

Power Amplifier

1-18GHz /43 dB Gain/43 dBm Psat

Model: TLPA1G18G-43-43

TLPA1G18G-43-43 is a power amplifier with a typical small signal gain of 43 dB and a nominal Psat of 43 dBm across the frequency range of 1 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/400 W. The input and output port configuration offers coax adapter structure with SMA female/N Female.

Features:

- Ultra Wide Band: 1-18GHz
- Gain: 43dB Min
- Output Power Psat: 43dBm 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	1-18			GHz
Gain	43			dB
Gain Flatness		±5		dB
Output Psat	43			dBm
Spurious			-60	dBc
Harmonics			-10	dBc
Input VSWR			2.5	:1
DC Voltage	+28			V DC
Power Consumption			400	W
Impedance	50			Ohms

Mechanical Specifications:

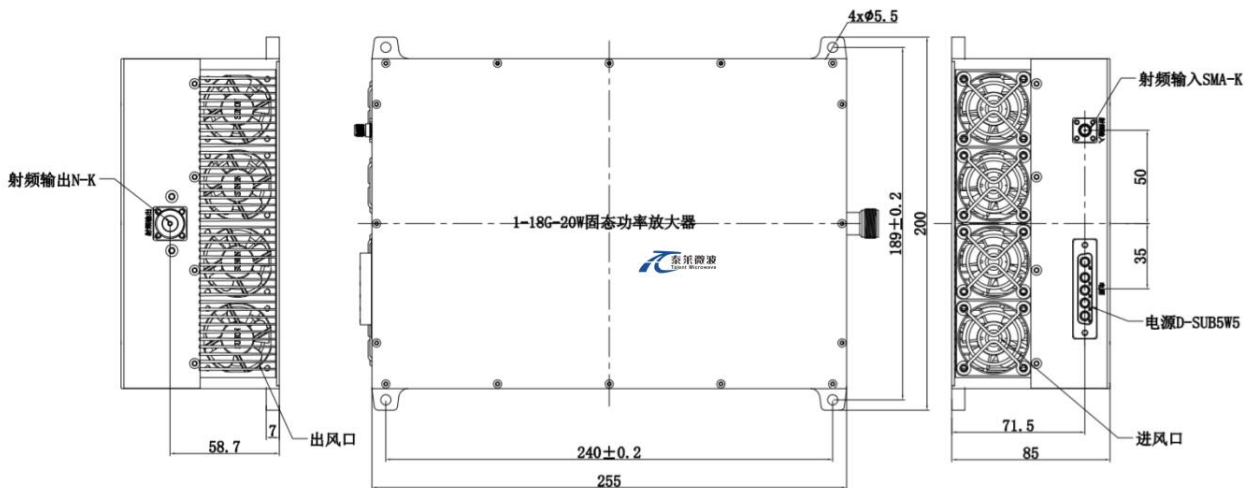
Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
Monitor and control interface	D-SUB5W5	
Size	255*200*85	mm
Weight	7.5	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



D-SUB7W2 Define	
Pin	Function
A1-A2	+28V
A3-A5	GND

*****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*	-20		+50	°C
Non-operating Temperature*	-40		+65	°C
Relative humidity		95		%
Altitude	10000		30000	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
TLPA1G18G-43-43	Power amplifier 1-18GHz,Gain:43dB,Psat:43dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA1G18G-43-43-HS	Power amplifier 1-18GHz,Gain:43dB,Psat:43dBm, +28V DC,With Heatsink	Rev.1.1