HD Communications

Solid State Broadband High Power RF Amplifier

HD17851

1 – 500 MHz / 10 Watts

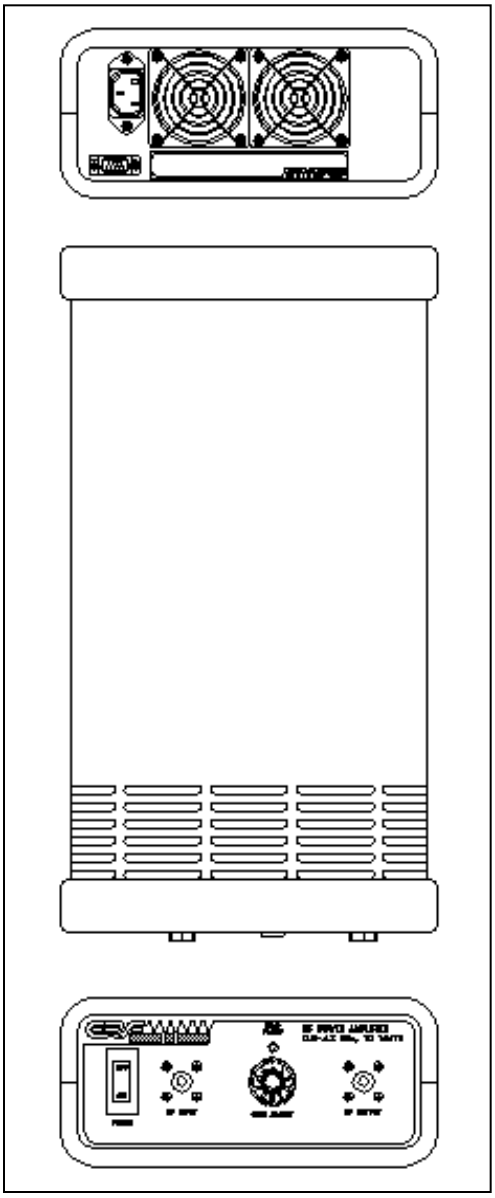
Designed for broadband high power applications, this amplifier utilizes linear Silicon RF Power MOSFET devices that provide high gain, wide dynamic range and good linearity. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters, custom-machined housings and qualified components. Each unit undergoes extensive burn-in prior to final test and inspection.

ELECTRICAL SPECIFICATIONS

Characteristics	Rating	Limit
Frequency Response	1 – 500 MHz	Min
Power Output CW	10 Watts	Min
Power Output @ 1 dB comp.	8 Watts	Min
Small Signal Gain	40 dB	Min
Small Signal Gain Flatness	±1.5 dB	Max
Manual Gain Adjustment Range	25 dB	Min
Third Order Intercept Point	+49 dBm	Typ
Input Overdrive	+10 dBm	Max
Input/Output VSWR @ 50 ohm	2:1	Max
Harmonics @ 1 dB compression	-20 dBc	Typ
Noise Figure	10 dB	Max
Spurious Signals	-60 dBc	Max
Supply Voltage (single phase)	100 - 240 VAC	Nom
Power Consumption	85 Watts AC	Max

MECHANICAL SPECIFICATIONS

Dimensions (Bench Top)	8.5”x3.5”x16”	Max
Weight	10 lb.	Max
RF Connectors	Type-N front panel	
Cooling:	Internal forced-air	



ENVIRONMENTAL CHARACTERISTICS

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

CIRCUIT PROTECTIONS

Infinite Load VSWR
RF Input Overdrive
Thermal Overload

AVAILABLE OPTIONS

- Front or Rear Panel Connectors
- Rack Mount or different Case Style
- Rack Mounting Slide
- Extended Temperature Range
- LCD Digital Display
  - Forward and Reflected Power Indication
  - VSWR Indication
  - Gain Adjustment
  - Automatic Level Control
  - Standby Mode
  - IEEE-488 GPIB or RS232 Interface

1 Comac Loop Ronkonkoma, NY 11779 Phone: (631) 588-3877 Fax: (631) 588-3879 e-mail: mailroom@hdcom.com
www.hdcom.com