

Power Amplifier

18-40GHz/47dB Gain/47dBm Psat

Model: TLPA18G40G-47-47

TLPA18G40G-47-47 is a power amplifier with a minimum gain of 47 dB and a minimum Psat of 47 dBm across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +18 VDC/110 A. The input port configuration offers coax adapter structure with 2.92mm female and output port is WRD180C24.

Features:

- Frequency range: 18-40GHz
- Gain: 47dB Min
- Output Power Psat: 47dBm 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
Gain	47			dB
Output Psat	47			dBm
Input Power	-3	0	10	dBm
Spurious@Pout=40dBm	-50			dBc
Input VSWR		2.0	2.5	:1
DC Voltage		+18	+19	V DC
DC Supply Current			110	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/WRD180C24	
DC Power Interface	SUB-8W8	
Control and Test Connector	J30J-9ZKP	
Size	254*254*198	mm
Weight	<30	Kg

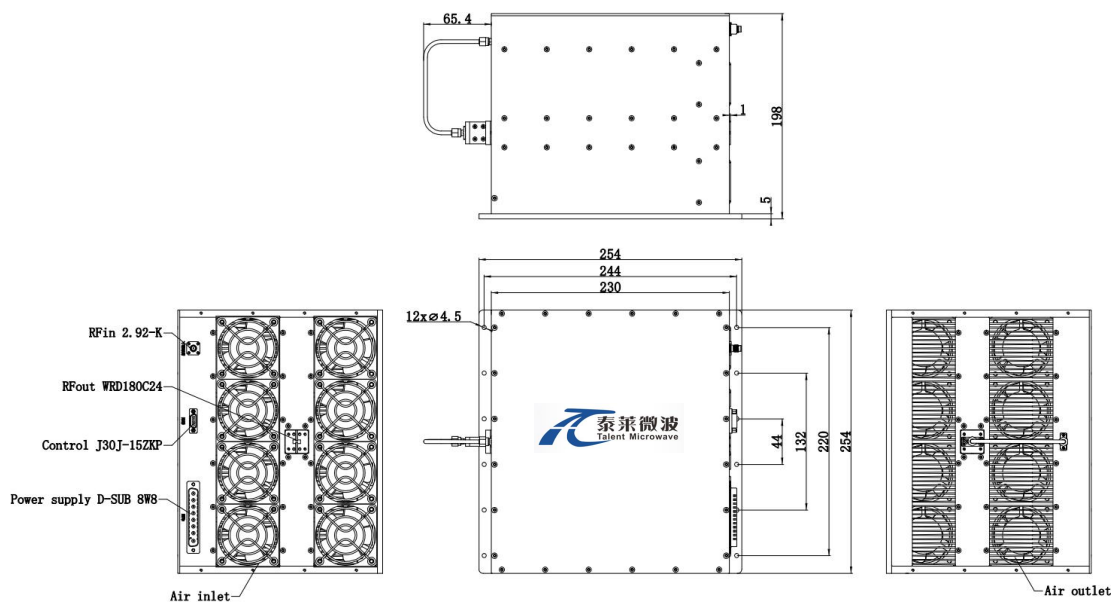
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+19 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm



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

DC Supply Connector(DSUB-8W8):

Pin	Function
A1-4	+18V
A5-8	GND
Pin1	TTL (high for open,low for close)
Pin2	Current Monitor
Pin3	Temperature Monitor

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
Relative humidity		95		%
Altitude	50,000			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-47-47	Power amplifier 18-40GHz, Gain:47dB,Psat:47dBm,+19V DC,With Heatsink	Rev.1.1