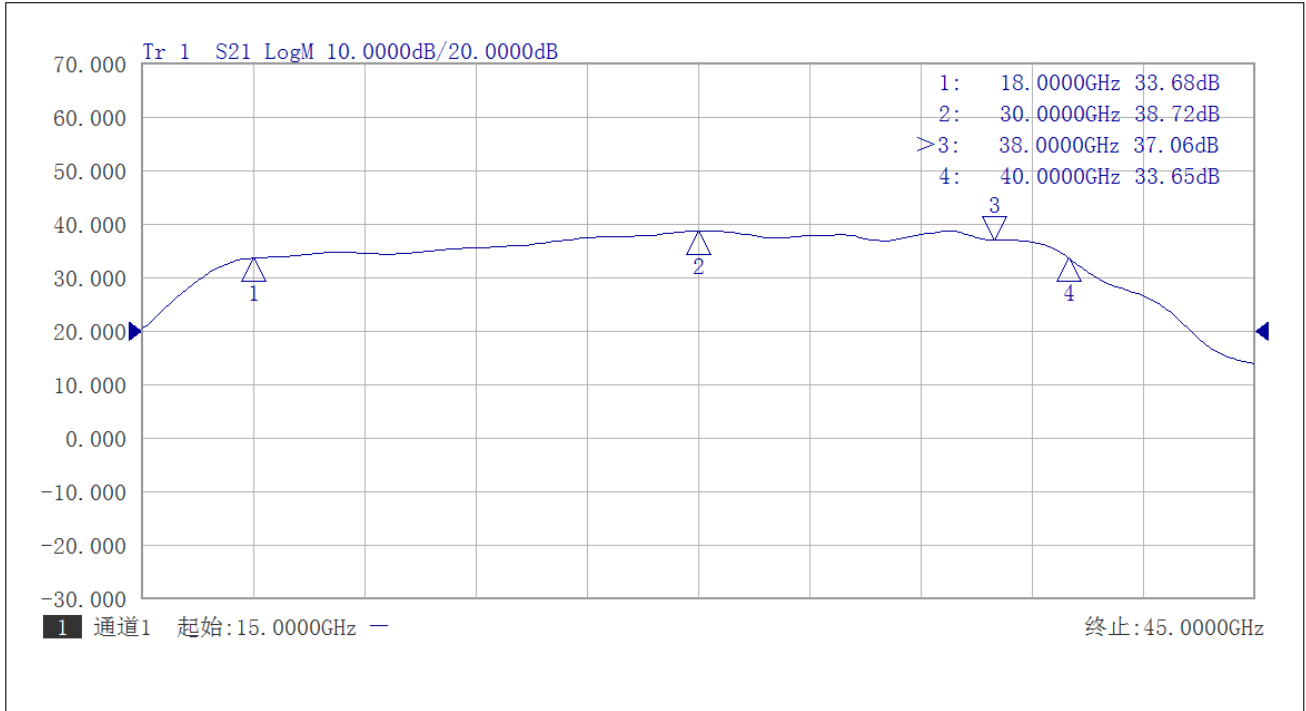


# AT-HPA-1840-3336GT

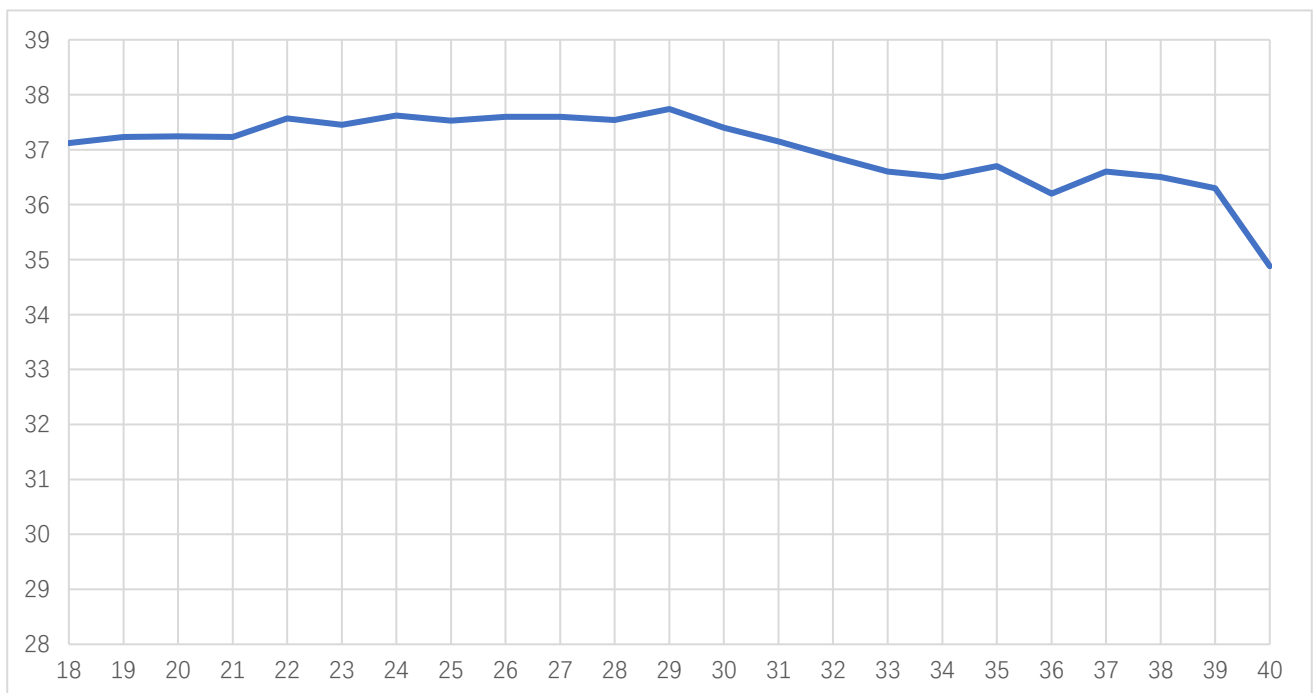
18-40GHz High Power Amplifier

## Test Data (25C)

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



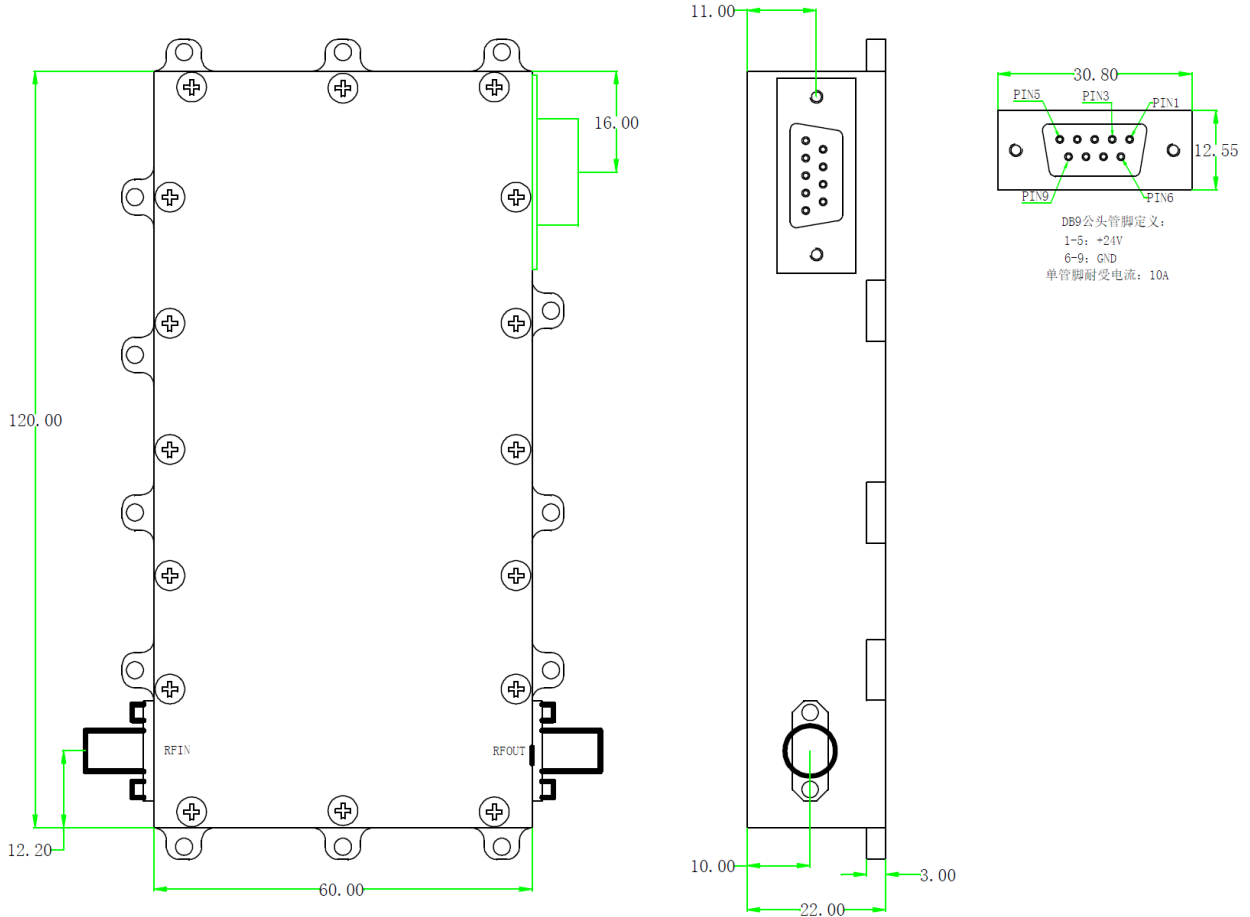
Gain vs Frequency



Psat vs Frequency



## Standard Module Outline Without Heatsink: (mm)



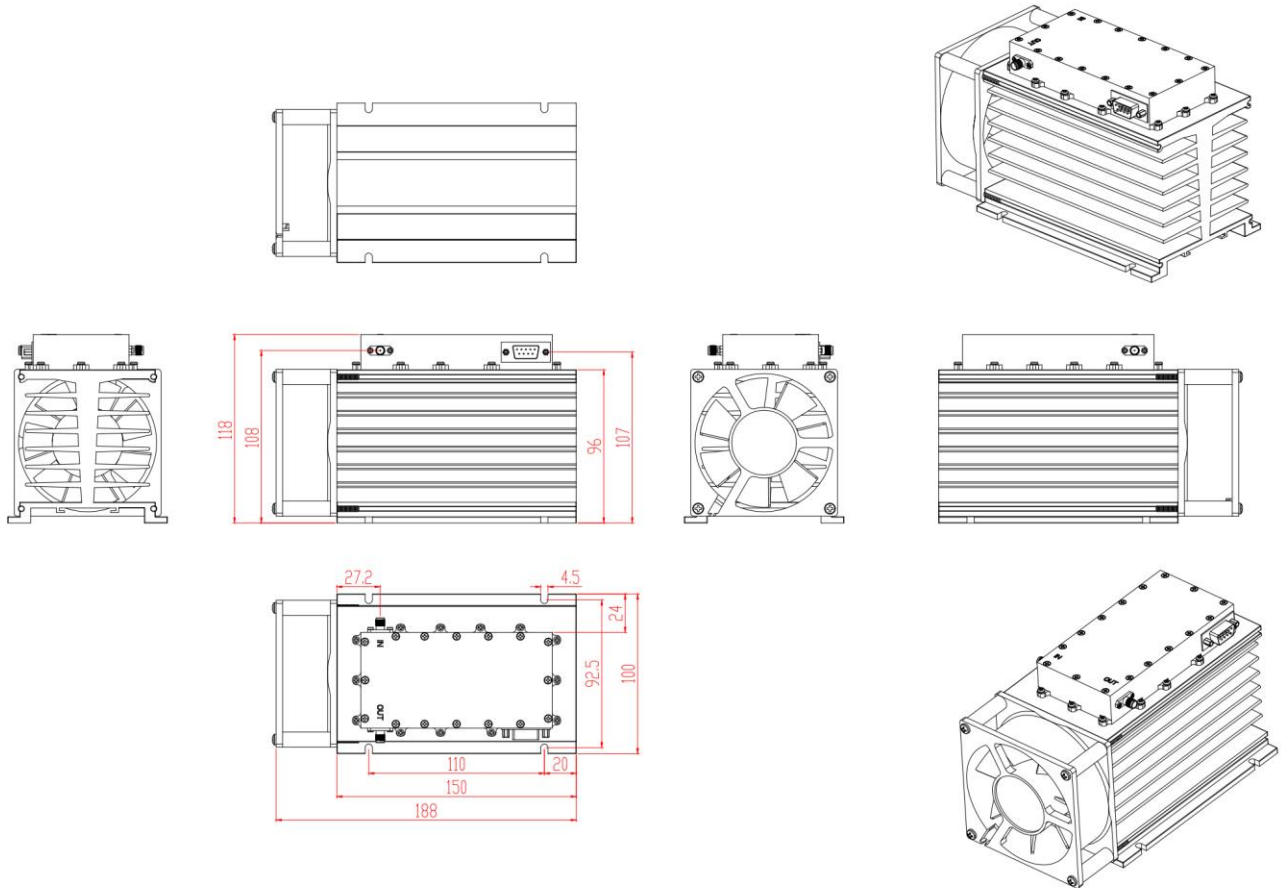
PA Module without heatsink and Fan

**Heatsink and Fan Required during Operation**



-HF Option:

Module With Heatsink and Fan: (mm)



Customers can remove the heatsink and Fan if using their own heatsink.



-BT Option,

Bench-top outline System Amplifier: (mm)

