

200 Watt Power Amplifier ARI-1000-200W

Features

- Frequency Range: 80 MHz to 1 GHz
- 200 Watts Output Power (Saturated); 120 Watts at P1dB
- User-selectable Operating Modes:
 - Adjustable Gain Mode (20 dB dynamic range)
 - Automatic Level Control (ALC) mode
- Full Protection from high VSWR conditions; open or short, into any Phase Angle
- Remote Control Access via Ethernet, RS232 or IEEE-488 Communications Ports
- Three-Year Warranty

Description

The Com-Power ARI-1000-200W is a 200 Watt broadband Power Amplifier operating over the frequency range of 80 MHz to 1 GHz. This amplifier utilizes Class A linear power devices that provide an excellent 3rd order intercept point, high gain, and wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

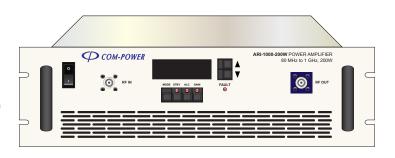
The ARI-1000-200W may be operated locally via the front panel controls and also by remote control access via its Ethernet, RS232 or IEEE-488 (GPIB) communications ports.

The amplifier may be operated in either of its two operational modes. In Gain mode, the user is able to adjust the gain with 20 dB dynamic range. In Automatic Leveling Control (ALC) mode, the amplifier maintains a constant output at the user-specified output level over its operational frequency range. The output level is maintained through use of a closed-loop system which continuously monitors the output level and compensates for variations by adjusting the input signal level using an integral variable voltage attenuator.

The amplifier is equipped with protection circuitry to avoid damage in the case of input overload, improper output connections (shorted or improper loads), over-temperature, as well as over-current conditions.

In order to prevent the amplifier output circuitry from reflected power caused by impedance mismatches with the output load, the integrated VSWR alarm will automatically disable the amplifier output when a high VSWR condition is encountered. The user is also able to monitor the amplifier's forward & reflected power (in dBm or Watts) via the front panel display.

As with all Com-Power products, the ARI-1000-200W comes with a standard three-year warranty.



Specifications

All specifications are subject to change without notice.
All values are typical, unless specified.
Specifications @ 25° C

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GENERAL	
Frequency Range	80 MHz to 1 GHz
Class of Operation	Class A
Output Power (saturated)	200 Watts (typical)
P1dB Output Power	120 Watts (minimum)
Small Signal Gain	54 dB (minimum)
Power Gain Flatness	±2.5 dB (maximum)
Input/Output Impedance	50 ohms (nominal)
3rd Order Intercept	+59 dBm (typical)
Input VSWR	2:1 (maximum)
Harmonics	-20 dBc (minimum @ 120 Watts)
Spurious Signals	<-60 dBc (typical @ 120 Watts)
RF Input	o dBm (maximum)
RF Input Signal Format	CW/AM/FM/PM/Pulse
ELECTRICAL	
AC Input Power	100 to 240 VAC, 50/60 Hz, 1-Phase 1200 Watts (maximum)
ENVIRONMENTAL	
Operating Temperature	32°F to 122°F (o°C to 50°C)
Operating Humidity Range	95% (non-condensing)
Operating Altitude	up to 10,000 feet above sea level
Shock and Vibration	Normal Truck Transport
Cooling System	Internal Forced Air
MECHANICAL	
Dimensions (H)x(W)x(D)	5.25" x 19" x 21" (13.3 cm x 48.3 cm x 53.3 cm)
Weight	55 lbs. (24.9 kg)
Input/Output Connectors	N-type (female)
Grounding	Chassis