HD Communications Corp.

HD33807
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Rack mount system
Class A/AB linear GaN design
Instantaneous ultra-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		0.7 - 6.0 GHz	
Power Output @ Psat		60 Watt Typ	CW
Power Output @ P1dB		25 Watt Typ	
Power Gain		47 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	37dBm/Tone, Δ = 1MHz
Harmonics	2nd	-15 dBc Typ <3 GHz / -20 dBc Typ	At rated output power
	3rd	-30 dBc Typ	
Spurious		-60dBc Max	Non-harmonics
Operating Voltage		100 - 240 VAC	50-60Hz
Power Consumption		<300 Watt Typ / 400 Watt Max	At Rated Pout
Input Power Protection		+8 dBm Max	<10 Sec without damage
Load VSWR Protection		∞ : 1	<1 Minute at rated Pout
OPTIONAL: FWD Sample Port Coupling Factor		40 dB Nom	Front SMA female

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 88 x 562 mm	2U - Excluding handles
Weight	10 kg.	
RF Connectors In/Out	Type-N Female	Front or rear panel
Sample Port Connector	N-Female	
Interface Connector	9-Pin D-Sub	See table pin assignment
AC Power Connector	IEC 60320-C14	
Cooling	Built in Fan Cooling	
OPTIONAL: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485, USB Optional GPIB Interface	Optional Remote Bluetooth application

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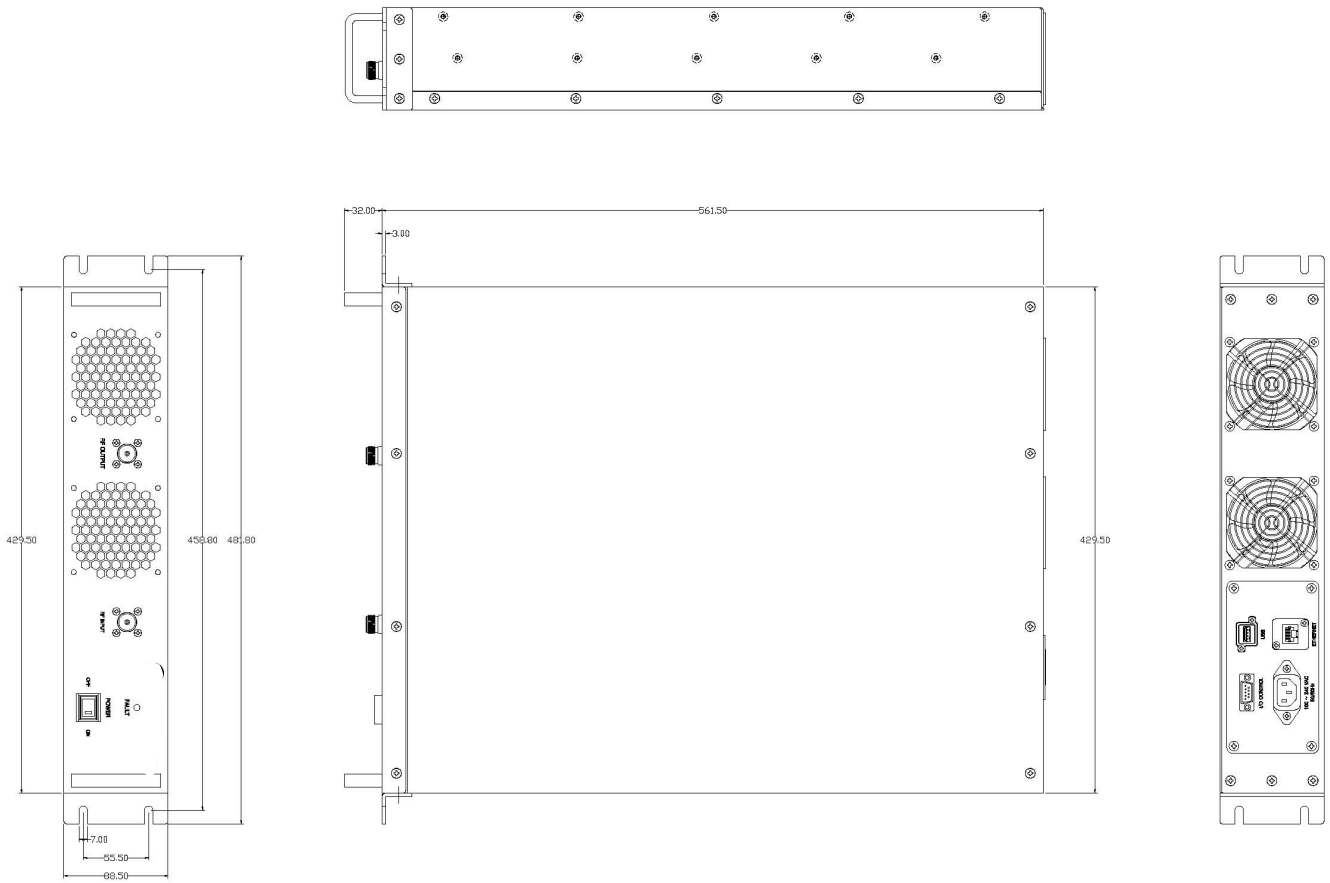
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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	Reserved	N/C
2	Reserved	N/C
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL - Standby Mode
6	VDD	Internal Power Supply Voltage
7	Reserved	N/C
8, 9	GND	Ground

OUTLINE DRAWING

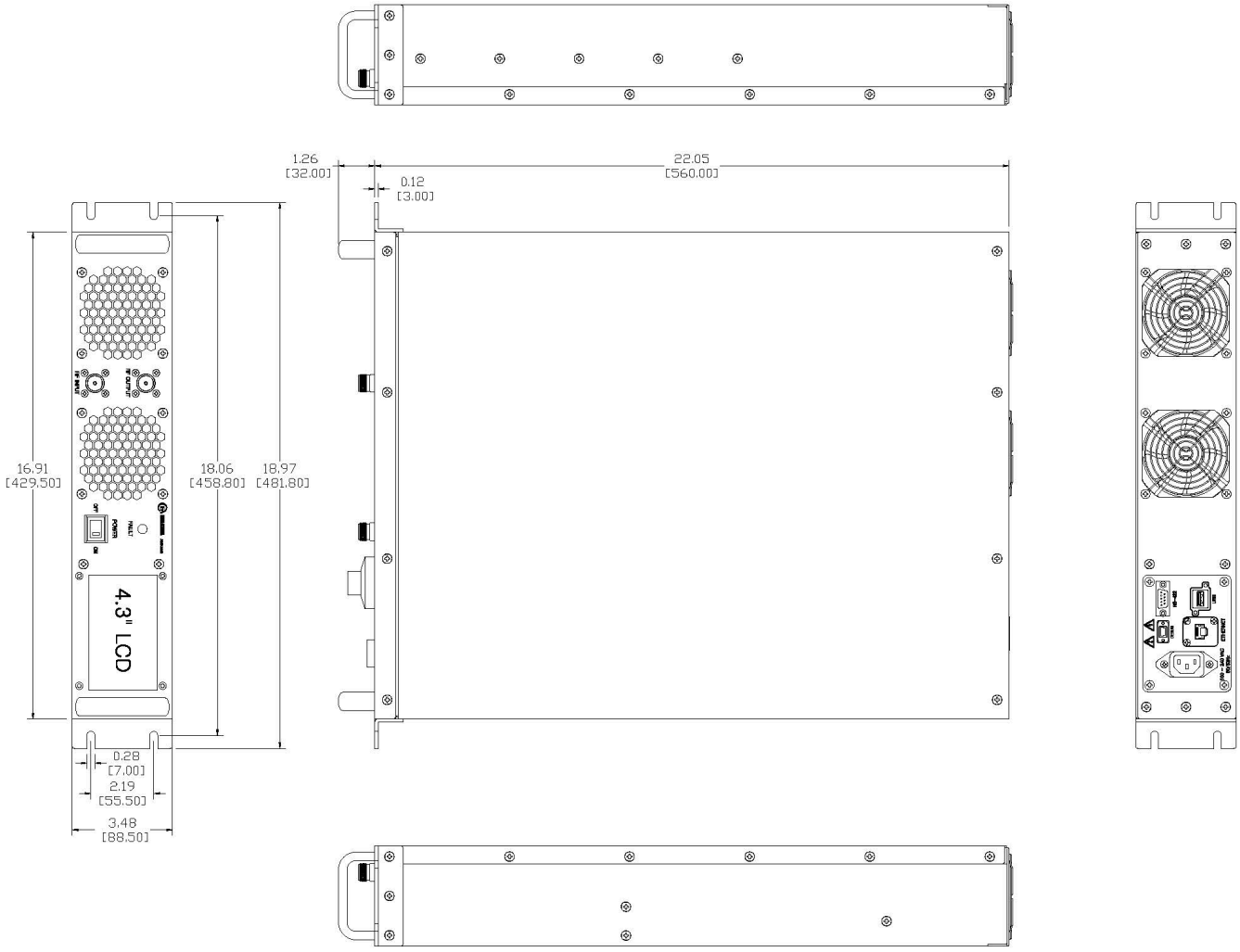


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OUTLINE DRAWING (with LCD)



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