

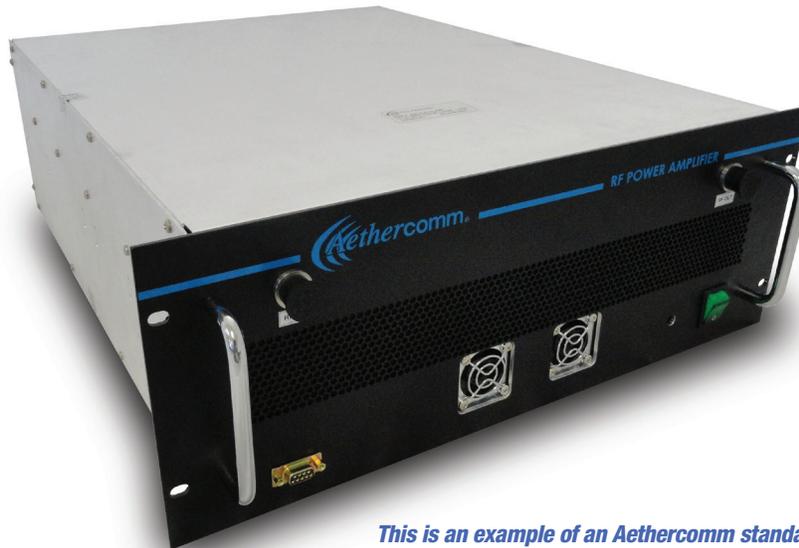


### High Power, Rack Mounted, GaN RF Amplifier SSPA 0.020-6.000-35-RM

Aethercomm Model Number SSPA 0.020-6.000-35-RM is a high power, rack mounted, RF amplifier that operates from 20 MHz to 6000 MHz minimum and is packaged in a rugged and rack mounted enclosure. This amplifier is in a 4u height, 19" rack. Typical output power is greater than 35 watts up to 4.0 GHz at P3dB. Greater than 4 GHz up to 6 GHz, the power falls off to approximately 20 watts. Nominal input power levels are -7.0 to +6.0 dBm. Input VSWR is 2.0:1 maximum. Standard features include output short and open circuit protection and over/under voltage protection. This RF transmit amplifier operates from a +28 Vdc. This unit operates in a laboratory environment. This unit is designed to withstand much harsher environments. Please check with the factory. Temperature control is done with two fans that integral with this rack that provide an active thermal management system.

- Gallium Nitride Technology
- Operation across 20 to 6000 MHz Minimum
- Rugged Rack Mount
- 35 Watts Typical Output Power
- 28Vdc Operation
- 25 uSec Turn On/Off Gating Times

Standard rack mount size is 19.0" (w) by 22.0" (d) by 7.0" (h). SMA female connector is standard on the RF input connector. The output RF connector is Type N female. The DC input voltage is supplied on the back face of the unit. Typical test data appears on page two of this data sheet at room temperature. For further test data or operation and logic and pin out requirements, please contact the factory.



*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.

## Rack Mounted, GaN RF Amplifier

### *SSPA 0.020-6.000-35-RM*

#### SSPA 0.020-6.000-35-RM

Typical Performance from 20 to 6000 MHz @ 25° C with a CW Input Stimulus with Vapplied = 28 Vdc

Frequency	Standard Output Power	Input Power for PSat	Power Gain	2nd Harmonic at PSat	3rd Harmonic at PSat
20	46.2	-7.0	53.2	-15.0	-13.0
50	46.5	-8.0	54.5	-11.0	-14.0
100	47.1	-8.0	55.1	-10.0	-11.0
200	48.5	-9.0	56.5	-11.0	-12.0
400	48.3	-9.0	57.3	-11.0	-14.0
600	47.1	-9.0	56.1	-14.0	-14.0
800	48.4	-9.0	57.4	-12.0	-20.0
1000	47.4	-9.0	56.4	-20.0	-19.0
1500	46.6	-8.0	54.4	-20.0	-19.0
2000	45.2	-3.0	48.2	-18.0	-16.0
2500	45.3	1.0	44.3	-28.0	-20.0
3000	44.9	-3.0	47.9	-28.0	-21.0
3500	44.6	2.0	42.6	-28.0	-20.0
4000	43.7	2.0	41.7	-19.0	-60.0
4500	43.3	4.0	39.3	-14.5	-39.0
5000	44.0	2.0	42.3	-18.0	-60.0
5500	43.0	5.0	38.0	-28.0	-57.0
6000	43.2	6.0	37.2	-60.0	-40.0
<b>MHz</b>	<b>dBm</b>	<b>dBm</b>	<b>dB</b>	<b>dBc</b>	<b>dBc</b>

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