



MODEL NUMBER:  
**TWT8G-300**  
300W CW TWT AMPLIFIER

## TRAVELER WAVE TUBE (TWT) POWER RF AMPLIFIER

The TWT8G-300 is a TWT 300W (CW) 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.

## ELECTRICAL

PARAMETER	SPECIFICATION
Frequency Range	7.5-18GHz
Output Power	300W CW min.
Internal Protection	Up to 0dBm for no damage
Gain @ rated power	55dB
Gain Adjustment	0 to 30dB
Input / Output Impedance	50 ohms(VSWR 2.0:1)
Noise Figure	≤35dB
RF Input / Output Connectors	RF Input Type N Female/ RF Output WRD750
Modulation	AM / FM / Pulse
Noise Figure	≤35dB
Spurious	-50dBc
Harmonics	-6dBc Typical
Harmonics (nom.) @Rated Power	7.5-12GHz: -5 to -10dBc; 12-18GHz: -10 to -20dBc
Prime Power	220V AC +/-10%, 50/60 Hz, Three Phase 5 wires

## MECHANICAL

PARAMETER	SPECIFICATION
Configuration	Racks mounts 19"W x 25"D x 8.75"H
Cooling System	Air cooled ,self contained
Shock MIL Standards	MIL-STD-810C, method 516.2, Procedure I ,15G. 11 ms 1/2 sine
Vibration MIL Standards	MIL-STD-810C, method 514.2, procedure VIII, curves V, 1 hr/axis
MIL-STD Test Certificate	Included with shipment in the operation/maintenance manual
Temperature	0° to 45° C
Non-operating. Temp	0° to 60°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 ▶	Ethernet Remote Control.
004 ▶	Forward RF Sample Port Type N Female -60dBc nominal on the Front or Rear Panel.
005 ▶	Reflected RF Sample Port Type N Female -60dBc 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.

