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**MODEL 8003**  
**3.1 - 3.5 GHz**  
**12 KW**  
**PULSED HIGH POWER AMPLIFIER**

**Solid State S-Band Pulsed High Power Amplifier**

The 8003 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>	<u>Specification @ 25° C</u>
<b><u>Electrical</u></b>		
1	Frequency Range	3.1 – 3.5 GHz
2	Peak Output Power	12KW Min.
3	Input VSWR	1.5:1 max
4	Harmonics	-60 dBc typical
5	Spurious Signals	< -70 dBc typical
6	Inter-pulse Noise	-110 dBm/MHz
7	AC Input Power Efficiency	30% typical
8	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
9	Fixed RF Input	+10 dBm
10	RF Input Signal Format	Pulse
11	Pulse characteristic	1-300µS PW, 10% DC 1-50µS PW, 16% DC
12	Gating	1µS prior and after the RF Pulse
13	RF Rise Time and Fall Time	20nS Typical
14	RF Pulse Droop	0.8dB
15	Pulse Droop by Power Supply	0.2dB max.
16	Class of Operation	A/AB
17	Pulse to Pulse Stability	70dB Typical
<b><u>Mechanical</u></b>		
18	Dimensions	24” x 17U x 30”
19	Weight	300 lb max
20	In/Out RF Connectors	Female SMA RF Input Female 7/16 Output D38999 for Control Communication via D38999
21	Grounding	Chassis
22	Cooling	Internal air cooled
<b><u>Environmental</u></b>		
23	Operating Temperature	-10 to +40°C with degradation over +30°C
24	Operating Humidity	90% Non-condensing @ 27°C
25	Non-Operating Temperature	-40°C to +85°C
26	Operating Altitude	Up to 10,000' Above Sea Level
27	Shock and Vibration	Normal truck transportation