



Solid State Wideband Power Amplifier

Model – DB.502.5G4840AC



Front touch panel allows complete control of all amplifier functions

General Description:

This system is a broadband Signal/power amplifier designed for CW/Digital/Pulse signals and general-purpose amplification. Using advanced high power density LDMOS and GaN semiconductor devices, these high-performance amplifiers achieve high efficiency, high gain, and wide dynamic range. Remote control via Ethernet. Like all Elite RF amplifiers, the product comes with an industry leading **3-year warranty**.



Features	Display Indicators	Protections
500-2500 MHz	Forward Power	Thermal Overload
100 watts	Reverse Power	Internally Fused
40 dB gain	VSWR Fault	Over Current
Class AB	Temp Fault	Over Voltage
100/240 VAC	Gain Settings	Over Power
Gain Control	High Power	Over VSWR
Power Monitor	Voltage	
Remote Control	Current	
V/C/T Monitor	Temp	

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	500		2500	MHz
Output Power CW	Psat		100		Watt
Output Power at 1 dB Compression	P1dB		25		Watt
Small Signal Gain	Gp		40		dB
Gain Flatness at Psat	Delta Gp 1		+/- 1		dB
Input VSWR	S11		2:1		dB
IMD	IP3		-		dBm
Small Signal Gain Flatness	Delta Gp 2		+/- 2.0		dB
Harmonics at 50 Watts	H		-15		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage (1 phase)	VAC		100 - 240		VAC
AC Input Power @ 100 watts	AC input		400		Watts
Class of Operation	C		AB		Class
Noise Figure	NF		7		dB
Gain Adjustment Range	GA		20		dB

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	Tc	0		+50	Deg C
Storage Temperature	Tstg	-40		+85	Deg C
Relative Humidity (non-condensing)	RH			95	%
Altitude	ALT			10,000	Feet
Vibration/Shock	VI /SH				Normal Truck Transport

MECHANICAL CHARACTERISTICS

Dimensions	Symbol	Min	Typ	Max	Unit
Dimensions (rack mount)	Dim		19 x 15 x 3.5	2U	Inches
Weight	Wt.		30		lbs.
Connectors	RF Conn		N - type		-
Cooling	Fans		Forced Air		-

Rev 2 5/28/2023
Specifications subject to change,
consult sales for latest information