HD Communications Corp.

HD32030
SOLID STATE HIGH POWER AMPLIFIER



FEATURES

Redundant C-Band Rack mount system
Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for CW, pulse, and all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	3.95 - 8.2 GHz	
Power Output @ Psat	20 Watt Min	Pulse or CW mode
Power Output @ P1dB GCP	12 Watt Typ	CW
Power Gain	43 dB Min	
Gain Adjustment Range	10 dB Min	Manual or Remote
Power Gain Flatness	4.0 dB p-p Max	
Input Return Loss	12 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	33dBm/Tone, Δ = 1MHz
Noise Figure	10 dB Max	
Harmonics	-20 dBc Typ	At rated output power
Non-Harmonics Spurious	-60dBc Max	
Operating Voltage	180 - 240 VAC	Single phase
Power Consumption	800 Watt Max	Both HPA on , at Rated Pout
Max Input Power Protection	+3 dBm	<10 Seconds without damage
Load VSWR Protection	∞ : 1	<1 Minute @ rated output
Pulse Rise / Fall Time	50 nS Max	
RF Delay	120 nS Max	
Pulse Blanking Output Power Density	<-130 dBm (2 KHz BW)	TTL (0-5V), Impedance >1kΩ

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	19” x 7” x 22” (483 x 178 x 580 mm)	4U
Weight	30 Kg.	
RF Connectors In/Out	Type-SMA Female	Rear panel
Pulse Blanking Connector	BNC Female	Rear panel
HPA 1 or 2 Selector		
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	Rear Panel
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Control: FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485, Optional GPIB Interface	Remote Bluetooth application

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