

## PTWPA-2G4G-2000

### 2000W Pulse TWT Amplifier

# Traveler Wave Tube (TWT) Power RF Amplifier

The PTWPA-2G4G-2000 is a TWT 2000W (Pulse) RF Amplifier which covers frequency range from 2GHz to 4GHz. 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 2 years warranty including the TWT.



Parameter	Specification
Electrical	
Frequency Range	2-4GHz
Output Power	850W Peak min, from 2-2.3GHz
	1000W Peak min, from 2.3-3.5Ghz
	2000W Peak min, from 3.5-4GHz
RF Input Power	20±2dBm for Saturated Power Out
Gain @ rated	43dB
power	
Input /Output	50 ohms(VSWR 2.0:1)
Impedance	
Load VSWR	1.5:1 max
Harmonics	2-4GHz, -1dBc
Spurious	-50dBc max. for PRF <3KHz
Pulse Input	TTL. High=Beam-ON,
	Low=Beam-OFF
	BNC Female on Rear Panel
Pulse Width	300nSec-100uSec
Rise/Fall time	20nSec max.
Pulse Delay	120nSec max.
Pulse Recovery	150nSec max.
Time	
PRF	2Hz-100KHz
Duty Cycle	0-5%
Pulse to Pulse jitter	±10nsec max.
Pulse Width jitter	±10nsec max.
Pulse to Pulse	±0.3dB max.
Stability	
Pulse Droop	0.2dB @ 10uSec pulse max.
	0.5dB @ 100uSec pulse max.
RF Input/Sample	Type SMA Female
Connectors	On Rear Panel
RF Output	Type N Female
Connector	On Rear Panel



Parameter	Specification
Modulation	AM / FM / Pulse
Output Power ON/OFF Ratio	100dB min.
Noise Power density	-8dBm/MHz, max.
Prime Power	110V AC +/-10%, 50/60 Hz, Single Phase 3 wires on the Rear Panel
Consumptions	1.2KVA max.
Mechanical	
Configuration	Racks mounts
	19"W x 26.13"D x 8.75"H
Weight	100 lbs max.
Cooling System	Air cooled ,self contained
Shock	MIL-STD-810F, method 516.2
Vibration	MIL-STD-810F, method 514.2
<b>Environmental</b>	
Temperature	0° to 50° C
Non-operating Temp	0° to 70°C
Humidity	95% without condensation
Altitude	15,000 feet



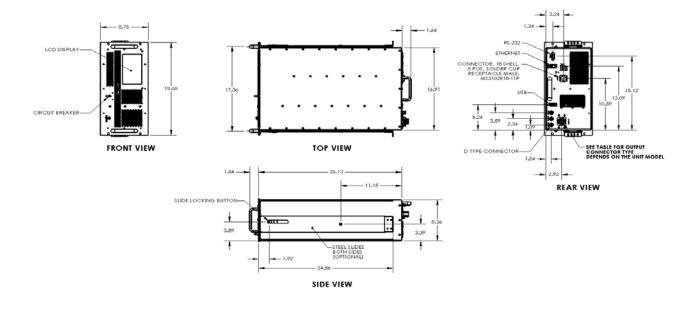
#### Features [Build-in]

High Voltage power supply Over Currents Protection RS 232 & Ethernet Remote Control. RF Input / Output Connectors on the Front 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	RS 422 Remote Control
004	Forward RF Sample Port Type N Female -50dBc nominal on the Front or Rear Panel.
005	Reflected RF Sample Port Type N Female -50dBc nominal on the Front or Rear Panel.
006	RF Input / Output Connectors on the Front Panel (Specify front or rear at time of order).
007	Internal Systems Diagnostics.
800	Heater/Beam Elapsed Time Metering in hours.
009	RF Safety Interlock, type BNC Connector.
010	Slides for Rack mount.







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