

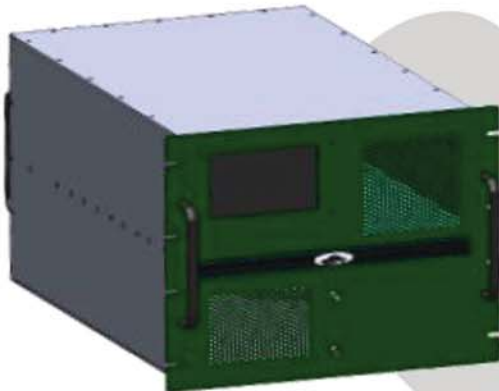


PTWPA-8G12G-3000

3000W Pulse TWT Amplifier

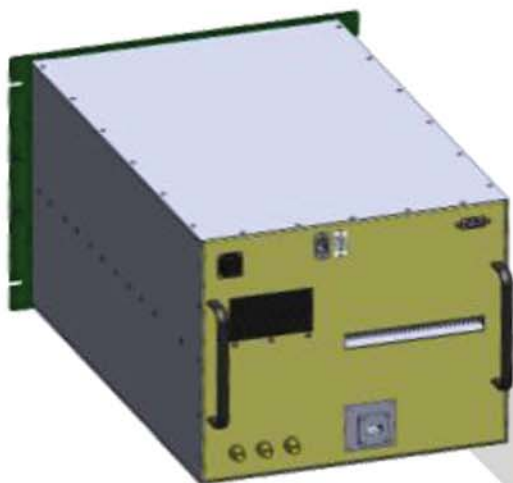
Traveler Wave Tube (TWT) Power RF Amplifier

The PTWPA-8G12G-3000 is a TWT 3000W (Pulse) RF Amplifier which covers frequency range from 8.0GHz to 12.0GHz. This amplifier can achieve high efficiency operation with proven reliability as is designed with the robust engineering and employment of the most advanced devices and components. The amplifier comes with 1 year warranty including the TWT.



Parameter	Specification
Electrical	
Frequency Range	8-12 GHz
Output Power	3000W Peak
RF Input Power	0dBm for Saturated Power Out
Gain @ rated power	65dB
Input /Output Impedance	50 ohms(VSWR 2.0:1)
Load VSWR	1.5:1 max
Harmonics	-10dBc
Spurious	-50dBc max.
Pulse Input	TTL. High=Beam-ON, Low=Beam-OFF, 50Ω Input. BNC Female on Front Panel
Pulse Width	200nSec -20uSec
Rise/Fall time	30nSec
Pulse Delay	120nSec
PRF	100Hz-10KHz
Duty Cycle	0-6%
Pulse to Pulse jitter	±10nsec max.
Pulse to Pulse	±0.3dB max.
Stability	
Pulse Droop	0.2dB @ 10uSec pulse max. 0.5dB @ 50uSec pulse max.
Pout ON/OFF ratio	80dB
RF Input/Sample Connectors	Precision Type N Female On Rear Panel
RF Output Connector	WR 90 Waveguide flange On Rear Panel

THESE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



Parameter	Specification
Noise Figure	$\leq 35\text{dB}$
Noise Power density	-5dBm/MHz, max.
Prime Power	220VAC +/-10%, 50/60 Hz, Single Phase, 3 wires on the Rear Panel
Consumptions	2.5KVA
<u>Mechanical</u>	
Configuration	Racks mounts 19"W x 26.13"D x 14"H
Weight	130 Lbs
Cooling System	Air cooled: forced Air Front to Rear, self contained
Shock	MIL-STD-810F, method 516.2
Vibration	MIL-STD-810F, method 514.2
<u>Environmental</u>	
Temperature	0° to 40° C
Non-operating Temp	0° to 60°C
Humidity	95% without condensation
Altitude	5,000 feet



Features [Build-in]

- High Voltage power supplies Over/Under Voltage & Over Currents Protection
- RS 232 & Ethernet Remote Control.
- RF Input / Output Connectors on the Rear Panel.
- Standby/RF_ON, Elapsed Time Metering in hours.
- Filament/Beam Elapsed Time Metering in hours.
- Color TFT Touch screen Display with Front Panel Controls and Indicators.

OPTIONS

- | | |
|-----|--|
| 001 | VSWR Protection against output mismatch. |
| 002 | Alternate Prime Power (specify at time of order). |
| 003 | USB Remote Control. |
| 004 | Forward RF Sample Port Type N Female -50dBc nominal on the Rear Panel [standard] or Front panel. |
| 005 | Reflected RF Sample Port Type N Female -50dBc nominal on the Rear Panel [standard] or Front panel. |
| 006 | RF Input/Output Connectors on the Rear Panel [Standard], (Specify front or rear at time of order). |
| 007 | Internal Systems Diagnostics. |
| 008 | Filament/Beam Elapsed Time Metering in hours. |
| 009 | RF Safety Interlock, type BNC Connector. |
| 010 | Forward/Reflected Power Indication simultaneously on Front Panel display. |
| 011 | Harmonic Filters (-20dBc) |

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Figure 1. Typical Pulse Amplifier display showing status controls and metering

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