

Solid State High Power Amplifier Systems

20-500MHz/60dB Gain/60dBm Psat/220V AC

Model: TLPA20M500M-60-60-BC

TLPA20M500M-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 20 to 500MHz 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: 20-500MHz
- Gain: 60dB Min
- Psat Output Power: 60dBm Typ
- 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	20-500			MHz
Power Gain	GP	60	63		dB
Gain flatness	Δ GL		± 2	± 3	dB
Output P1dB	P1dB		57		dBm
Output Psat	Psat	59	60		dBm
Spurious	Spur			-60	dBc
Harmonics	HAM		-15		dBc
Input VSWR	VSWR _{in}		1.5	2	:1
AC Voltage	Vac		220		V AC
Power Consumption	P _{diss}			5000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

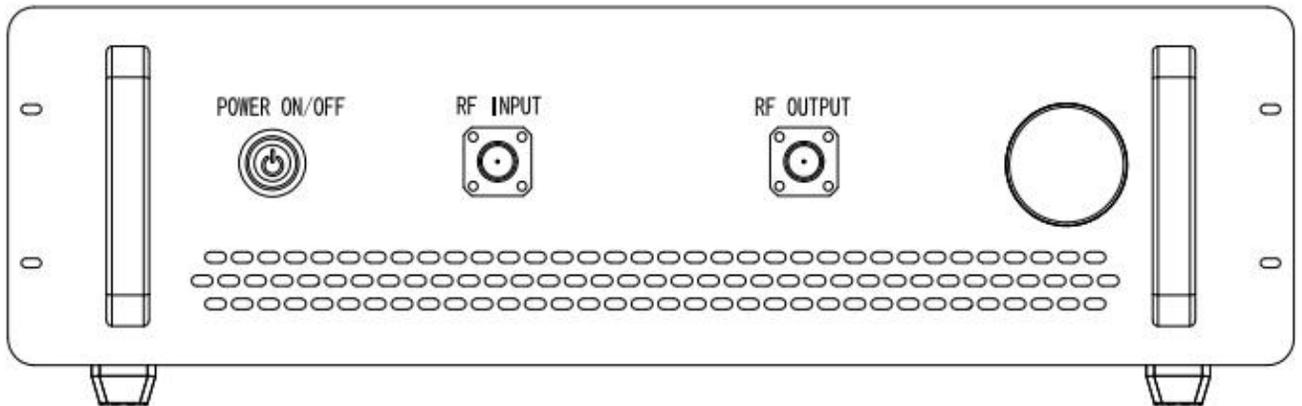
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Monitor and control interface	D-SUB 15Pin	
Size	6U Rack Mount Chassis	
Weight	≤ 50	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



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	°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
TLPA20M500M-60-60-BC	Solid State High Power Amplifier Systems 20-500MHz,Gain:60dB,Psat:60dBm,220V AC,Built in Fan Cooling	Rev.1.1