



Travelling Wave Tube Amplifier

Type LY72



Description

The LY72 is a travelling wave tube amplifier comprising an Albacom LY73 pulsed E-F Band travelling wave tube and matched, modular power supply. The TWTA produces a 10kW peak output power at up to 2.6% duty ratio, and operates from a 200 Volt, 3 phase, 400 Hz power source.

The LY73 TWT incorporates a shadow gridded gun, ring and bar slow wave structure and a single stage depressed collector. The power supply produces all of the TWT electrode voltages to the high standards of stability and ripple required for modern radar system performance. It uses a proven compact transformer rectifier unit in the high voltage supplies and floating deck grid modulator.

Built in features such as monitoring, control and protection circuits ensure safe operation; BITE (built in test equipment) is provided which simplifies fault finding and maintenance.

Features

The LY72 is a pulsed E-F Band TWTA intended for radar applications. The TWTA incorporates:

- LY73 TWT
- Modular PSU
- Monitoring, Control and Protection Circuits
- BITE

Specification

Frequency Range	3.2-3.7 GHz
Output Power	10kW Peak (min)
Duty Ratio	2.6% (max)
Gain	46dB
Pulse length	20µS (max)
RF Input Connector	SMA Female
RF Output Connector	7/16 Suhner or Other Co-Axial
Connectors as Required	

Electrical Supply

Connector	Type 602-14-5-S
Primary Supply	200V, 3 Phase, 3 Wire, 400Hz
Power Consumption	1500W at Maximum Duty Ratio

Cooling

Coolant	Water, or Water/Glycol
Control Inputs	+ 15V for "On"
Operate Command	
Pulse Start Trigger	
Pulse Stop Trigger	
Status Outputs	+ 15V for "Status Achieved"
Power On	
No Fault	
Standby	
Operate	

Monitor Outputs

Connector	Type 602-14-19-S
Cathode Voltage Sample	0.5V/kV
Cathode Current Sample	0.1V/A
Fault Outputs	+ 15V for "No Faults"
Over Temperature	
High Voltage Fault	
Low Voltage Fault	
Modulator Fault	

Physical

Overall Dimensions (approx)	680mm x 490mm x 180mm (includes baseplate)
Weight (approx)	46kg

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