

Power Amplifier

2-18GHz/40dB Gain/45dBm Psat

Model: TLPA2G18G-40-45

TLPA2G18G-40-45 is a power amplifier with a minimum power gain of 40 dB and a minimum Psat of 45 dBm across the frequency range of 2 to 18 GHz. The DC power requirement for the amplifier is +22 VDC/16 A. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Frequency range: 2-18GHz
- Gain: 40dB Min
- Output Power Psat: 45dBm 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	2		18	GHz
Power Gain	40			dB
Power Gain Flatness		±3	±5	dB
Output Psat	45			dBm
Spurious@Pout=45dBm			-60	dBc
Harmonic@Pout=45dBm		-15	-10	dBc
Input VSWR			2	:1
DC Voltage		22	24	V DC
DC Supply Current		16		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Supply Connector	D-SUB-7W2	A1: +22V A2: GND 1~5: NC
Size	200*100*69.5	mm

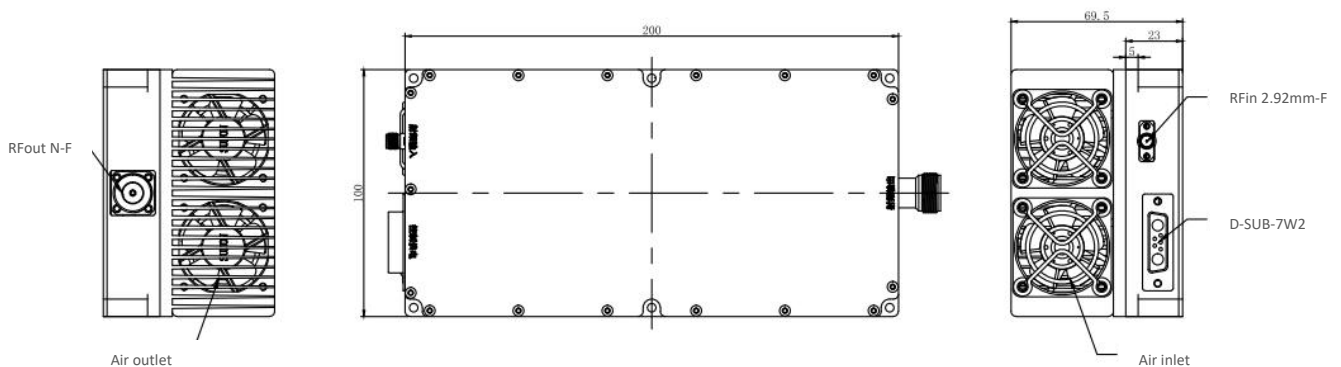
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+24 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*	-40		+50	°C
Non-operating Temperature*	-50		+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
TLPA2G18G-40-45	Power amplifier 2-18GHz, Gain:40dB,Psat:45dBm,+22V DC,With Heatsink	Rev.1.0