HD32120
SOLID STATE HIGH POWER AMPLIFIER

HD Communications Corp.

FEATURES

Rack mounted system
L-Band high pulse peak power GaN design
Instantaneous bandwidth
Suitable for high power pulse applications
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Operating Frequency Range	950 - 1250 MHz			
Power Output Peak Pulse	350 Watt Min			Pulse
Pulse Characteristics	**Duty**	**Width**	**PRF**	
	5 %	0.1 - 5 µS	10 KHz	
Power Gain	57 dB Min			
Power Gain Flatness	2.0 dB p-p Max			Constant input power
Pulse Rise / Fall Time	100 nS / 50 nS Max			Nominal Peak Power 10% - 90%
Input Return Loss	10 dB Min			Relative to 50 Ohm
Harmonics 2^{nd} / 3^{rd}	-20 dBc / -40 dBc Typ			At rated output power
Spurious	-60 dBc Max			Non-harmonics
Operating Voltage	180 - 240 VAC			
Power Consumption	150 Watt Max			5 µS pulse width @ rated Pout
Max Input Power Protection	+8 dBm			<10 Seconds without damage
Load VSWR Protection	5 : 1			<1 Minute @ rated output

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	430 x 133 x 560 mm	3U
Weight	20 kg.	
RF Connectors In / Out	Type-N Female	Front Panel Standard
Pulse Gating Input	BNC-F	2.4V ±0.25V switching threshold
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	
OPTION: Digital LCD Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485 Optional GPIB Interface	Remote Bluetooth application
Cooling	Built in Fan Cooling	Variable speed

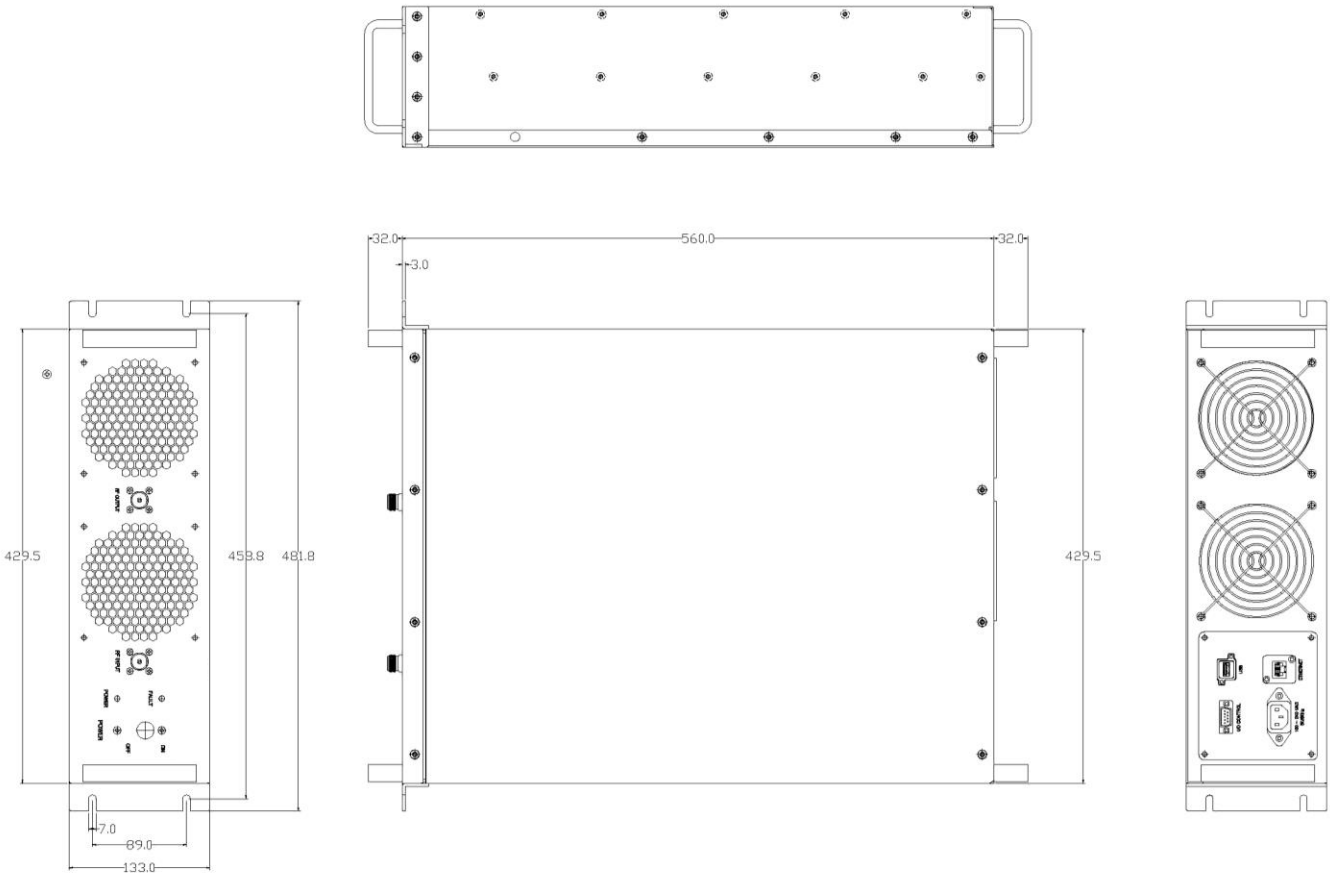
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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	Reserved	N/C
2	Reserved	N/C
3	Reserved	N/C
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	Reserved	N/C
6	VDD	Internal Power Supply Voltage
7	Reserved	N/C
8, 9	GND	Ground

OUTLINE DRAWING



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