



High Power, Rack Mount, S Band Amplifier High Power Pulsed Radar Amplifier

Aethercomm Model Number SSPA 3.1-3.5-1500-RM is a high power, pulsed RF amplifier that operates from 3.1 to 3.5 GHz in a rack mounted configuration. It will also operate down to 3.0 GHz if requested. This PA is ideal for S band military radars. It is packaged in a 3u high, 19 inch rack mounted enclosure. This amplifier has a typical peak output power of 2000 Watts at a 5% duty cycle with a 64 uSec pulse width. This amplifier offers a typical saturated gain of 55 dB with a typical power flatness of ± 1.0 dB. Input and output VSWR is 1.5:1 maximum. This RF rack mounted amplifier operates from 220VAC with a universal input transformer that will operate at 208VAC also. There is a forward power RF sample port along with an output forward voltage pulse available. Test data can be found on page two of this data sheet.

The output is fully protected from an infinite VSWR at the RF output port. The input RF connector is SMA Female. The output RF connector is a type N female. Contact the factory with any questions on the performance or capabilities of this amplifier. The amplifier has a rise time of 100nSec typical and a 20nSec fall time. Output spurious emissions are < -65 dBc. There are multiple fans that form the internal thermal management system.

- **Operation from 3100 MHz to 3500 MHz min**
- **50 dB Saturated Gain typ**
- **1500 Watts Peak Output Power Minimum**
- **208-220 VAC Operation**



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 3.1-3.5-1500-RM

SSPA 3.1-3.5-1500-RM Typical Performance @ 25°C

Freq (MHz)	Peak Output Power (dBm)	208 VAC Current @ PSat (Amps AC)	Peak Input Power @ Pout (dBm)	Saturated Gain (dB)
3100	62.1	4.80	7.00	55.1
3200	63.7	4.70	7.00	56.7
3300	63.0	4.20	7.00	56.0
3400	62.9	6.10	7.00	55.9
3500	62.6	5.20	7.00	55.6