



## L Band Rack Mounted High Power Amplifier Solid State RF Amplifier

Aethercomm Model Number SSPA 1.025-1.150-1000-RM is a high power rack mounted L Band solid-state power amplifier that operates over the 1025 to 1150 MHz bands. The peak RF power is 1000 watts minimum. Power flatness across the entire band is  $\pm 0.3$  dB typical. Minimum saturated signal gain is 56 dB. Input VSWR is 1.5:1 maximum. Output VSWR is 1.5:1 maximum. Noise Figure is 10 dB typical. Harmonics are -30dBc typical. This amplifier offers a manual PA turn-on and turn-off command that enables and disables the internal PA's. RF Pulse rise and fall times are 50nSec maximum. This model operates from 220 VAC, 50 Hz power from the infinite bus. The input transformer of this standard unit will access 120VAC, 60 Hz or any other international standard. Contact the factory with any questions you may have. This rack mounted assembly is offered in a standard 19 inch rack that is 5u high. The input RF connector is N type female. The output RF connector is N type female. This rack mounted unit typically operates

### SSPA 1.025-1.150-1000-RM Operational Performance @ 25C Ambient Temperature from 1025 to 1150 MHz @ 10% Duty Cycle

Operational Parameter	Min	Typ	Max
Peak Output Power (dBm)	60.0	60.3	-
Saturated Gain (dB)	56.0	57.8	-
Power Variation Over Frequency (dB)	$\pm 0.10$	$\pm 0.30$	$\pm 1.0$
Noise Figure (dB)	5.0	10.0	-
Input Return Loss (dB)	-	-15.2	-14.0
Output Return Loss (dB)	-	-15.5	-14.0
Harmonics (dBc)	-	-30	-
Pulse Width (uSec)	-	10	100
Input Voltage (VAC)	90/200	115/220	140/240
Input Power Level (dBm)	-	0.0	5.0
Dynamic Range (dB)	60	70	80
Duty Cycle (%)	-	1.0	10.0

- High Power L Band Power Amplifier
- 1000 Watts min Peak Output Power
- 57.0 dB typ Saturated Gain
- Typical Pulse Width is 100uSec
- Typical Duty Cycles are 1% to 10%



from 0C to 50C ambient operating conditions. The PA is protected from an open or short-circuit placed on the output RF port of the unit. There is an AC on/off switch with illuminated indicator. Other protection features include an input AC fuse and duty cycle limiting. The internal AC/DC converter also includes EMI filtering. A fan is included to cool the internal assemblies.

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 customers.

*Aethercomm Inc. reserves the right to make changes without further notice. Aethercomm recommends that before these items herein are specified into a system or critical application that the performance characteristics be verified by contacting the factory.*