

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 two 350W TWTs to achieve the specified rated power. The amplifier comes with 3 years warranty including the TWT.

Parameter	Specification
Electrical	
Frequency Range	2-8GHz
Output Power	2-2.5GHz, 350W min. 400W typical
	2.5-7.5GHz, 500W min. 700W typical
	7.5-8GHz, 350W min. 400W typical
Internal Pre-Amp.	Input level: 0dBm or less
Gain @ rated power	57dB
Input / Output	50 ohms(VSWR 2.0:1)
Impedance	
RF Input / Output	RF Input Type N Female /
Connectors	RF Output 7/16 Female; Rear Panel
Modulation	AM / FM / Pulse
Noise Figure	≦35dB
Spurious	-50dBc
Harmonics (nom.)	2-3GHz: 0 to-3dBc;
@Rated Power	3-6GHz: -3 to-8dBc
	6-8GHz: -8 to -15dBc
Prime Power	120/208 AC +/-10%, 50/60 Hz, Three
	Phase
Power consumption	6KVA max.
<u>Mechanical</u>	
Configuration	Racks mounts
	19"W x 26.13"D x 14"H
Cooling System	Air cooled ,self contained
Shock	MIL-STD-810C, method 516.2
Vibration	MIL-STD-810C, method 514.2
Environmental	
Temperature	0° to 40° C
Non-operating Temp	-20° to 70°C
Humidity	Up to 95% without condensation
Altitude	5,000 feet

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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	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.
800	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. One filter can be connected at a time.

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DOCUMENT NO.: DAT-70034, REV A -2-