



High Power, Rack Mount RF Power Amplifier

High Power Linearized Amplifier

The SSPA 0.960-1.215-2000-RM is a rack mounted, high power amplifier that offers high efficiency and high linearity. It is a microprocessor controlled unit and provides excellent performance across the 960 to 1215 MHz frequency band. This high power RF system contains a built in pre-distortion linearizer that allows for low level IMD's at high RF output power levels. All controls are available on an LCD touch screen display that allows real time display of the amplifier parameters and allows the operator to control all functions via this interface. The LCD user interface allows for setting the desired RF power output, displays the RF transistor flange temperature, the Ethernet IP address, ALC enable and disable, Unit enable and disable and a fault status for RF overdrive, reflected power, over temperature and No or low RF power output.

This complex RF power system is packaged in a 4u high; 19" rack mounted enclosure with a 22.1" depth. The total weight is less than 55 pounds. The input AC voltage is 90 to 264 VAC. Total AC power does not exceed 1500 watts. Gain is > 65 dB. Harmonics are < -50 dBc. The ALC is settable over a 25 dB dynamic range. The unit offers a PEP of > 800 watts. Other features include Ethernet and RS-422 Ports remote control and status, self protection from RF overdrive and full reflected power, BIT monitoring and display, integrated fan thermal management with temperature controlled fans. The RF input connector is an SMA-F and the RF Output port is a Type N female both located on the back connector. Some test data appears on page 2 of this document. Please contact the factory with any questions you may have.

- **960-1215 MHz Frequency Operation**
- **800-1000 Watts PEP or 200+ Watts CW RF Pout**
- **40 dBc IMD Products with Built In Linearizer**
- **ALC Settable Over 25 dB Dynamic Range**
- **Touch Screen Control Provides Real Time Display and Control**
- **4u High, 19 Inch Rack Mount Amplifier**



This is an example of an Aethercomm standard product. Aethercomm designs and manufactures high performance, high power CW or pulsed SSPA's for commercial, military and satellite communications customer.

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SSPA 0.960-1.215-2000-RM Test Data at Room Temperature from 960 to 1215 MHz
with a 120 VAC, 60 Hz, Single Phase Input Voltage

Frequency (MHz)	Small Signal Gain	Output Power (dBm)	AC Current (Amps)	Panel Indication (dBm)	2nd Harmonics (dBc)	3rd Harmonics (dBc)
960	66.03	52.89	13.6	53.0	-52.8	-90.9
988	66.01	52.60	12.1	53.0	-53.8	-85.1
1017	66.00	52.80	13.5	53.0	-69.7	-84.3
1045	66.05	52.60	12.3	53.0	-61.5	-87.2
1073	66.05	52.73	11.4	53.0	-54.6	-85.2
102	66.01	52.60	11.6	53.0	-52.5	-84.5
1130	66.03	52.90	10.8	53.0	-51.3	-84.7
1158	66.02	52.80	10.4	53.0	-53.5	-87.3
1187	66.01	52.85	11.3	53.0	-56.5	-85.2
1215	66.05	52.75	12.1	53.0	-60.1	-81.3