

Power Amplifier

10.7-12.7GHz/53dB Gain/53dBm Psat

Model: TLPA10.7G12.7G-53-53

TLPA10.7G12.7G-53-53 is a power amplifier with a minimum power gain of 53 dB and a minimum Psat of 53 dBm across the frequency range of 10.7 to 12.7 GHz. The AC power requirement for the amplifier is +220 V AC/1600 W. The input port configuration offers coax adapter structure with N female and output port is WR75.

Features:

- Frequency range: 10.7-12.7GHz
- Gain: 53dB Min
- Output Power Psat: 53dBm Min
- Protection: Over TEM, over current, over voltage, over VSWR protection
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	10.7		12.7	GHz
Power Gain	53			dB
Output Psat	53			dBm
Gain flatness		±3		dB
Spurious@Pout=53dBm			-50	dBc
Harmonic@Pout=53dBm			-15	dBc
Input VSWR			2	:1
AC Voltage		220		V AC
Power Consumption			1600	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/WR75	
DC Supply Connector	Y50DX-1403	
Control Connector	Y50X-1013	RS422
Size	320*304*155	mm
Weight	≤20	Kg

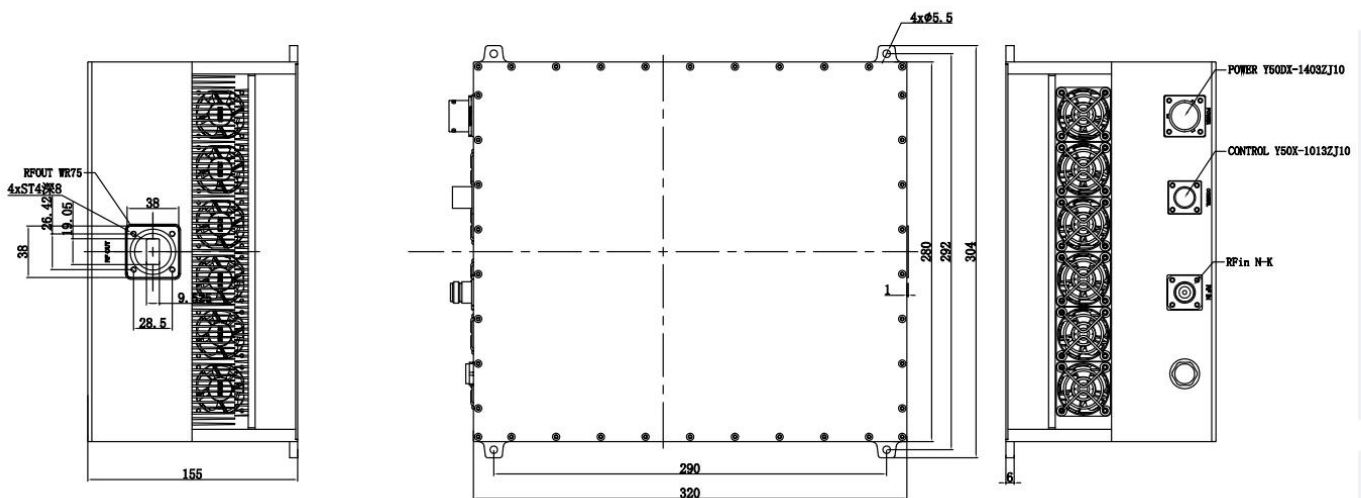
Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBM)	Class 0, passed 150V



Outline Drawing:

Unit:mm



*****Heat Sink Required During Operation**



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

Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2, RF setting on/off 3, ALC automatic level control
Monitoring functions	1, TEM 2, Operating voltage 3, Operating current 4, Output/reflected power 5, Fault informations
Protection functions	1, Over TEM 2, Over voltage 3, Over current 4, Over VSWR: the safe level of 3:1
Remote control	RS422
Cooling system	Built in Cooling system, forced air cooling

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
TLPA10.7G12.7G-53-53	Power amplifier 10.7-12.7GHz, Gain:53dB, Psat:53dBm, 220V AC , With Heatsink	Rev.1.1