

LINEAR WIDEBAND POWER AMPLIFIER

Model – MB6.0018G505028

General Description:

Elite RF's MB Series amplifier is a wideband power amplifier designed for CW signals fabricated on GaN on SiC process and can operate up to **18.0 GHz**. These amplifiers offer high power density, low thermal resistance, and wideband performance. They can be widely used for military and commercial applications.

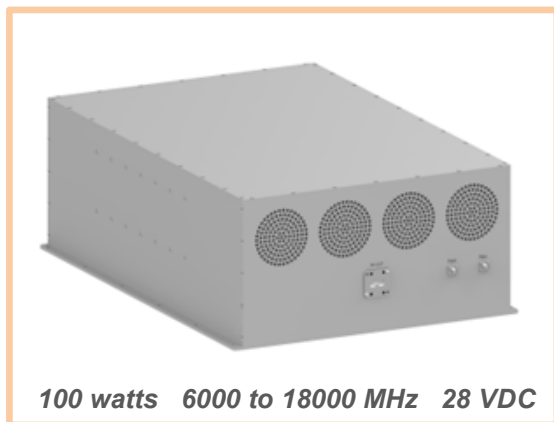
Like all Elite RF amplifiers, this product comes with an industry leading warranty.

Features

Wide Freq. Range
High Output Power
High Gain

Protections

Over Current
Over Heat



ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	6000		18000	MHz
Output Power CW	Psat	50			dbm
Output Power at 1 dB Compression Small	P1dB		47		dbm
Signal Gain	Gp	50			dB
Gain Flatness (@200MHz step)	Delta Gp 1		+/- 3.5		dB
Input VSWR(at 50 Ohm)	S11			2:1	Ratio
IMD @ 12 GHz @ 1 watt one / 1 MHz spacing	IP3		-		dBm
Harmonics	H		-15		dBc
Spurious Signals	Spur		-55		dBc
Operating Voltage(Customizable)	VDC		28		VDC
Power Consumption(at rated output)	P			800	VA
Class of Operation	C		AB		Class
Input Power	Pin			+5	dBm

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	Tc	0		+45	Deg. C
Storage Temperature	Tstg	-20		+75	Deg. C
Relative Humidity	RH	5		95	%
Vibration/Shock	VI /SH		Normal Truck Transport		

MECHANICAL CHARACTERISTICS

Parameter	Symbol	Typ	Note	Unit
Dimensions	Dim	20.8 × 15.2 × 7.3	Customizable	Inches
Weight	Wt.	14		kg
Connectors In/Out	RF Conn	N-Female / N-Female	Customizable(WRD500-N)	-
Cooling	Th	Fan Cooling	Need to adapt heat sink	-
Power/Control Supply Connector	Pwr/CTL Conn	D-SUB-7W2-Male / D-SUB-9-Male	Customizable	-
Control Mode	Ctrl	EN +5V		-

OPTIONS

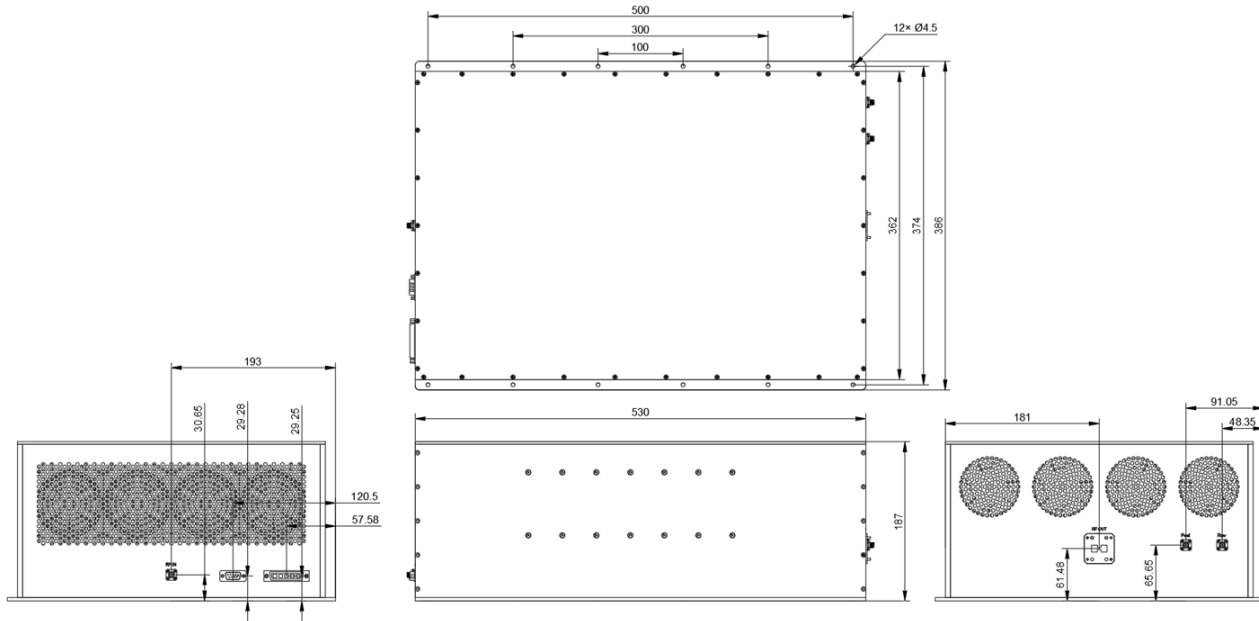
Parameter	Add suffix to part number
Heat sink and fans	- H

Elite RF LLC

1700 Tower Drive, Hanover, IL. 60133
Call us for customer service/technical support at: 847-592-6350
Order or email us on-line at www.eliterfllc.com

Just for Reference

Assembly Outline



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

Rev2 01/21/2025:
Specifications subject to change,
consult sales for latest information