



# Power Amplifier

## Model: PA-0M1-20M-32

0.1-20MHz 32W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 0.1-20MHz
- Input 1 dB Gain Compression Point, 32W Min.
- High gain, 45dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-0M1-20M-32 is a power amplifier with a minimum power gain of 45 dB and a minimum Psat of 32W across the frequency range of 0.1 to 20MHz. The DC power requirement for the amplifier is +28 VDC/3.5 A. The input and output port configuration offers coax adapter structure with SMA female. And it has built-in protection functions included over TEM protection.



## Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	0.1		20	MHz
Power Gain	45	47		dB
Gain Flatness		±1	±2	dB
Output P1dB		42		dBm
Output Psat	45	45.5		dBm
Input VSWR		1.5	2	:1
DC Voltage		+28	+30	V DC
Static Current		2.5		A
Saturation Current		3.5	4	A
Impedance		50		Ohms

## Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +50°C	
Non-operating Temperature*	-50°C to +60°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	D-SUB-9	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	154*94*20(Without Heatsink) 264*140*82(With Heatsink)	mm
Weight	500	g

\*Note: For a wider temperature range, please consult the manufacturer.

## Absolute Maximum Ratings:

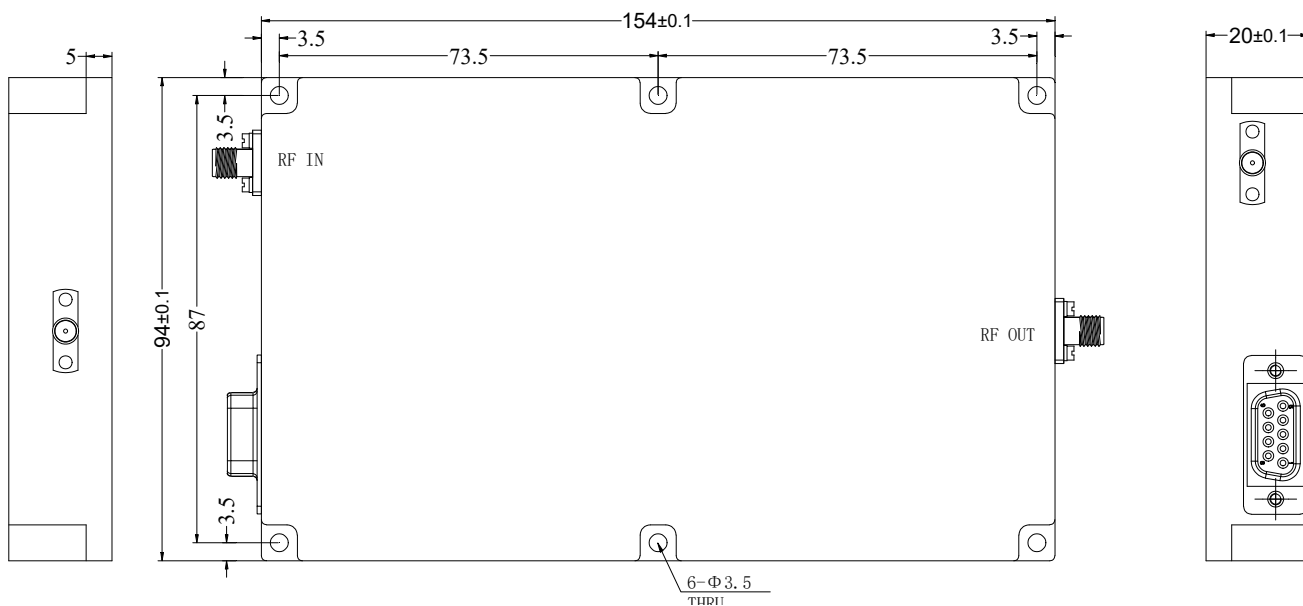
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



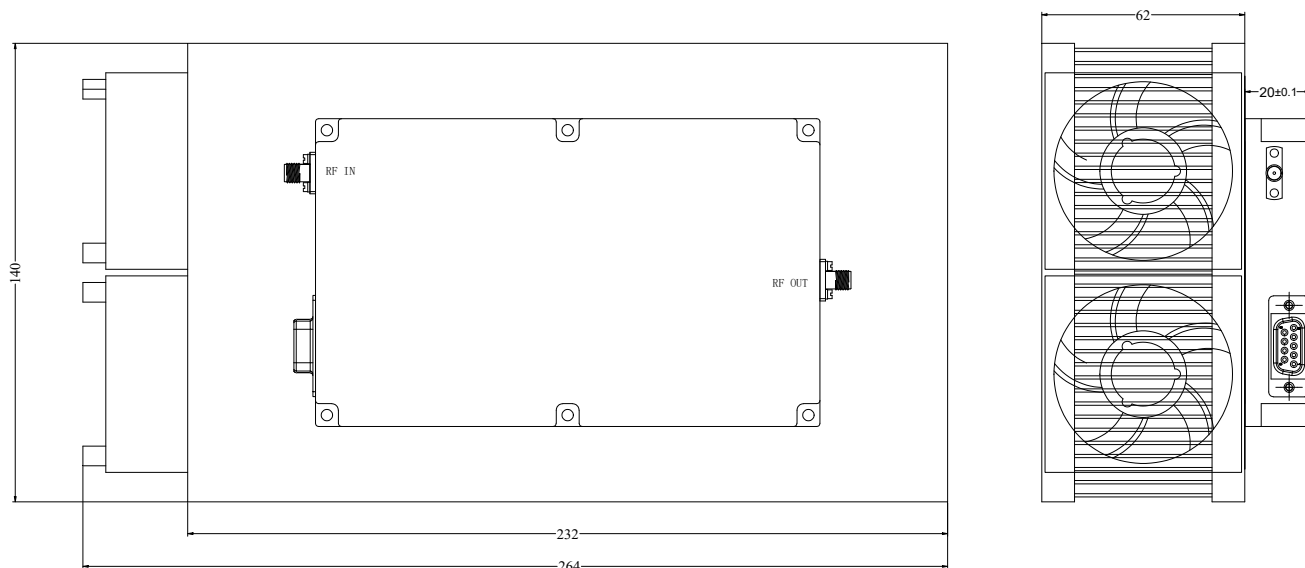
Outline Drawing:

Unit:mm

PA-0M1-20M-32



PA-0M1-20M-32-HS





## DC Supply Connector(DSUB-9 Female):

Pin	Name	Function
1~3	VCC	Power supply positive,+26.0-30.0VDC
4~5	GND	Ground
6	NC	Not connected
7	Over TEM	When the temperature of the case exceeds 75 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 70 °C, the power amplifier will return to normal operation, and this pin will be pulled low.
8	NC	Not connected
9	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to Ground

## Ordering Information:

Base Number	Description	Optional
PA-0M1-20M-32	Power Amplifier,0.1-20MHz, Gain:45dB,Psat:32W,+28V DC	Without Heatsink
PA-0M1-20M-32-HS	Power Amplifier,0.1-20MHz, Gain:45dB,Psat:32W,+28V DC	With Heatsink