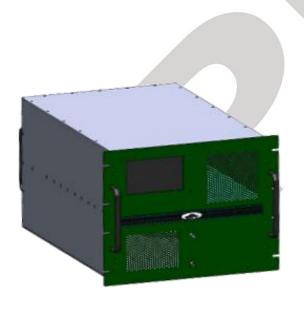


## **PTWPA-2G4G-4000**

### **4000W Pulse TWT Amplifier**

# Traveler Wave Tube (TWT) Power RF Amplifier

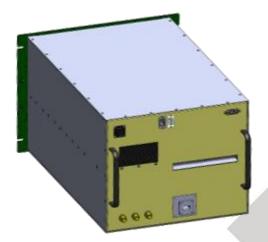
The PTWPA-2G4G-4000 is a TWT 4000W (Pulse) RF Amplifier which covers frequency range from 2.0GHz to 4.0GHz. This amplifier can achieve high efficiency operation with proven reliability as is designed with the robust engineering and employment of the most advanced devices and components. The amplifier comes with 1 year warranty including the TWT.



Parameter	Specification
<u>Electrical</u>	
Frequency Range	2-4 GHz
Output Power	4000W Peak
RF Input Power	0dBm for Saturated Power Out
Gain @ rated power	66dB
Input /Output Impedance	50 ohms(VSWR 2.0:1)
Load VSWR	1.5:1 max
Harmonics	-3dBc
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 Stability	±0.3dB max.
Pulse Droop	0.2dB @ 10uSec pulse max.
	0.5dB @ 50uSec pulse max.
Pout ON/OFF ratio	80dB
RF Input/Sample	Precision Type N Female
Connectors	On Rear Panel
RF Output Connector	7/16 female
	On Rear Panel

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Parameter	Specification
Noise Figure	≦35dB
Noise Power	5dBm/MHz, max.
density	
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
Environmental	
Temperature	0° to 40° C
Non-operating	0° to 60°C
Temp	
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.
800	Filament/Beam Elapsed Time Metering in hours.
009	RF Safety Interlock, type BNC Connector.
010	Forward/Reflected Power Indication simultaneously on Front Panel display.

THESE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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

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