HD Communications Corp.

HD31166
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for HF high power applications
Class AB linear LDMOS design
Rack mounted system
Instantaneous wide bandwidth
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	2 - 32 MHz	
Power Output	1000 Watt Min	CW
Power Gain	60 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	<-30 dBc Typ	50dBm/Tone, Δ = 1MHz
Harmonics	<-20 dBc Typ	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	100 - 240 VAC	50-60 Hz - Single phase
Power Consumption	3000 Watt Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated Pout

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	25 Kg. Max	
RF Connectors In/Out	Type-N Female	Front or rear panel
AC Power	IEC 60320-C14	
I/O Connector	9-Pin D-Sub	See Table
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485 Optional GPIB Interface	Optional Remote Bluetooth application

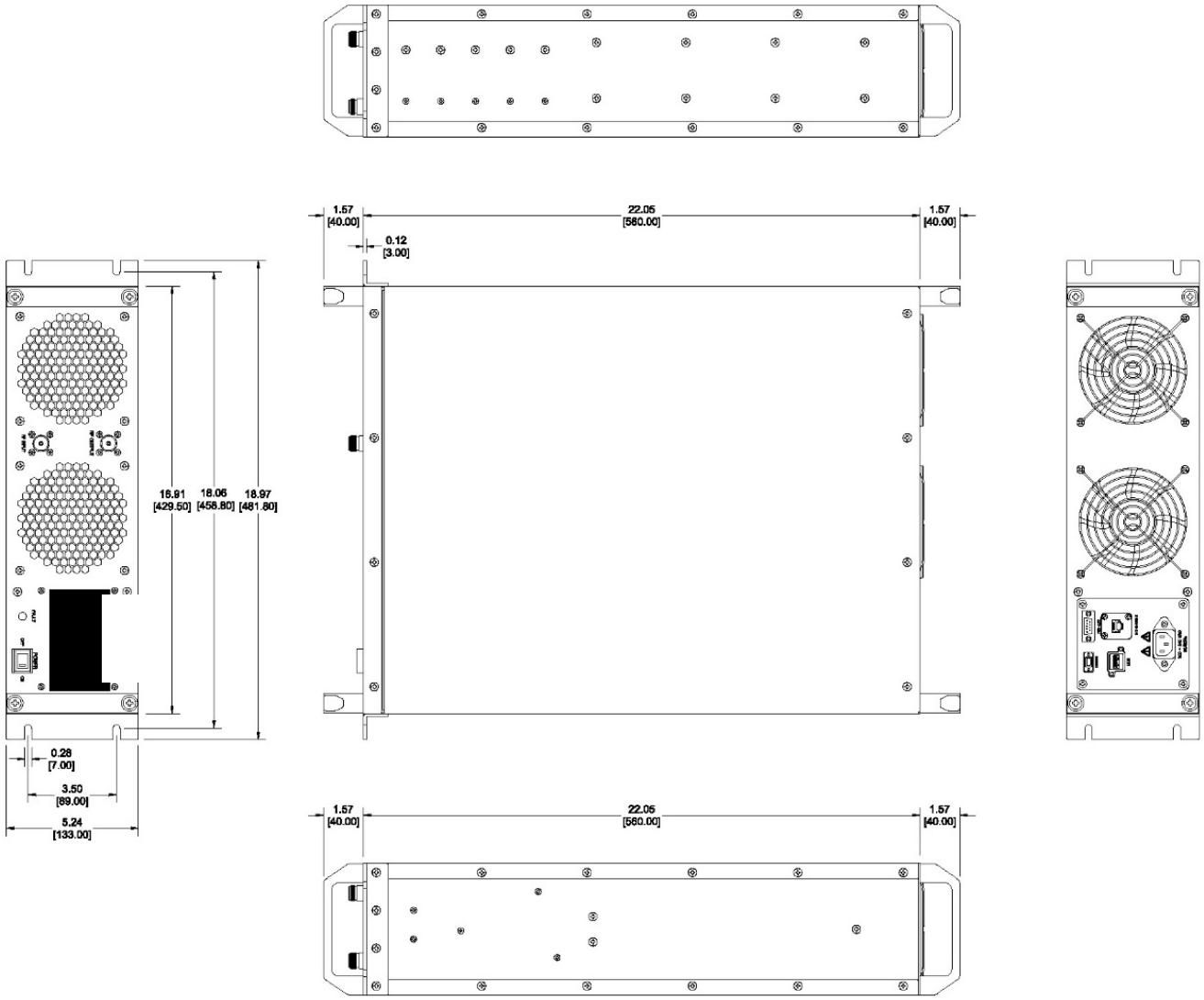
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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	N/A
2	N/C	N/A
3	DC Current Sensor	I_D@20mV/100mA Typ
4	Temp Sensor	V_T@10mV/°C + 500mV Typ
5	Shutdown	TTL
6	DC Voltage Sensor	Internal PS voltage
7	N/C	N/A
8,9	GND	

OUTLINE DRAWING



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