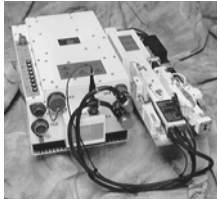




## Travelling Wave Tube Amplifier

### Type AHPA-12-200



### Description

The AHPA-12-200 is a medium power I/J Band Travelling Wave Tube Amplifier comprising an Albacom AHTA-12-200 RF amplifier and a matched power supply. The TWTA produces 200W of output power from 7.5GHz to 18GHz with an input power of +1dBm to +8dBm and can operate in pulse or CW modes. It is designed to self protect against major fault conditions and can operate in a Remote or Local control situation. LED indicators provide control and fault information. The input supply is 115V, 3 phase, 50/60Hz. Integral fans cool the RF amplifier assembly and the power supply to meet demanding military environments. The overall weight is 30kg.

### Features

This I/J Band TWTA is intended for ECM applications. The TWTA incorporates:

- Broad Band Helix TWT
- Modular Switched Mode Power Supply
- Remote/Local Control
- Output Power Monitor
- Monitoring and Protection Circuits
- Integral Cooling Fans
- Time Elapse Indicator

## Specification

### Electrical

Frequency Range	7.5GHz - 18GHz
Output Power	200W
Input Power	+1dBm to +8dBm
Output Power Variation	Variation 4dB
Harmonic Output Power	-4dBc, 7.5GHz-8.5GHz; -6dBc, 8.5GHz-18GHz
Noise Blanked:	-50dBm/MHz
Unblanked:	-14dBm/MHz
Duty Ratio	Up to 100%
PRF	20kHz Max
Warm Up Delay	180s
Operate Delay	1.5s
Output Power Monitor	-40dB

## ECM

CE01 MIL-STD-461B	RE01 MIL-STD-461B
CE03 MIL-STD-461B	RE02 MIL-STD-461B
CS01 MIL-STD-461B	RS01 MIL-STD-461B
CS02 MIL-STD-461B	RS02 MIL-STD-461B
CS05 MIL-STD-461B	RS03 MIL-STD-461B

## Control Monitored Parameters

Control Prime AC power Applied LED  
Standby Reached LED  
Beam On (HV) LED  
Local Blank On LED  
Monitored: TWT PSU Voltage LED  
TWT Modulator Voltage LED  
TWT Helix Voltage LED  
TWT Helix Current LED

## Physical

Connectors RF Output WRD750  
PF Input SMA (Female)  
Control Pattern 602  
Prime Power Pattern 602  
Power Output Monitor SMA (Female)  
Weights PSU 20.5kg  
RFA Assembly 8.6kg  
Outlines PSU 427mm x 240mm x 176mm  
(Approx) RFA Assembly 570mm x 180mm x 160mm

## Environmental

Temperature 30°C to +70°C: DEF-STAN 07-55 Section 2  
Vibration 1g: DEF-STAN 07-55 Part 2 Section 1  
Shock 25g: DEF-STAN 07-55 Part 2 Section 1  
Humidity 90%: DEF-STAN 07-55 Part 2 Section 2  
Bump 10g , 4000 Bumps  
Cooling Integral Cooling Fans +

+ Cooling Air will be required within the temperature range +15°C to+30°C.

**Albacom Limited reserve the right to alter any product specifications without prior notice.**