



PTWA-2G8G-500

500W CW TWT Amplifier

Traveler Wave Tube (TWT) Power RF Amplifier

The PTWA-2G8G-500 is a TWT 500W (CW) RF Amplifier which covers frequency range from 2GHz to 8GHz. 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. This amplifier combines Four 350W TWTs to achieve the specified rated power. The amplifier comes with 3 years warranty including the TWT.

Parameter	Specification
<u>Electrical</u>	
Frequency Range	2-8GHz
Output Power	2-2.5GHz, 500W min. 600W typical 2.5-7.5GHz, 500W min. 1000W typical 7.5-8GHz, 500W min. 600W typical
Internal Pre-Amp.	Input level: 0dBm or less
Gain @ rated power	57dB
Input / Output Impedance	50 ohms(VSWR 2.0:1)
RF Input / Output Connectors	RF Input Type N Female / RF Output 7/16 Female; Rear Panel
Modulation	AM / FM / Pulse
Noise Figure	$\leq 35\text{dB}$
Spurious	-50dBc
Harmonics (nom.) @Rated Power	2-3GHz: 0 to -3dBc; 3-6GHz: -3 to -8dBc 6-8GHz: -8 to -15dBc
Prime Power	120/208 AC +/-10%, 50/60 Hz, Three Phase
Power consumption	12KVA max.
<u>Mechanical</u>	
Configuration	Rack configuration 19"W x 36"D x 24U [42" Panel space] High
Cooling System	Air cooled ,self contained
Shock	MIL-STD-810C, method 516.2
Vibration	MIL-STD-810C, method 514.2
<u>Environmental</u>	
Temperature	0° to 40° C
Non-operating Temp	-20° to 70°C
Humidity	Up to 95% without condensation
Altitude	5,000 feet

THESE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE



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

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|-----|---|
| 001 | VSWR Protection against output mismatch. |
| 002 | Alternate Prime Power (specify at time of order). |
| 003 | IEEE 488, 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 | RF Safety Interlock, type BNC Connector. |
| 009 | Forward/Reflected Power Indication simultaneously on Front Panel display. |
| 010 | Slides for Rack mount. |
| 011 | External Harmonic filters for -20dBc harmonic reduction, Band 1 Filter: 2-3.5GHz, Band 2 Filter: 3.5-6GHz, Band 3 Filter: 6-8GHz. Note: Output will be affected when filters are connected to the Amplifier Output connector. Only one filter can be connected at a time. |



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