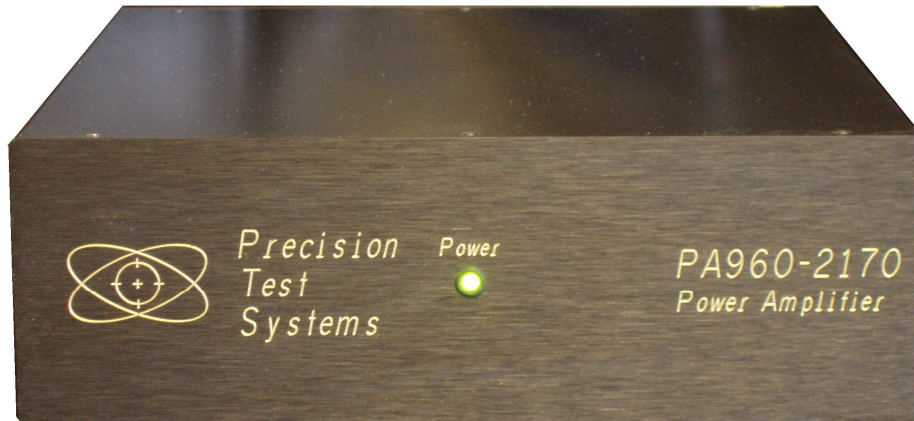




PA500-50: 50 Watt Power Amplifier



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 | | |

| PTS UK | South Africa | USA |
|---|--|--|
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Full specifications available from www.ptsyst.com. Specifications and features subject to change without notice (240812)