

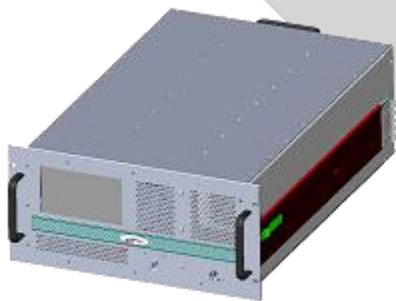


# PTWPA-7.5G18G-1500

## 1500W Pulse TWT Amplifier

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

The PTWPA-7.5G18G-1500 is a TWT 1500W (Pulse) Ruggedized RF Amplifier which covers frequency range from 7.5GHz to 18GHz. 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	7.5-18GHz
Output Power	1500W Peak min, 2000W peak Typical
Internal Protection	Up to 0dBm for no damage
Gain @ rated power	62dB
Gain Adjustment	0 to 30dB
Input /Output Impedance	50 ohms (VSWR 2.0:1)
Harmonics	7.5-12GHz, -2dBc 12-18GHz, -10dBc
Spurious	-50dBc max
Pulse Input	TTL. High=Beam-ON, Low=Beam-OFF BNC Female connector
Pulse Width	150nSec-100uSec
Rise/Fall time	20nSec
Pulse Delay	60nSec
PRF	150KHz max.
Duty Cycle	0-6%
Pulse to Pulse jitter	±10nsec max.
Pulse Width jitter	±10nsec max.
Pulse to Pulse	±0.3dB max.
<b>Stability</b>	
Pulse Droop	0.2dB @ 10uSec pulse max. 0.5dB @ 100uSec pulse max.
RF Input/Sample Connectors	Type N Female
RF Output Connector	WRD750 Waveguide Flange Gasket with EMI gasket 4 Holes all TAPPED

THESE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



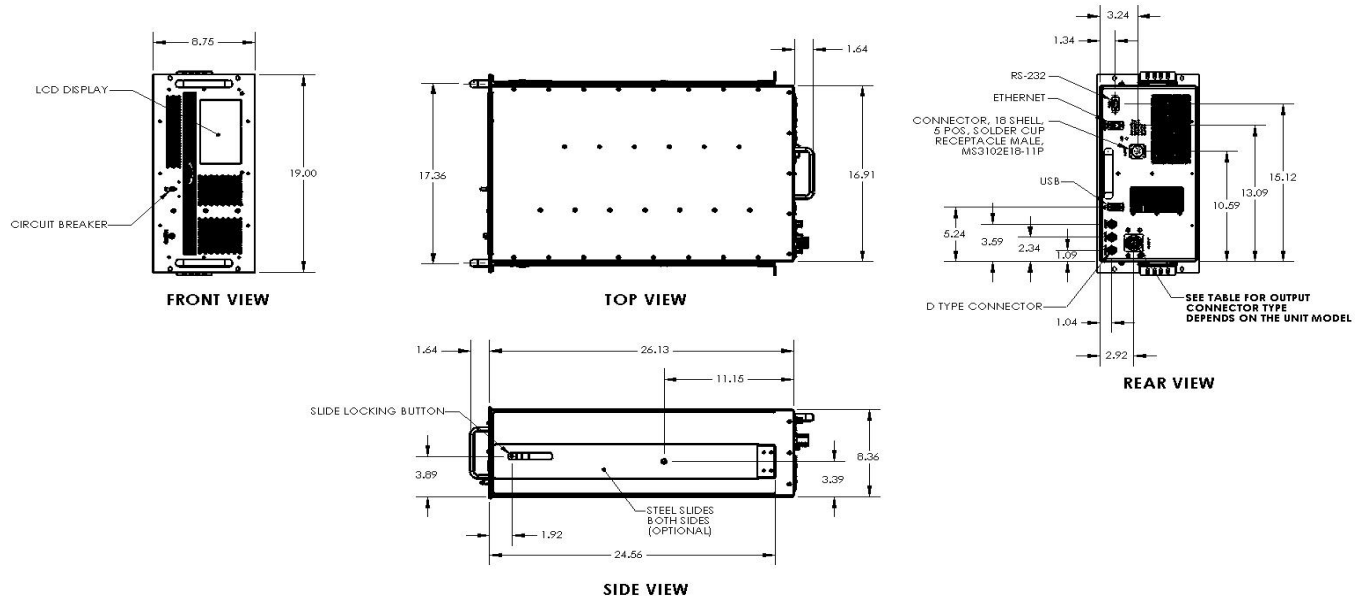
<b>Parameter</b>	<b>Specification</b>
Modulation	AM / FM / Pulse
Noise Power density	4dBm/MHz, max.
Prime Power	220V AC +/-10%, 50/60 Hz, Three Phase 5 wires on the Rear Panel
Consumptions	2.0KVA max.
<b><u>Mechanical</u></b>	
Configuration	Racks mounts 19"W x 26.13"D x 8.75"H
Weight	100 lbs max.
Cooling 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

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## 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 | RS 232 & 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 | Slides for Rack mount.  |



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