

Solid State High Power Amplifier Systems

10KHz-100MHz/64dB Gain/2500W Psat/380V AC Model: TLPA10K100M-64-64-BC

TLPA10K100M-64-64-BC is a solid state high power amplifier systems provides high output power and high gain across the 10KHz to 100MHz 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: 0.01-100MHz
- Gain: 64dB Min
- Psat Output Power: 64dBm Min
- Protection: Over TEM, over input power, over VSWR protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	0.01		100	MHz
Small Signal Gain	SSG	64			dB
Gain flatness	Δ GL		± 3		dB
Noise Figure	NF		6		dB
Output P1dB	P1dB	1500			W
Output Psat	Psat	2500			W
Spurious	Spur		-50		dBc
Harmonics	HAM		-15		dBc
Input VSWR	VSWR _{in}		2		:1
Output VSWR Alarm	/		5		:1
AC Voltage	Vac	340		530	V AC
Power Consumption	P _{diss}			8400	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

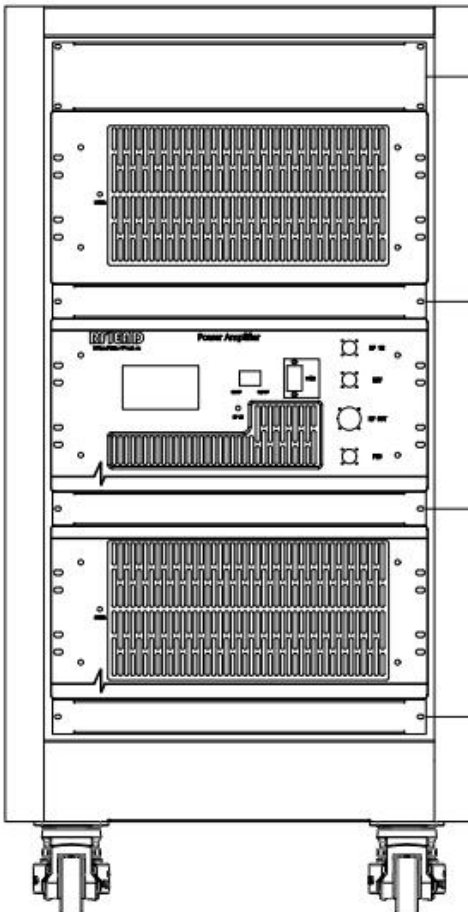
Parameter	Value	Units
Input /Output Connector	N Female/7/16 Female	
Forward/Reverse Coupling	N Female/N Female	
Size	19 Inch 20U with 1.4m Cabinet	

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Key Features:

Parameter	Advantages
Control functions	Power setting on/off
Protection functions	1, Input overdrive: $\leq 10\text{dBm}$ 2, Over TEM: $\leq +85^{\circ}\text{C}$ 3, VSWR protection: $\leq 5:1$
Cooling system	Built in Cooling system, forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	0		+40	$^{\circ}\text{C}$
Non-operating Temperature*	-20		+60	$^{\circ}\text{C}$
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.

Optional items:

Number	Items	Payment
1	The input/output interfaces are located on the front panel.	STD(Optional)
2*	The input and output interfaces are on the rear panel.	STD(Optional)
3	Safety lock (DB9)	STD(Optional)
4	Provides forward and reverse coupling ports	STD(Optional)
5	Gain and output power adjustment	PD

*Note: The default input and output interface is in the back panel

Ordering Information:

Base Number	Description	Revision
TLPA10K100M-64-64-BC	Solid State High Power Amplifier Systems 10KHz-100MHz, Gain: 64dB, Psat: 2500W, 380V AC, Built in Fan Cooling	Rev.1.0