



# Travelling Wave Tube

## Type LY75/1



### Description

The LY75/1 is rated at 2.5kW minimum peak power output, 45dB gain, 10% duty ratio at pulse lengths up to 15µs. The compact, rugged tube is of a metal ceramic construction and weighs 6.5kg (approx).

### Features

The LY75/1 is a medium power EF Band TWT intended for radar applications. The tube incorporates:

- Low Voltage Beam Switching Grid
- Ring Loop Circuits
- PPM Focusing
- Depressed Collector Operation
- Conduction Cooling

### Specification

#### Electrical

Frequency Range	3.1-3.4GHz
Output Power	2.5kW Peak (min)
Duty Ratio	10%
Gain	45dB
Load VSWR	1.5:1
Source VSWR	1.5:1
Gain Flatness Over the Frequency Range	1dB
Harmonic output	2nd: -25dBc 3rd & 4th: -35dBc
Heater Voltage	6.3V
Heater Power	25W
Ion Pump	Voltage: 3.5kV Current: 1mA (s/c)

## Phase Sensitivity

Cathode	0.6°/V
Grid	4.5°/V
AM/PM	8°/dB

## Electrode Voltages WRT Cathode (Typical)

Grid Bias	-270V
Grid Pulse	180V
Slow Wave Structure	9.6kV
Collector	7kV

## Electrode Pulse Currents (Typical)

Grid	5mA
Slow Wave Structure	0.35A
Cathode	1.4A

## Physical

Temperature Range (operating)	-30°C to +70°C
Cooling	Conduction
Input Connector	SMA (or as Required)
Output Connector	7/16 Spinner
Overall Dimensions (approx)	530mm x 87mm x 115mm
Weight (approx)	6.5kg

NB The tube is fitted with an integral ion pump.

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