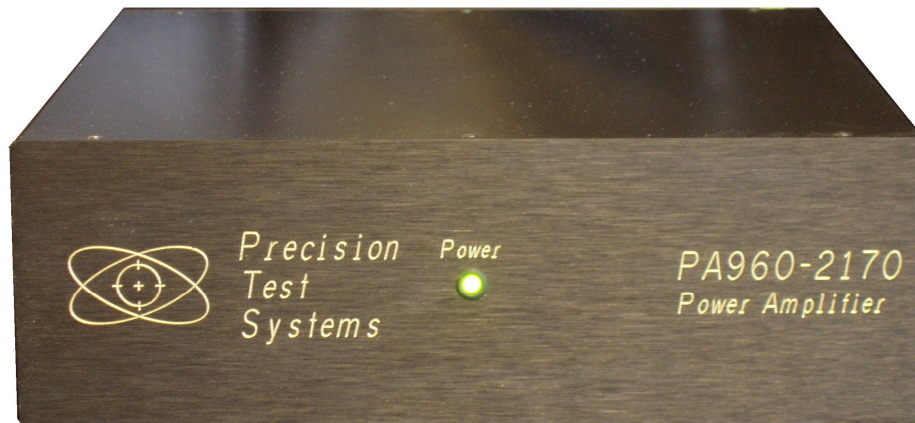




PA500-50: 50 Watt Power Amplifier



Key Features

- Class A Power Amplifier
- Over temperature protection
- Applications include VHF/UHF transmitters, defense, Amateur radio, Laboratory use.
- 50 Watts Output (1 dB compression)
- Useable to 100 watts (3 dB compression)
- > 47 dB Gain
- Short and Open Circuit Protection
- Matching Signal Generators Available

General Description

The PA500 power amplifier is designed for multiple applications. The amplifier produces 50 Watts output from a +0 dBm input, thus they have a minimum gain of 47 dB. The frequency range is 50 to 500 MHz. Up to 100 watts can be achieved at 3 dB compression.

They can either be used with any standard signal generator, or matching signal generators from Precision Test Systems are available.

An automatic gain control (AGC) circuit inside the power amplifiers ensures flatness is typically better than ± 1.0 dB.

The power amplifiers are protected against open circuits, short circuits or poor VSWR's.

The amplifiers are housed in an aluminum case and are powered from a 100 - 240 VAC power source or optional 24V source.

Description	Specification	Remarks
Amplifier		
Frequency Range	50 - 500 MHz	
Input Impedance	50 Ω	
Input Return Loss	> 14 dB typical	
Output Impedance	50 Ω	
Output Return Loss	> 7 dB typical	
Gain	50 dB nominal	
Gain Flatness (AGC Enabled)	± 2 dB typical, 3 dB worse case	
Maximum Input	+3 dBm	
Output Power with +0 dBm input	+47 dBm (50 Watts)	typical
Miscellaneous		
Operating Temperature	0 °C to +40 °C	
Storage Temperature	-20 °C to +60°C	
Power Inlet with switch	IEC320 power cord	Rear Panel
AC Voltage Range	100 - 240 VAC (usable 90-260 VAC)	
Power consumption	300 watts max	
Fuse rating	3.15A, 250 VAC slow blow type	
Dimensions		
Width	275 mm	
Depth	330 mm	
Height	180 mm	
Weight	5 kg	
Consult Precision Test Systems for further details		

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Specifications and features subject to change without notice (251011)