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MODEL 8001

3.1 - 3.5 GHz 12 KW PULSED HIGH POWER AMPLIFIER

Solid State S-Band Pulsed High Power Amplifier

The 8001 is a 12 KW S-band Pulsed amplifier that covers the 3.1 – 3.5 GHz frequency range. This amplifier utilizes Class A/AB power devices that provide an excellent Pulse fidelity and Phase stability performance.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

The system is designed to fit into a 24" cabinet and controlled by RS-422.

	<u>Parameter</u>	Specification @ 25° C
Electrical		
1	Frequency Range	3.1 – 3.5 GHz
2	Peak Output Power	12KW Min.
3	Power flatness	1.5dB peak to peak
4	Input VSWR	1.5:1 max
5	Harmonics	-60 dBc typical
6	Spurious Signals	< -70 dBc typical
7	Inter-pulse Noise	-110 dBm/MHz
8	AC Input Power Efficiency	30% typical
9	AC Input External Filter will be added on AC input from Customer	3 phases, 5 wire connection, Phase to Phase 400 VAC± 10% Phase to Zero 230 VAC± 10% 47 - 63Hz
10	Fixed RF Input	+10 dBm
11	RF Input Signal Format	Pulse
12	Pulse characteristic (Target)	250μS PW, 10% DC 200μS PW, 13% DC 50μS PW, 15% DC
13	Gating	1μS prior and after the RF Pulse
14	RF Rise Time and Fall Time	20nS Typical
15	RF Pulse Droop (Target)	0.5dB
16	Pulse Droop by Power Supply	0.2dB max.
17	Class of Operation	A/AB
18	Pulse to Pulse Stability	70dB Typical
<u>Mechanical</u>		
19	Dimensions (Target)	Fit into a Standard 24" Cabinet 15U Tall, and 40" Depth
20	Weight	250 lbs. max
21	In/Out RF Connectors	Female SMA RF Input Female 7/16 Output D38999 for Control Communication via D38999
22	Grounding	Chassis
23	Cooling	Internal air cooled
Environmental		
24	Operating Temperature	+30°C
25	1dB Allowable Degrading Temperature	+40°C for 30 minutes
26	Operating Humidity	90% Non-condensing @ 27°C
27	Non-Operating Temperature	-40°C to +85°C
28	Operating Altitude	Up to 10,000' Above Sea Level
29	Shock and Vibration	Normal truck transportation