

# LINEAR WIDEBAND POWER AMPLIFIER

**Model – AB.502.5G5048AC**



## General Description:

**Elite RF's AB Series** amplifier is a wideband power amplifier designed for CW signals fabricated on GaN on SiC process and can operate up to **2.5 GHz**. These amplifiers offer high power density, low thermal resistance, and wideband performance. They can be widely used for military and commercial applications.

**Like all Elite RF amplifiers**, this product comes with an industry leading **3-year warranty**.

### Features

Wide Freq. Range  
High Output Power  
High Gain  
High Reverse Isolation  
Built-in Protection

### Protections

Thermal Overload  
Over Voltage

## 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		50		Watt
Small Signal Gain	Gp		48		dB
Gain Flatness	Delta Gp 1		+/- 2		dB
Input VSWR	S11		2:1		Ratio
IMD @ 2 GHz @ 1 watt/tone / 1 MHz spacing	IP3		55		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	Opv	100	120	240	VAC
AC Power at 100 watts	Pd		400		Watt
Class of Operation	C		AB		Class
Noise Figure	NF		7		dB
Large Signal Gain	Lsg		46		dB
Max Load VSWR @ 100 Watts	ML		6:1		Ratio

## 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		

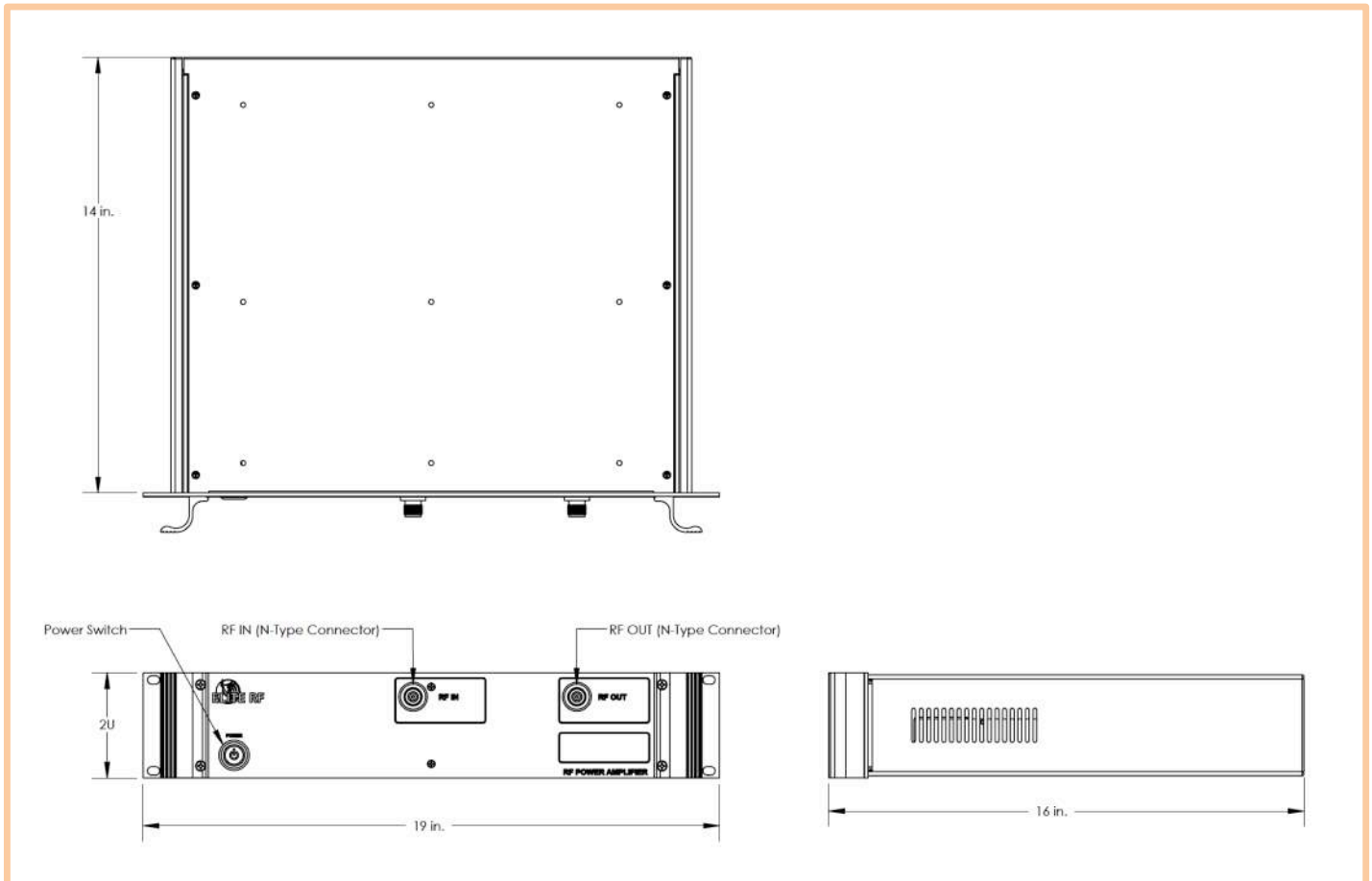
## MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Dimensions	Dim		19 x 15 x 3.5		Inches
Weight	Wt.		25		lbs.
Connectors In/Out	RF Conn		N-Type		-
Cooling	Th		Forced air cooling		-

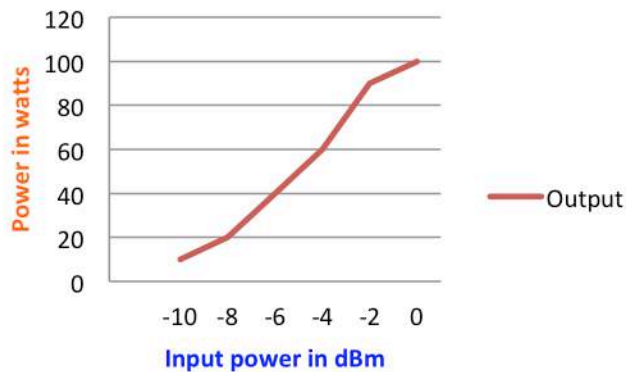
## OPTIONS

Parameter	Add suffix to part number
Heat sink and fans	N/A
Isolator with forward and reverse voltage outputs	N/A
TTL Input Trigger	N/A

## Mechanical Drawings



### Output Power vs. Input Power



### Gain vs. Frequency

