

LINEAR WIDEBAND POWER AMPLIFIER

Model – DB030512M5048AC

General Description:

Elite RF's DB Series 19 inch rack mount amplifier is a wideband power amplifier designed for CW signals fabricated on LDMOS process and can operate up to **512 MHz**. These amplifiers offer high power density, low thermal resistance, and wideband performance. They can be widely used for military and commercial applications. Front Panel display provides easy control of all functions.

Like all Elite RF amplifiers, this product comes with an industry leading warranty.



Features

- Wide Freq. Range
- High Output Power
- High Gain
- Front panel touch screen
- Built-in Protection
- Ethernet based interface
- Local Monitoring /Control
- Remote Monitoring/Control

Protections

- Thermal Overload
- Over Voltage
- VSWR

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	30		512	MHz
Output Power CW	Psat		100		Watt
Output Power at 1 dB Compression	P1dB		40		Watt
Small Signal Gain	Gp		48		dB
Gain Flatness	Delta Gp 1		+/- 2		dB
Input VSWR	S11		2:1		Ratio
IMD @ 250 MHz @ 1 watt/tone / 1 MHz spacing	IP3		55		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-50		dBc
Operating Voltage	Opv	100	120	240	VAC
AC Power at 100 watt	Pd		300		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

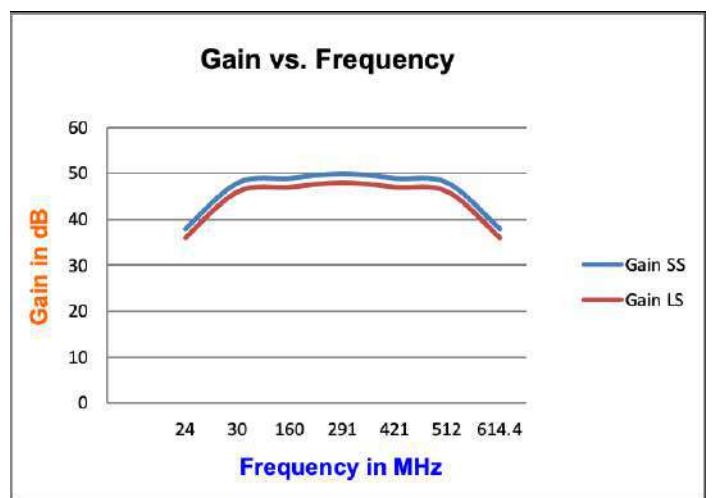
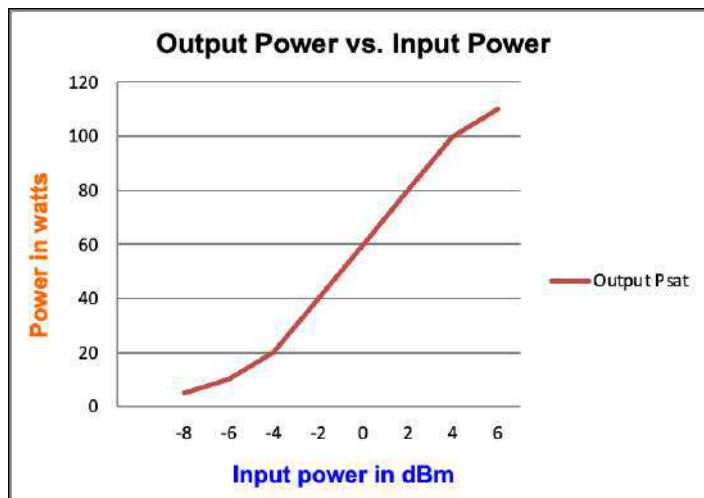
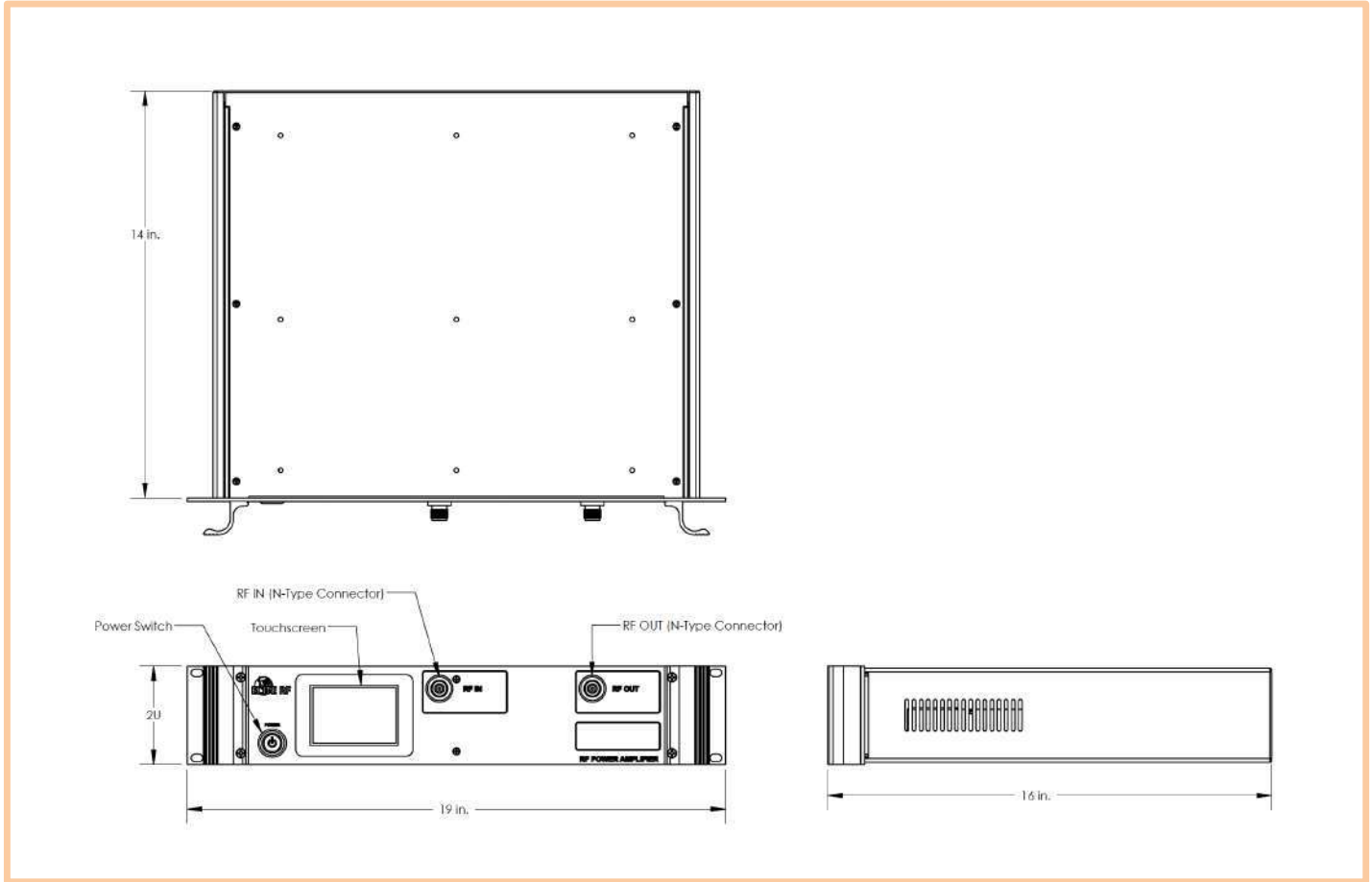
MECHANICAL CHARACTERISTICS

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



Elite RF LLC
 1700 Tower Dr, Hanover Park, IL 60133, USA
 Call us for customer service/technical support at: 847-592-6350
 Email: sales@eliterf.com Web: www.eliterfllc.com

Rev 3 06/14/2023
 Specifications subject to change,
 consult sales for latest information

Product Compliance:
 ECCN: EAR99
 USHTS: 8541290075