Low Noise and Medium Power Amplifiers

Aethercomm designs and manufactures low noise and medium power amplifiers for military and wireless applications. Our low noise products are used in the front-ends of radar and communication systems. Our medium power amplifiers serve as driver amplifiers for high power amplifiers in the same types of systems. All military amplifiers are designed for the highest reliability and for operation in the most extreme environments. Most of the standard products listed herein are used on combat aircraft or ground radar systems. They have been proven extremely reliable and robust under combat conditions.

This section provides a sampling of Aethercomm products in this category. We produce low noise and medium power amplifiers with frequencies ranging from 10 MHz to 40 GHz, with the majority from 30 MHz to 18 GHz. Power levels for low noise and medium power products typically go up to 1 watt. Aethercomm employs GaAs, LDMOS, Silicon Bipolar, SiC, GaN and MMIC technologies as required to maximize performance.

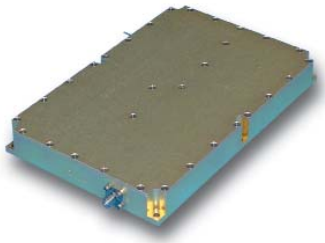
Low noise and medium power amplifier custom features include:

- operation from 12 or 28 VDC supplies, or any power supply specified
- 1.0 dB noise figures
- internal high power limiters
- high speed DC blanking function of 1000 nSec maximum
- internal DC-DC converter
- self protect functions
- system protect functions
- BIT telemetry options
- rack mounting
- high speed digital interface
- microprocessor control
- other high performance options upon request

If you do not see the product you need in the standard offerings listed below, please contact the factory with your specific requirements. Aethercomm will design and manufacture your custom amplifier to your exacting specifications.

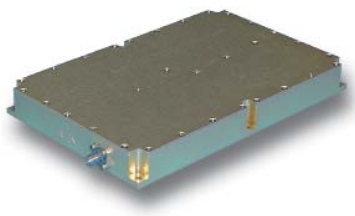
All data presented is at room temperature. Visit www.aethercomm.com for a complete list of datasheets.

SSPA 0.1-1.1-2.0



- Operation from 100 MHz to 1100 MHz min
- 2 watts P1dB typ
- 45 dBm OIP3 typ
- 22 to 32 Vdc operation
- High speed DC blanking at 750 nsec

SSPA 0.3-2.6-1.0

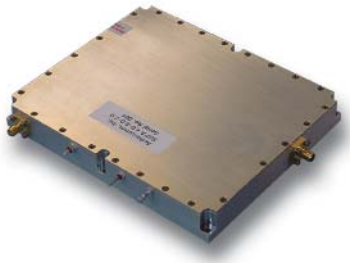


- Operation from 300 MHz to 2600 MHz min
- 1 watt P1dB min
- 43 dBm OIP3 typ
- 22 to 32 Vdc operation
- High speed DC blanking at 1000 nsec

SSPA 0.96-1.22-2.0

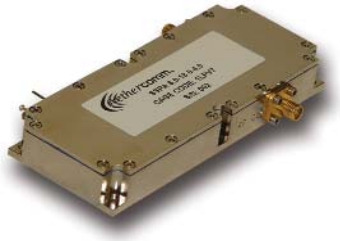
- Operation from 960 MHz to 1220 MHz min
- 2 watts peak output power typ
- JTIDS, TACAN, IFF preamplifier
- High speed DC blanking of 1000 nSec
- 21 to 29 Vdc operation

SSPA 4.0-8.0-2.0



- Operation from 4.0 GHz to 8.0 GHz min
- 2 watt P1dB min
- 3.5 watts PSat typ
- 12 Vdc @ 2.5 amps operation
- 7 dB noise figure typ

SSPA 6.0-18.0-4



- Operation from 6.0 Ghz to 18.0 GHz min
- 4 watts P3dB typ
- 30 dB typ small signal gain
- Remote on/off function
- 10-15% PAE typ

SSLNA 7.9-8.4-2.0

- Operation from 7.9 GHz to 8.4 GHz min
- 2.0 dB noise figure typ
- 34 dB gain typ
- 32 dBm OIP3 typ
- 15 Vdc @ 400 mA operation

SSLNA 8.4-9.4-3.0

- Operation from 8.4 GHz to 9.4 GHz min
- 2.5 dB noise figure typ
- 28 dB gain typ
- Gain / phase tracking unit to unit
- 15 Vdc @ 330 mA operation