

Power Amplifier

14-15GHz/48dB Gain/48dBm Psat

Model: TLPA14G15G-48-48

TLPA14G15G-48-48 is a power amplifier with a minimum gain of 48 dB and a minimum Psat of 48 dBm across the frequency range of 14 to 15 GHz. The DC power requirement for the amplifier is +28 VDC/400 W. The input port configuration offers coax adapter structure with SMA female and output port is WR-62.

Features:

- Frequency range: 14-15GHz
- Gain: 48dB Min
- Output Power Psat: 48dBm 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	14		15	GHz
Gain	48			dB
Gain Flatness		±3		dB
Output Psat	48			dBm
Supurious@Pout=48dBm			-60	dBc
Harmonic			-20	dBc
3rd Order IMD	25			dBc
Input VSWR			1.5	:1
DC Voltage		+28		V DC
Power Consumption			400	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/WR-62	
Size	140*235*100	mm
Weight	≤3.5	Kg

Absolute Maximum Ratings:

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

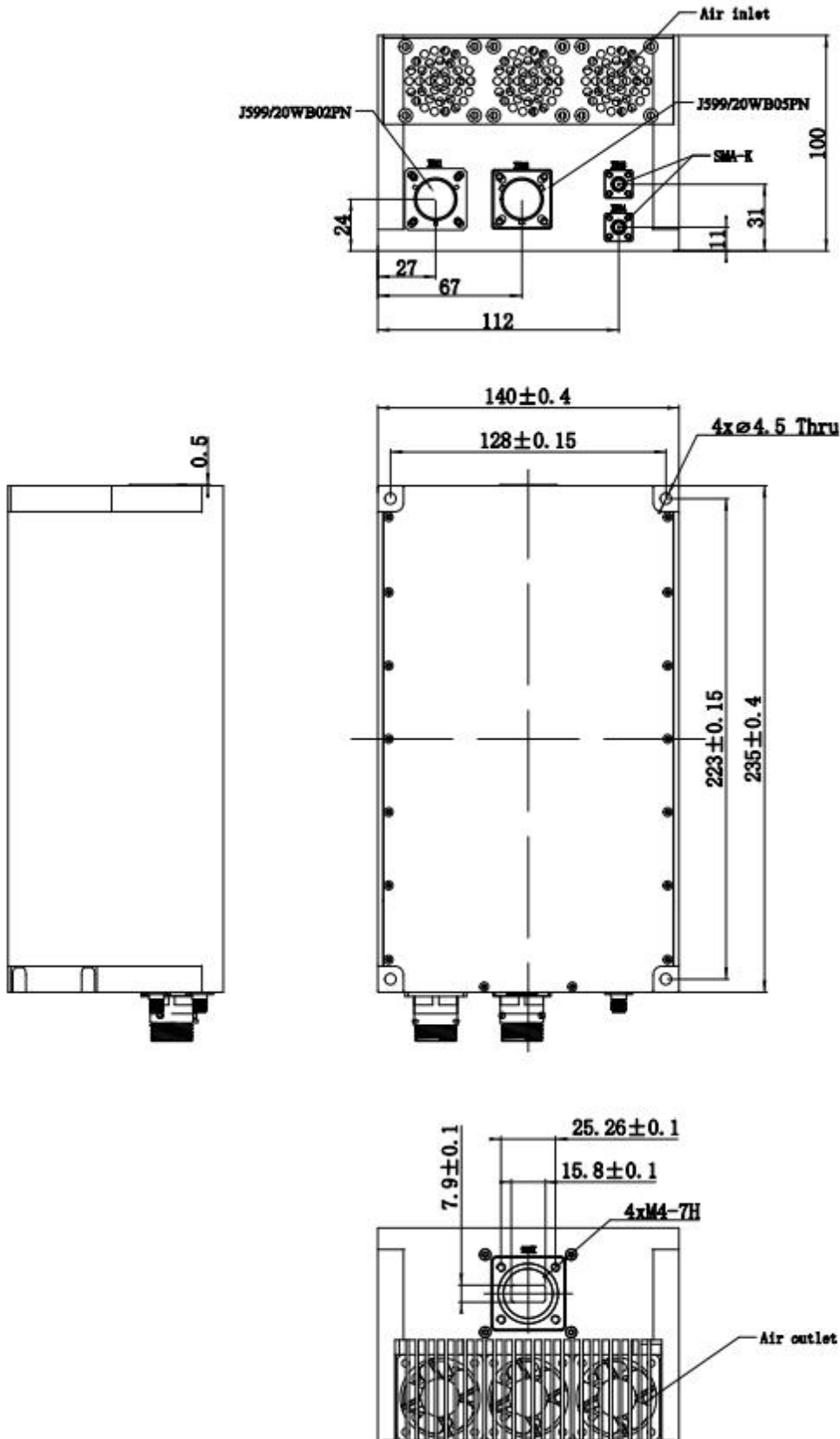


Instruction Connector:

Port	Function
Port 1	1,RF Input 2,IF/REF Input
Port 2	RF Output
Port 3	Supply Voltage
Port 4	Communication
Port 5	Output Power Forward Coupling

Outline Drawing:

Unit:mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
Relative humidity		95		%
Altitude	30,000			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
TLPA14G15G-48-48	Power amplifier 14-15GHz, Gain:48dB,Psat:48dBm,+28V DC,With Heatsink	Rev.1.1