

Power Amplifier

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

Model: TLPA18G40G-40-45

TLPA18G40G-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 18 to 40 GHz. The DC power requirement for the amplifier is +18 VDC/50 A. The input configuration offers coax adapter structure with 2.92mm female and output port is WRD180 waveguide.

Features:

- Frequency range: 18-40GHz
- 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	18		40	GHz
Power Gain	40			dB
Small Signal Gain Flatness		±5		dB
Output Psat	45			dBm
Spurious@Pout=45dBm			-50	dBc
Harmonic@Pout=45dBm		-20		dBc
Input VSWR			2	:1
DC Voltage		18	19	V DC
DC Supply Current		50		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/WRD180	
DC Supply Connector	D-SUB8W8	A1~A4: +18V A5~A8: GND
Size	80*80*15(Without heatsink) 220*160*76.5(With heatsink)	mm

Absolute Maximum Ratings:

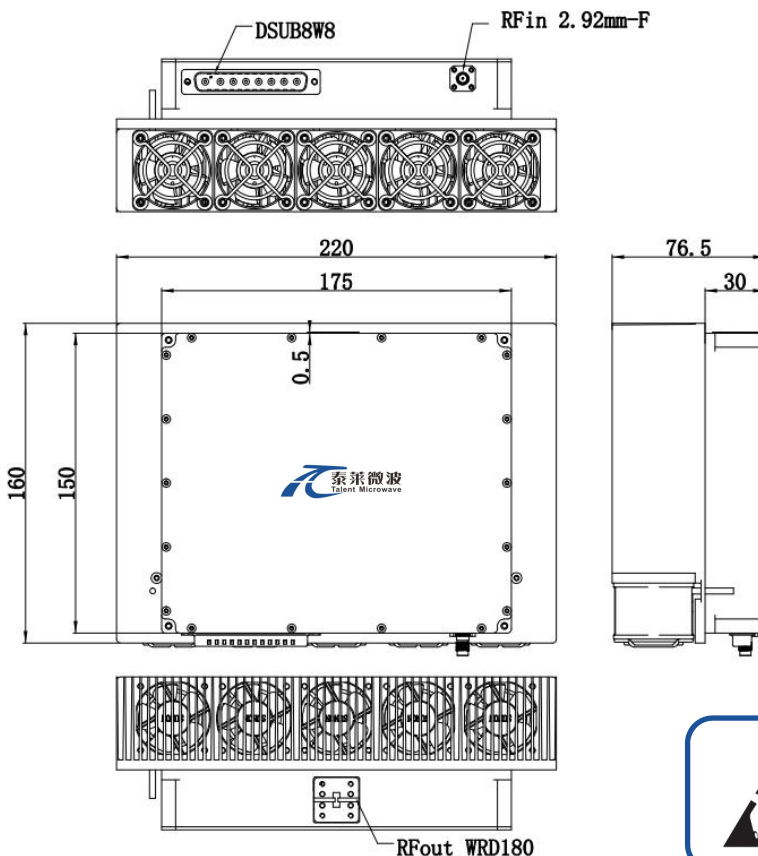
Parameter	Value
Supply Bias Voltage	+19V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

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
TLPA18G40G-40-45	Power amplifier 18-40GHz, Gain:40dB,Psat:45dBm,+18V DC,With Heatsink	Rev.1.0