

Power Amplifier

8-12GHz/51dB Gain/51dBm Psat

Model: TLPA8G12G-51-51

TLPA8G12G-51-51 is a power amplifier with a minimum power gain of 51 dB and a minimum Psat of 51 dBm across the frequency range of 8 to 12 GHz. The DC power requirement for the amplifier is +28 VDC. The input configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Frequency range: 8-12GHz
- Gain: 51dB Min
- Output Power Psat: 51dBm 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	8-12			GHz
Power Gain	51			dB
Gain Flatness		±3		dB
Output Psat	51			dBm
Spurious@Pout=51dBm			-55	dBc
2nd Harmonic@Pout=51dBm			-20	dBc
Input VSWR			2	:1
DC Voltage		28	29	V DC
Power consumption			650	W
Impedance	50			Ohms

Mechanical Specifications:

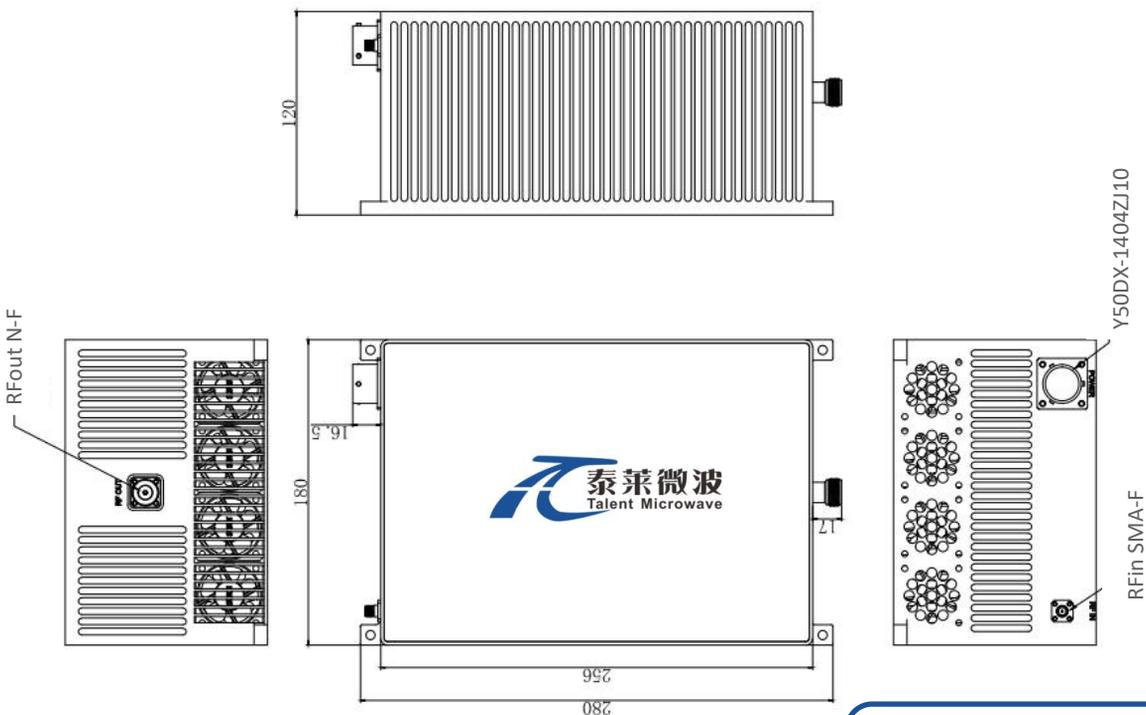
Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
Power Supply Connector	Y50DX-1404	Pin1~2 : +28V Pin3~4: GND
Size	280*180*120	mm
Weight	≤7.5	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+29 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
Relative humidity		95		%
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			

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

Ordering Information:

Base Number	Description	Revision
TLPA8G12G-51-51	Power amplifier 8-12GHz, Gain:51dB,Psat:51dBm,+28V DC,Without Heatsink	Rev.1.0