

# HD Communications

Ronkonkoma, NY USA

## Solid State Broadband High Power RF Amplifier

**HD14879**

**1000 – 2000 MHz / 100 Watt**

Home of RF Amplifiers.com

E-mail: [sales@rfamplifiers.com](mailto:sales@rfamplifiers.com)

Web: <http://www.rfamplifiers.com>

Designed for broadband high power L-Band linear applications, this amplifier utilizes high power GaAsFET devices that provide high gain, wide dynamic range, low distortions and excellent linearity. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, built in high quality power supply, EMI/RFI filters, custom-machined housings and qualified components. Each system undergoes extensive burn-in prior to final test and inspection.

### ELECTRICAL SPECIFICATIONS

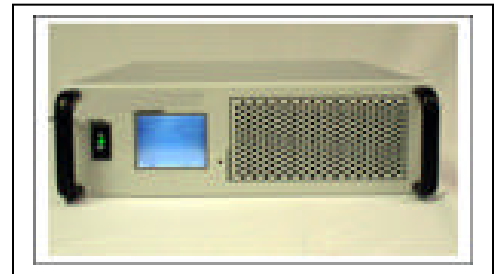
Characteristics	Rating	Limit
Frequency Response	1000 – 2000 MHz	Min
Power Output CW	100 Watts	Min
Power Output @ 1 dB Comp.	80 Watts	Min
Small Signal Gain	52 dB	Min
Gain Flatness / with ALC option	$\pm 1.5 / \pm 0.75$ dB	Max
Third Order Intercept Point	+60 dBm	Typ
Input/Output VSWR @ 50 ohm	2:1	Max
Harmonics @ 1 dB compression	-20 dBc	Typ
Noise Figure	10 dB	Max
RF Input Signal Format	CW/AM/FM/PM/Pulse/Digital	Nom
Spurious Signals	-60 dBc	Max
Supply Voltage	180 – 260 VAC, 50/60 Hz, single phase	Nom
Power Consumption	600 Watts AC	Max

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C to +50°C	Min
Non-operating Temperature	-40°C to +85°C	Min
Relative Humidity	95% without condensation	Min
Altitude	10,000 feet	Min
Shock and Vibration	Normal truck transport	Min

### MECHANICAL SPECIFICATIONS

Dimensions / Weight	19"x5.25"x22" / 47 lb.
RF Connectors FCN or RCN option	Type-N female front or rear panel
Sample Port Forward Power	SMA female rear panel
Cooling	Internal forced-air



### PROTECTIONS

Input Overdrive	+10 dBm
Load VSWR	Infinite @ any angle
Thermal Overload	85°C shutdown

### CONTROLS - DIGITAL DISPLAY LCD OPTION

Gain Adjustment Range	25 dB
Forward and Reverse indication	dB or Watts scale
VSWR Indication	2 - 5 dB user programmable response
Automatic Level Control	Fast or Slow ALC selection
Standby Mode	30 dB isolation minimum
Fault Indication	Temperature, VSWR, ALC out of range, Modules Fault, Power Supply Voltages
Remote Control	IEEE488.2 or full duplex RS232