

## Solid State High Power Amplifier Systems

10KHz-100MHz /66dB Gain/66dBm Psat/380V AC

Model: TLPA10K100M-66-66-BC

TLPA10K100M-66-66-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: 10KHz-100MHz
- Gain: 66dB Min
- Psat Output Power:66dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR,open/circuit break,overexcitation protection
- 50 Ohm Matched Input / Output

### Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	10KHz-100MHz			
Power Gain	GP	66			dB
Gain flatness	$\Delta$ GL			$\pm 2.5$	dB
Output Psat	Psat	3500			W
Output P1dB	P1dB	2500			W
Spurious	Spur			-60	dBc
Harmonics	HAM			-15	dBc
Input VSWR	VSWRin			2	:1
AC Voltage	Vac		380		V AC
Power Consumption	Pdiss			10	KW
Impedance	I/O-IMP	50			Ohms

### Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/7/16 DIN Female (optional)	
Forward/Reverse Coupling	N Female/ N Female (optional)	
Size	600*800*1600/19 Inch*1600	mm
Weight	$\leq 200$	Kg

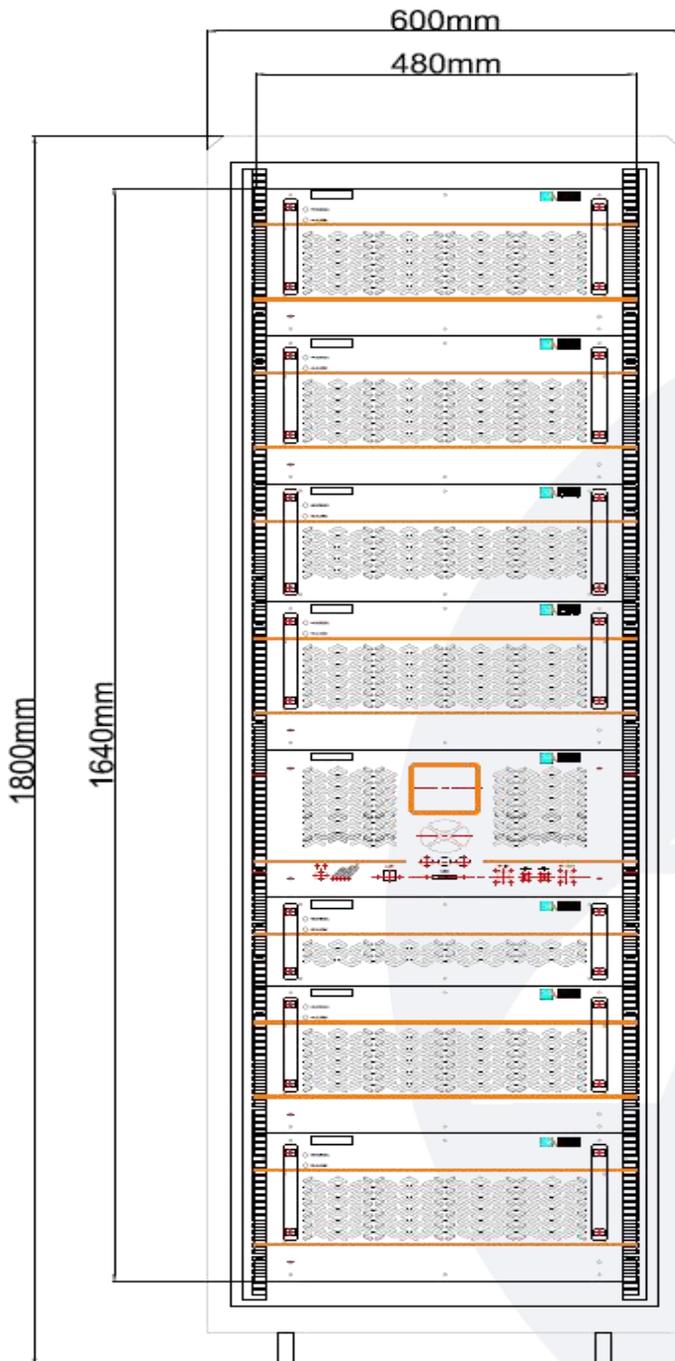
Note: Dual directional coupler can be selected as built-in or external..

### Absolute Maximum Ratings:

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

### Outline Drawing:

Unit:mm



### Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off
Protection functions	1,Over TEM: 70°C 2,Over voltage 3,Over current 4,Over VSWR: 6:1 (adjustable) 5,Open/circuit break 6,Overexcitation: 3600W
Remote control	GPIB/Ethernet
Cooling system	Built in Cooling system,forced air cooling

### 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			

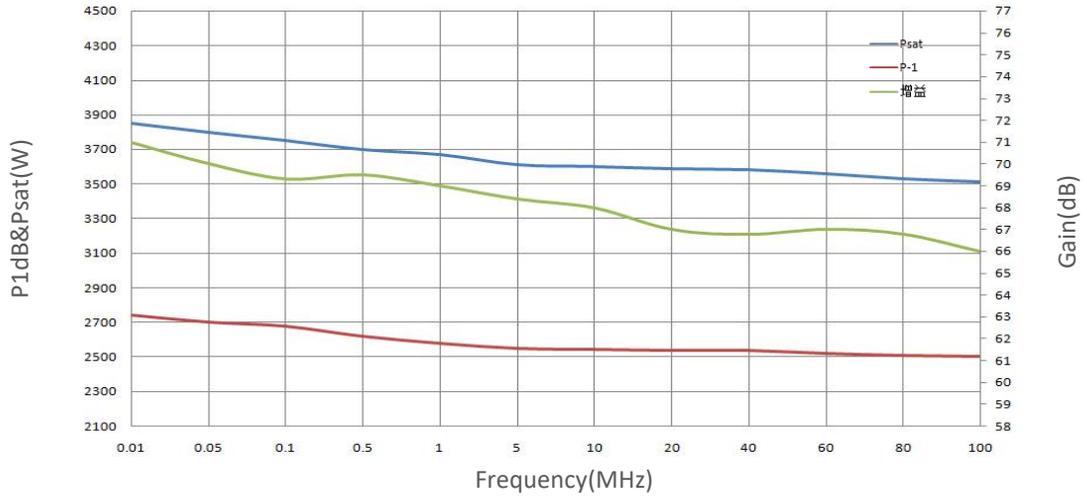
\*Note: For a wider temperature range, please consult the manufacturer.

### Ordering Information:

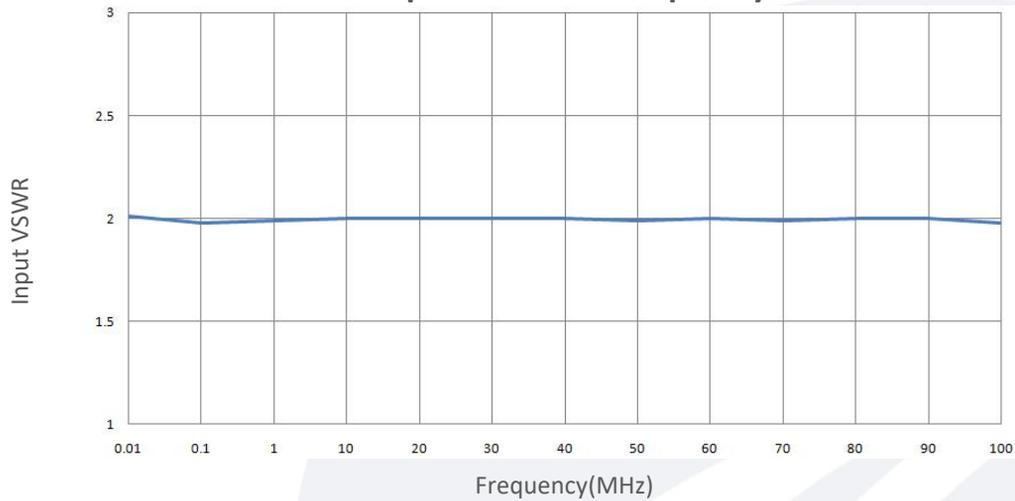
Base Number	Description	Revision
TLPA10K100M-66-66-BC	Solid State High Power Amplifier Systems 10KHz-100MHz, Gain:66dB, Psat:66dBm, 380V AC, Built in Fan Cooling	Rev.1.1

## Typical Performance Data:

### Power Gain&P1dB&Psat vs Frequency



### Input VSWR vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.