

# PEA 25LH

## 0.1 to 1000 MHz LINEAR AMPLIFIER

**Linear RF Power For Industrial, Laboratory, Communication and Medical Applications.**

**FEATURING:**

- 0.1 MHz to 1000 MHz min
- 20 W Linear
- 25 W Saturated
- Up to 15W in 50 to 100 kHz range



### INTRODUCTION

Amplifier Model PEA 25LH is a robust source of RF power for ultrasonic, laser modulation, RFI/EMI, plasma generation, laboratory and general industrial applications. Featuring leading edge solid state design in all RF amplifier stages, this unit provides everything for a reliable RF power delivery system. It reflects the ongoing T&C commitment to provide RF power products of the highest quality.

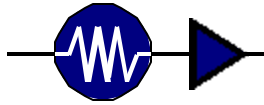
### OPERATION

The PEA 25LH produces 20 W of linear power over a frequency range from less than 100 kHz to more than 1000 MHz, with low harmonic and intermodulation distortion. It operates over the this frequency range with electronic band switching at 500 MHz. Small signal gain is rated at 51 dB with a typical gain flatness of  $\pm 1.5$  dB and  $\pm 2$  dB for large signal operation. In AGC mode its output is hold at  $\pm 0.7$  dB. The PEA 25LH is compatible with most signal and function generators, computer synthesizer cards and accurately reproduces all waveforms within its output and bandwidth limits. The Forced-air cooling system and the internal power supply are designed to permit operation over a wide range of temperature and global AC line conditions. The PEA 25LH is built to endure a +2 dBm input. The unit amplifies AM, FM, SSB, pulse and other complex modulations with  $< -25$  dBc (h3) harmonic distortion and exceptional power stability.

### RELIABILITY

T&C amplifiers and generators are designed to be reliable, compact and light in weight. The use of conservatively rated components ensures high reliability and eliminates the need for periodic calibration.

PEA 25LH's Microprocessor Control System protects its output against over load, RF input overdrive and protected against over-temperature. It enables to measure forwarded power and reflected from the load as well as allows to set custome levels of FWD and REV powers to protect the RF load in the case of unwanted mismatch.



# PEA 25 LH Specifications

Output Power	>25W
Output Power @ 1dB gain compression @ 0.1MHz , 1GHz	20W
Output Power @ 1dB gain compression @ 50kHz , 100kHz	15W
Frequency Range	100kHz , 500MHz - module L 500MHz , 1GHz - module H
Small Signal Gain	51dB min
Small Signal Gain Flatness	±1.5dB typ., ±2dB max
Flatness @ AGC switch on	±0.7dB
Input Impedance/ VSWR	50W nominal 2:1 max 1.5 typ.
Output Impedance/ VSWR	50 Ohm nominal < 4:1 max
Mismatch Tolerance	5:1 max
Connectors Input/Output	N female
Supply	100 , 120/200 , 240VAC, 50 , 60Hz
Power Consumption	350W
Cooling	Forced air
Microprocessor Control System	Protected against over load  Protected against RF input overdrive  Protected against over-temperature  Enable to measure forwarded power and reflected from the load
Dimensions (H x W x D)	140mm x 483mm x 670mm 5.5" x 19" x 26.5"
Weight	20kg, 44 lbs
Interface	RS232

**T&C Power Conversion, Inc.**  
 110 Halstead Street, Suite 7  
 Rochester, NY 14610, USA  
 Tel: 585-482-5551  
 Fax: 585-482-8487  
<http://www.TCPowerconversion.com>

**Sales Representative:**