HD31127
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Rack mounted system
High Power Class AB linear GaN design
Instantaneous ultra wide bandwidth
Suitable for all modulations standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output @ Psat	100 Watt Min	CW into 2:1 Load VSWR
Power Output @ P1dB GCP	50 Watt Min	CW
Power Gain	50 dB Min	
Power Gain Flatness	1.0 dB p-p Max per 1.0 GHz span	At full power & constant Pin
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
RF Reference	FWD/REV Ports @ 35 dB Coupling	
Harmonics	>10 dBc Typ	At rated output
Non Harmonic Spurious	-60 dBc Min	
Operating Voltage	48 VDC	MIL-STD-451F
Power Consumption	1800 Watt Max	At rated output
Gain Control	20 dB @ 0 dBm input	Interface - 8 BIT SPI
Load VSWR Protection	5 : 1	Self-initiated shutdown
High Temperature Protection	Automatic Shutdown	
Cold Start	<3 Sec Max	From when DC is applied
Standby Mode	Time Ready State <10 mSec	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	-40 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation
Shock	MIL-STD-901D with 30G	
Vibration	MIL-STD-167-1A	

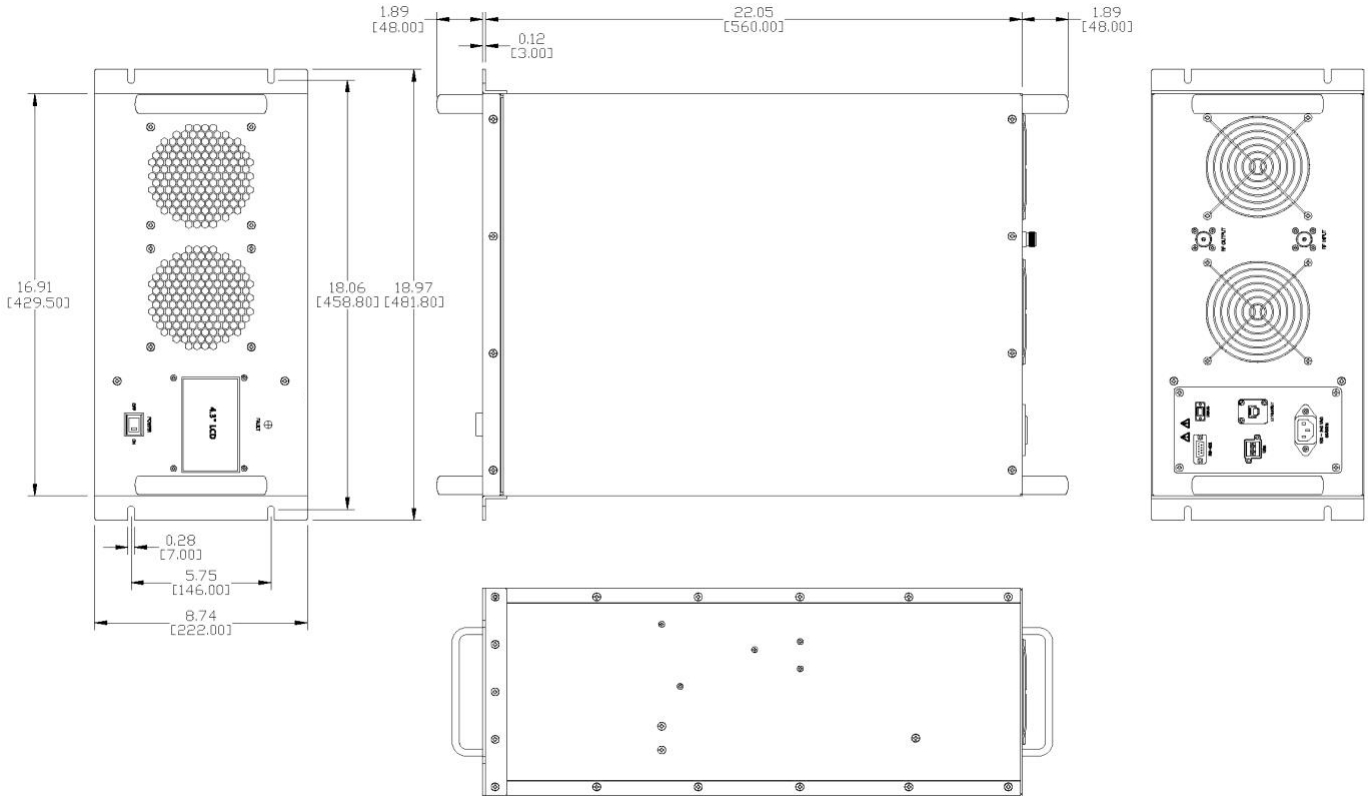
MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	R5U Rack Mount Chassis	5U
Weight	35 Kg. Max	
RF Connectors In/Out/Reference	Precision Type-N Female	Front Panel Standard
AC Power	MS3450W22-3P	
Control Connector	M28840/10AC1S1	
Cooling	Built in Fan Cooling	Variable speed
Ground Stud	10-32	Designated area
OPTIONAL: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485 Optional GPIB Interface	Remote Bluetooth application

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfcomp.com www.rfamplifiers.com sales@hdcom.com

HD31127
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfcomp.com www.rfamplifiers.com sales@hdcom.com