

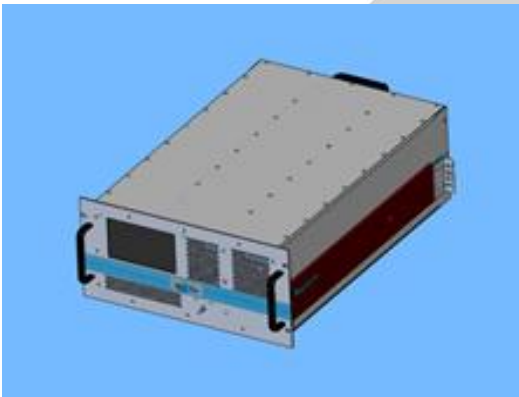


# PTWA-13.7G14.5G-350

## 350W CW TWT Amplifier

### Traveler Wave Tube (TWT) Power RF Amplifier

The PTWA-13.7G14.5G-350 is a TWT 350W (CW) Communication RF Amplifier which covers frequency range from 13.7GHz to 14.5GHz. 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
<b>Electrical</b>	
Frequency Range	13.7-14.5GHz
Output Power	350W CW min.
Internal Pre-Amp.	Input level: 0dBm or less
Gain @ rated power	73dB
Gain @ small signal	78dB
Gain Adjustment	0 to 20dB
Gain Stability	±0.25dB/24Hrs
Gain Slope	±0.02dB/MHz
Gain Variation	1.0dB pk-pk across 80MHz band
Input / Output Impedance	50 ohms(VSWR 1.3:1)
Load VSWR	2.0:1 max.
RF Input / Output Connectors	RF Input Type N Female / RF Output WR75
Phase Noise IESS	-12dBc
Phase Noise	-42dBc
<b>AC fundamental</b>	
Spurious	-50dBc
AM/PM Conversion	2.5°/dB for a Single carrier at 6dB below rated power
Harmonics (nom.) @Rated Power	-60dBc
Modulation	AM / FM / Pulse
Noise Power density	-8dBm/MHz, max.
Prime Power	110V AC +/-10%, 50/60 Hz, Single Phase 3 wires on the Rear Panel
Consumptions	1.4KVA max.

THESE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

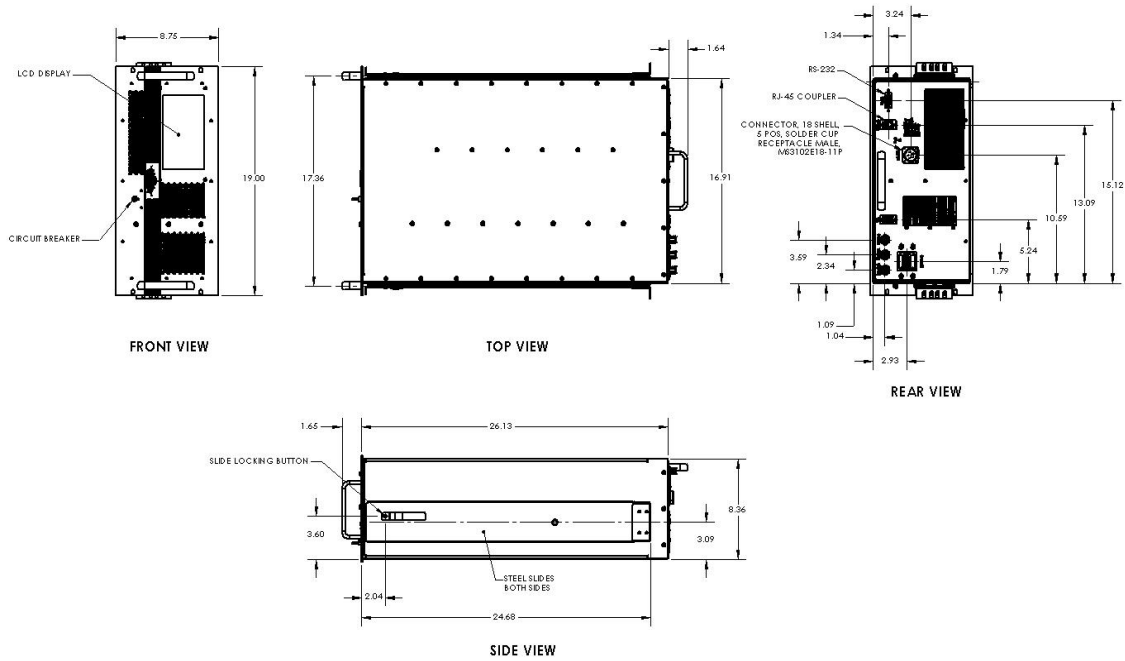


<b>Parameter</b>	<b>Specification</b>
<b><u>Mechanical</u></b>	
Configuration	Racks mounts 19"W x 26.13"D x 8.75"H
Weight	100 lbs max.
Cooling System	Air cooled ,self contained
Shock	MIL-STD-810C, method 516.2, Procedure I, 15G. 11 ms 1/2 sine 3 axis 6 directions
Vibration	MIL-STD-810C, method 514.2, procedure VIII, curves V, 1.5G, 1 hr/axis, 3 axis, 5-5.5Hz 1 inch, 30Hz 0.033 inch
EMI	RE02 Requirements (Radiated emissions, Electrical field, 14KHz-10GHz) CE03 Requirements (Conducted emissions, power & interconnect leads, 0.015-50MHz)
Test Certificate	Included with shipment in the operation/maintenance manual
<b><u>Environmental</u></b>	
Temperature	0° to 50° C
Non-operating Temp	-20° to 70°C
Humidity	95% without condensation
Altitude	15,000 feet

## **OPTIONS**

001	VSWR Protection against any output mismatch; will operate without damage or oscillation against any magnitude and phase of source and load impedance.
002	Alternate Prime Power (specify at time of order).
003	GPIB IEEE 488, RS232 & Ethernet 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.
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.

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