

HSN1 Narrowband COFDM High Power Amplifier

Narrowband COFDM Power Amplifier!



Design Features

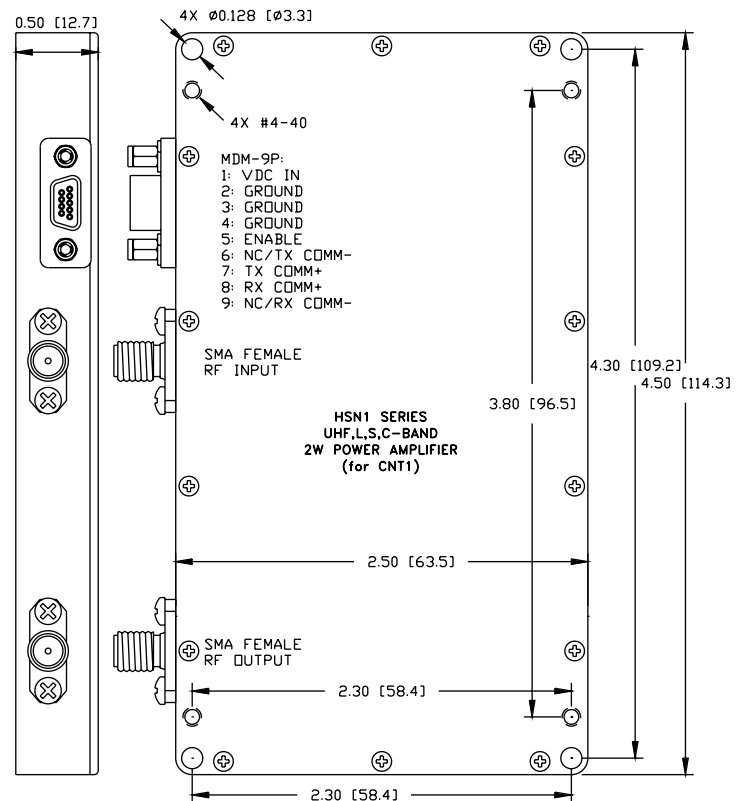
- 5.6 Cubic Inch Package (2.50"x4.50"x0.50")
- Weighs < 6 oz.
- Up to 2 Watts RF Output Power
- Up to 16 dB of Output Power Attenuation in 1 dB Steps (Remote Control)
- Compatible with AMP CNT1 Transmitters
- Dedicated PA Enable Pin
- Temperature Indication and Fold-Back (Remote Control)
- J-STD-001D Class 3 Assembly (Medical/Aerospace)

HSN1 Series

AMP's HSN1 Series 5.6 cubic inch High Power Amplifiers are designed to be mated with AMP's CNT1 COFDM transmitters.

The HSN1 module is available in one of three output power levels including 500mW, 1W, and 2W. Optional Variable Output Power allows for up to 16 dB of attenuation to be applied in 1 dB steps through the HSN1's serial interface.

With military telemetry heritage, HSN1 HPAs are designed to withstand harsh environments and are ideal for law enforcement, surveillance, UAV, UGV, Military, and other applications requiring efficient, high quality video/audio/data transmission in a compact, rugged package.



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RF Characteristics

Frequency Range (Specify):	UHF:	340.0-399.9 MHz
(Other Ranges Available)	Lower L-Band:	1435-1535 MHz
	Upper L-Band:	1700-1850 MHz
	Lower S-Band:	2200-2399 MHz
	Upper S-Band:	2400-2499 MHz
	Full S-Band:	2200-2499 MHz
Output Power (Specify):	500mW, 1W, or 2W, Nominal	
Variable Power (Specify):	1 dB Steps up to 16 dB Reduction	
Output Power, PA Disabled:	< +10 dBm	
Output Impedance:	50 Ω Nominal, VSWR 2:1 Maximum	
Output Stability:	Stable Into Any Load at Any Angle, Indefinitely	
Spurious Output:	-13 dBm Maximum	

Configuration Interface Characteristics

Interface Type:	Two-Way UART	
Signalling Type (Specify):	RS232, RS422, or 3.3V TTL	
Interface Parameters:	9600/8/1/None/None (Baud/Data Bits/Stop Bits/Parity/Handshake)	

Power Requirements

Input Voltage:	+11 to +16 Vdc, Reverse Polarity Protected	
Current Draw (12v Typical):	350mA for 500mW, 700mA for 1W, and 1.4A for 2W	
PA Enable Control:	Open = On, Ground (or <1.5 Vdc) = Off	

Mechanical

Material:	CNC Machined T6061-T6 Aluminum	
Finish (Specify):	Nickel Plated or Gold Iridite	
Dimensions:	2.50" W x 4.50" L x 0.50" H	
Weight:	<6 oz.	
Connectors:	RF Input:	SMA Female
	RF Output:	SMA Female
	DC Supply, Comms, PA Enable:	MDM-9P

Environmental

Temperature (Operating):	-20°C to +60°C	
Acceleration:	100 g, 3 Axis	
Altitude:	Unlimited	
Humidity:	Up to 95% @ Any Temperature Forming Frost or Condensation	