泰莱微波
Talent Microwave

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Solid State High Power Amplifier Systems

3.1-3.4GHz/68dB Gain/68dBm Psat/380V AC Model: TLPA3.1G3.4G-68-68-P-BC

TLPA3.1G3.4G-68-68-P-BC is a solid state high power amplifier systems provides high output power and high gain across the 3.1 to 3.4 GHz frequency range. The amplifier features a built-in 380V 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: 3.1-3.4GHz
- Gain: 68dB Min
- Psat Output Power: 68dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW		3.1-3.4		GHz
Power Gain	GP	68			dB
Gain flatness	ΔGL		±3		dB
Output Psat	Psat	68			dBm
Spurious@Pout=59dBm	Spur			-60	dBc
Harmonics@Pout=59dBm	HAM			-20	dBc
Modulation Signal Level	TTL	0		5	V
Modulation Frequency	MF	1		100	KHz
Pulse Width	T	0.3		500	us
Duty Cycle	τ	0.1		20	%
Rise/Fall Time	Tr		50	100	ns
Pulse Drop@T=100us	Pdrop		0.5	1	dB
Input VSWR	VSWR		1.5	2	:1
AC Voltage	Vac		380		V AC
Power consumption@20%	Pdiss		6000		W
Impedance	I/O-IMP		50		Ohms

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Mechanical Specifications:

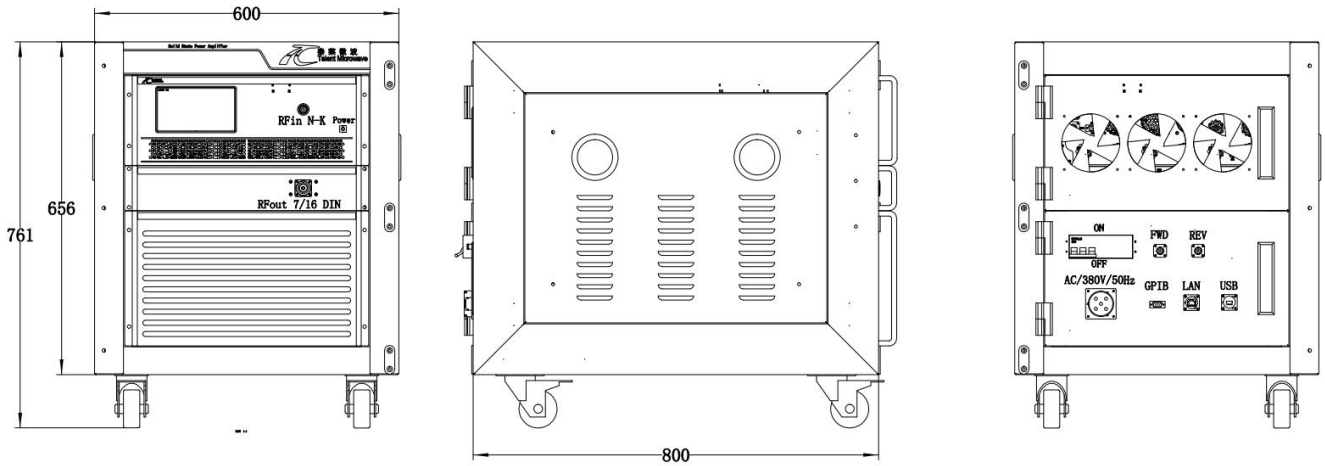
Parameter	Value	Units
Input /Output Connector	N Female/7/16 DIN Female	
Forward/Reverse Coupling	SMA Female/SMA Female	
Communication Connector	DB9/RJ45	
Size	12U	
Weight	≤150	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



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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,Over VSWR
Remote control	RS422/Ethernet
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	℃
Non-operating Temperature*	-30		+50	℃
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
TLPA3.1G3.4G-68-68-P-BC	Solid State High Power Amplifier Systems 3.1-3.4GHz,Gain:68dB,Psat:68dBm,380V AC,Built in Fan Cooling	Rev.1.1