

Power Amplifier

30-36GHz/46dB Gain/46dBm Psat

Model: TLPA30G36G-46-46

TLPA30G36G-46-46 is a power amplifier with a minimum gain of 46 dB and a minimum Psat of 46 dBm across the frequency range of 30 to 36 GHz. The DC power requirement for the amplifier is +28 VDC/20 A. The input port configuration offers coax adapter structure with 2.92mm female and output port is WR28.

Features:

- Frequency range: 30-36GHz
- Gain: 46dB Min
- Output Power Psat: 46dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	30		36	GHz
Gain	46	50		dB
Gain Flatness		±3	±5	dB
Output P1dB		44		dBm
Output Psat	46	47		dBm
Input VSWR		1.5	2.0	:1
DC Voltage		+28	+30	V DC
DC Supply Current		20	32	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92 Female/WR28	
DC Bias	D-SUB-9	
Size	220*200*35	mm
Weight	6	kg

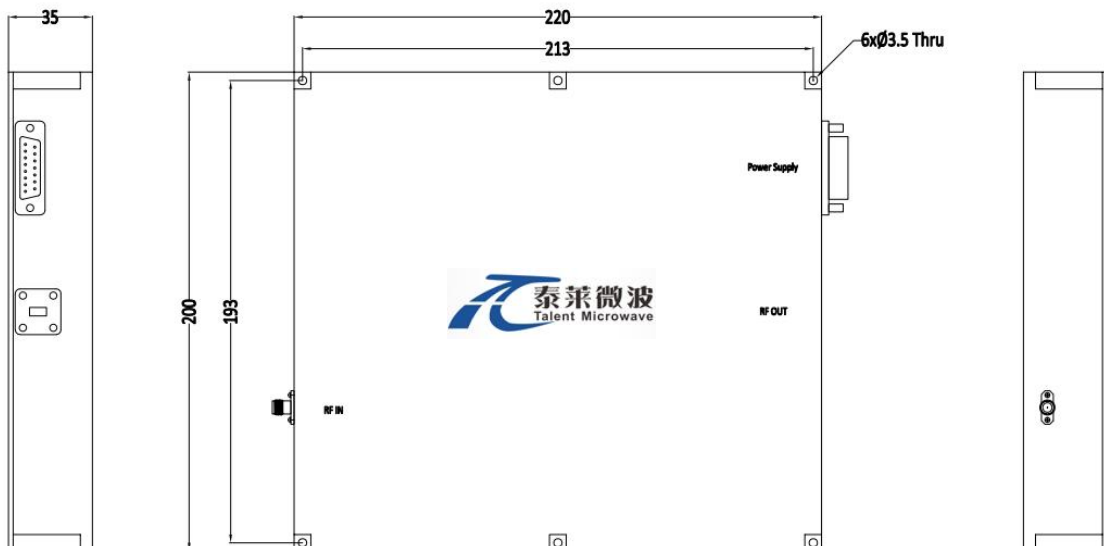
Absolute Maximum Ratings:

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



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



*****Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	°C
Non-operating Temperature*	-50		+60	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA30G36G-46-46	Power amplifier 30-36GHz, Gain:46dB,Psat:46dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA30G36G-46-46-HS	Power amplifier 30-36GHz, Gain:46dB,Psat:46dBm,+28V DC,With Heatsink	Rev.1.1