

Solid State High Power Amplifier Systems

26.5-31GHz /63dB Gain/63 dBm Psat/220V AC

Model: TLPA26.5G31G-63-63-P-BC

TLPA26.5G31G-63-63-P-BC is a solid state high power amplifier systems provides high output power and high gain across the 26.5 to 31 GHz frequency range. The amplifier features a built-in 220V 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: 26.5-31GHz
- Gain: 63dB Min
- Psat Output Power:63dBm Min
- Protection:Over TEM,over voltage, over current ,output mismatch protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	26.5-31			GHz
Working Mode	MOD	PULSE ONLY			
Power Gain@Pout=63dBm	GP	63			dB
Gain flatness	Δ GL		± 3		dB
Output Psat	Psat	63			dBm
Spurious@Pout=63dBm	Spur			-60	dBc
Harmonics@Pout=63dBm	HAM			-30	dBc
Input Signal Mode	IPS_MOD	CW/PULSE			
Modulation Signal Level	TTL	0		5	V
Modulation Frequency	MF	0.5		100	KHz
Pulse Width	T	0.3		500	us
Duty Cycle	τ			10	%
Rise/Fall Time	Tr		50	100	ns
Pulse Internal Flatness	Pdp			± 0.5	dB
Pulse-to-Pulse Flatness	P-P			± 0.1	dB
Inrush Impulse Current@10%	IPC			20	A
Power consumption@5%	Pdiss			1700	W
Power consumption@10%	Pdiss			3300	W

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
AC Voltage	Vac		220		V AC
Impedance	I/O-IMP		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input Connector	2.92mm Female	
Output Connector	WR28	
Forward/Reverse Coupling	2.92mm Female/2.92mm Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Modulation Interface	BNC Female	
Size	20U	
Weight	≤250	Kg

Absolute Maximum Ratings:

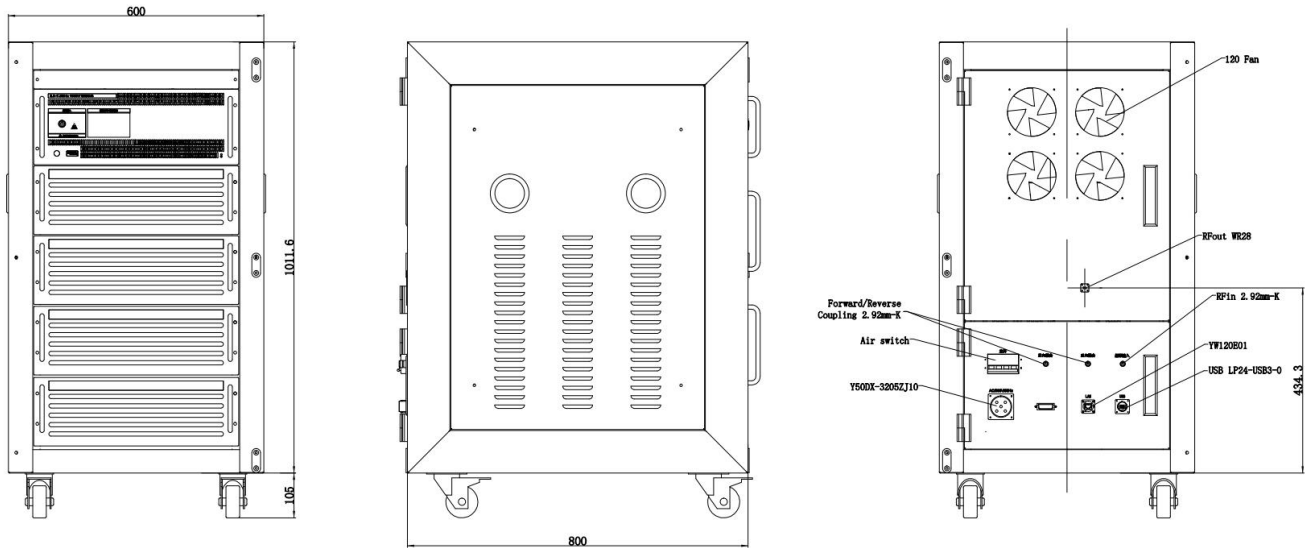
Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off 2, Gain control
Protection functions	1, Over TEM 2, Over voltage 3, Over current 4, Output mismatch
Remote control	RS422/LAN
Monitor functions	1, Output power 2, Reflected power 3, TEM 4, Operating voltage 5, Operating current
Cooling system	Built in Cooling system, forced air 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
TLPA26.5G31G-63-63-P-BC	Solid State High Power Amplifier Systems 26.5-31Hz, Gain:63dB, Psat:63 dBm, 220V AC, Built in Fan Cooling	Rev.1.1