

Features

- Frequency Range: 700 MHz to 6 GHz
- 100 Watts Output Power (Saturated); 60 Watts at P1dB
- User-selectable Operating Modes:
 - Adjustable Gain Mode (0-100%)
 - Automatic Level Control (ALC) mode
- Full Protection from high VSWR conditions; open or short, into any Phase Angle
- Protection Circuitry from Input Overload, Over-Temperature & Over-Current
- Three-Year Warranty

Description

The Com-Power ARI-6000-100W is a 100 Watt broadband Power Amplifier operating over the frequency range of 700 MHz to 6 GHz. This small and lightweight 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.

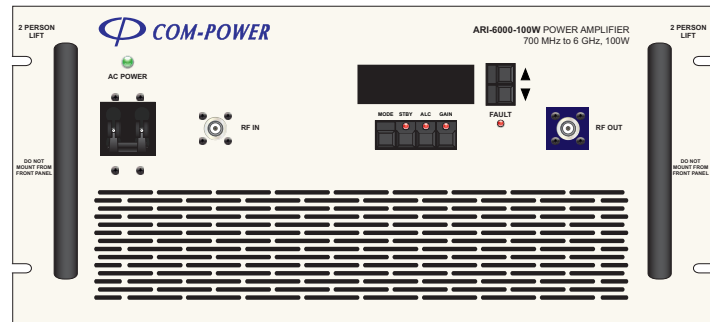
The ARI-6000-100W may be operated locally via the front panel controls and also by remote control access via its Ethernet, RS232/422 (serial) or IEEE-488 (GPIB) communications ports.

The amplifier may be operated in either of its two operational modes. In Gain mode, the user is able to adjust the percentage gain (0-100%). 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 alarm threshold value is selectable by the user. In addition, the amplifier output level is automatically scaled back when a high VSWR condition is sensed.

As with all Com-Power products, the ARI-6000-100W comes with a standard three-year warranty.



Specifications

All specifications are subject to change without notice.
All values are typical, unless specified.

GENERAL	
Frequency Range	700 MHz to 6 GHz
Class of Operation	A/AB
Output Power (saturated)	100 Watts (typical)
P1dB Output Power	60 Watts (minimum)
Small Signal Gain	53 dB (minimum)
Power Gain Flatness	±5 dB @ 0 dBm input (maximum)
Input/Output Impedance	50 ohms (nominal)
Input VSWR	2:1 (maximum)
Output VSWR	2:1 operating into*
RF Input	0 dBm (nominal) +3 dBm with no damage
RF Input Signal Format	CW/AM/FM/PM/Pulse
ELECTRICAL	
AC Input Power	100 to 240 VAC, 50/60 Hz, 1-Phase 3000 Watts (maximum)
INPUT/OUTPUT CONNECTORS	
Input Connector	N-type (female)
Output Connectors	N-type (female)
AC Input Connector	IEC C20 Receptacle
RS232/RS422 Serial Interface	DB9 pin (female) connector
Ethernet Interface	RJ45 Jack
GPIB Interface	GPIB Connector
ENVIRONMENTAL	
Operating Temperature	32° F to 122° F (0° C to 50° C)
Operating Humidity Range	95% (non-condensing)
Temperature Protection	Shut-down @ 80° C (minimum)
Cooling System	Internal Forced Air
MECHANICAL	
Dimensions (H)x(W)x(D)	(5U) 8.75" x 19" x 24.5" (22 cm x 48.3 cm x 62.2 cm)
Weight	95 lbs. (43.1 kg)

* Any output VSWR match > 2.5:1 may result in reduced power and/or activate amplifier's 'Reverse Power' protection.

Specifications given at 25° C.

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