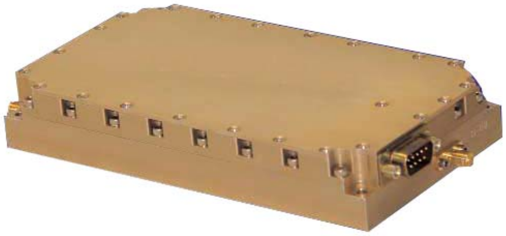
ZHM 0.2 -525/120
MIL GRADE HIGH POWER AMPLIFIER 200 MHz TO 525 MHz 120 W



This is a high power, broadband, Gallium Nitride (GaN) RF amplifier that operates from 20 MHz to 520 MHz. This PA is ideal for broadband military platforms as well as commercial applications because it is robust and offers high power over a multi-octave bandwidth. This amplifier was designed for broad band jamming and communication systems platforms. This amplifier operates with a base plate temperature of 85C with no degradation in the MTBF for the GaN devices inside. It is packaged in a modular housing that is approximately 3.4" (width) by 6.4" (long) by 1.0" (height). This amplifier has a typical P3dB of 100-125 watts at room temperature. Noise figure at room temperature is 10.0 dB typical. This amplifier offers a typical gain of 58 dB with a typical gain flatness of ± 2.0 dB. The power and gain flatness across the band is extremely flat for the bandwidth. Input VSWR is 2.0:1 maximum. Class AB quiescent current is ~2.0 amps typical employing a +28 Vdc supply.

- Gallium Nitride Broadband Power Amplifier
- Operation from 20 MHz to 520 MHz min
- Small Signal Gain 58 dB typical
- 50+% Typical Power Added Efficiency
- 125 Watts P3dB typical

Typical Performance @ 25ºC

Freq (MHz)	Small Signal Gain (dB)	P3dB (dBm)	Current @ P3dB from a 28 Vdc Supply (Amps)	2nd Harmonic @ P1dB (dBc)	3rd Harmonic @ P1dB (dBc)	Power Added Efficiency (%)
20	59.5	48.7	6.10	-19.0	-13.0	44.0
50	57.3	51.6	9.00	-23.0	-14.0	52.0
100	57.7	51.1	8.20	-27.0	-15.0	54.0
200	59.2	50.7	7.50	-24.0	-17.0	55.0
300	61.0	50.5	6.70	-40.0	-19.0	58.0
400	58.7	49.9	6.00	-34.0	-25.0	58.0
520	57.9	49.4	5.70	-32.0	-30.0	53.0