

Solid State High Power Amplifier Systems

1.5GHz/65dB Gain/65dBm Psat/48V AC

Model: TLPA1.5G-65-65-P

TLPA1.5G-65-65-P is a solid state high power amplifier systems provides high output power and high gain at the frequency point of 1.5GHz. The amplifier features a built-in 48V power supply, making it easy to use in most lab environments. This model features thermal self protection, preventing damage to the amplifier and providing added reliability.

Features:

- Frequency range: 1.5GHz
- Gain: 65dB Min
- Psat Output Power: 65dBm Min
- Protection: Over TEM, over voltage, over current ,infinite VSWR protection
- 50 Ohm Matched Input / Output



Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	1.5			GHz
Working Mode	MOD	PULSE ONLY			
Power Gain	GP	65			dB
Output Psat	Psat	65	66		dBm
Spurious@Pout=65dBm	Spur			-60	dBc
Harmonics@Pout=65dBm	HAM			-20	dBc
Input Signal Mode	IPS_MOD	CW/PULSE			
Modulation Signal Level	TTL	0		5	V
Modulation Frequency	MF	1		100	KHz
Pulse Width	T	1		500	us
Duty Cycle	τ	0.1		30	%
Rise/Fall Time	Tr		50	100	ns
Pulse Input	TTL level, 50 ohm nominal termination				
Pulse Drop@T=100us	Pdrop		0.5	1	dB
Star Delay	DSU		150		ns
Shutoff Delay	TOF		250		ns
Input VSWR	VSWRin			1.5	:1

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Output VSWR	VSWRout			2	:1
AC Voltage	Vac	48(It can be changed to 220 V AC)			V AC
Power consumption	Pdiss			2000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/WR510	
Pulse Input Connector	J30J-15ZKP	
Supply Connector	Y50DX-1804	
Size	510*450*134	mm
Weight	≤35	Kg

Absolute Maximum Ratings:

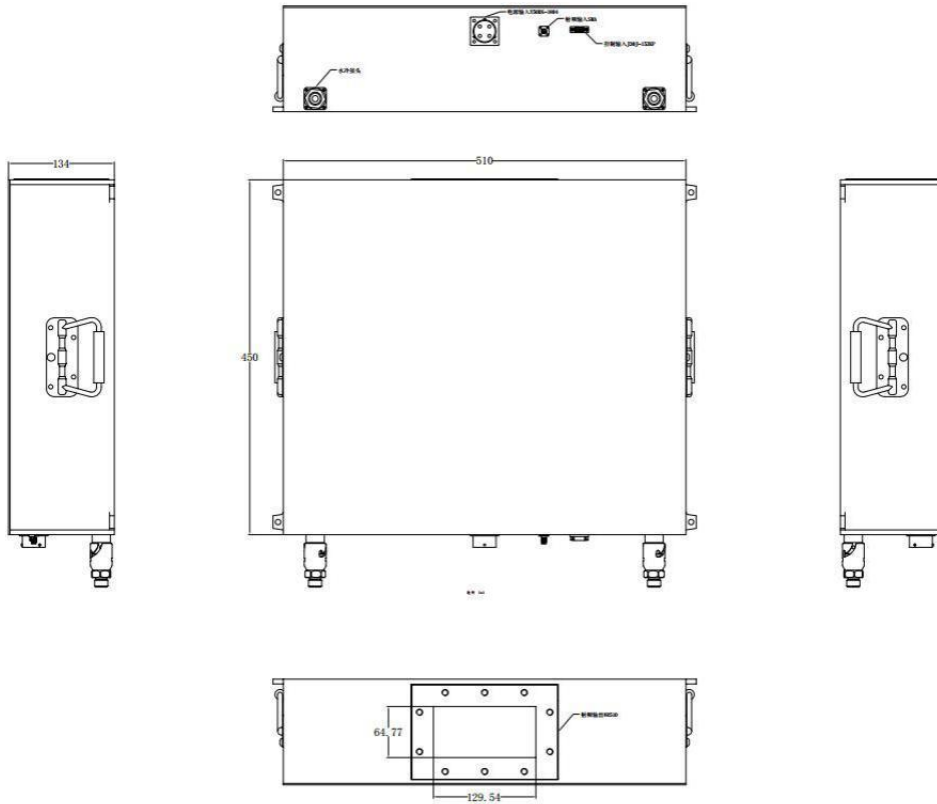
Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off 2,ALC automatic level control
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Infinite VSWR
Remote control	RS422
Cooling system	Built in Cooling system,liquid cooling

Outline Drawing:

Unit:mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	°C
Non-operating Temperature*	-30		+50	°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
TLPA1.5G-65-65-P	Solid State High Power Amplifier Systems,1.5GHz, Gain:65dB,Psat:65dBm,+48V AC,Built in liquid Cooling	Rev.1.1