HD Communications Corp.
Ronkonkoma, NY USA

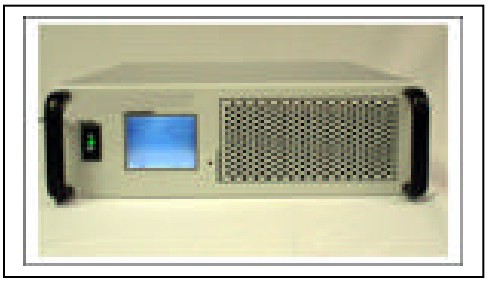
Home of RFAmplifiers.com

Solid State Broadband High Power RF Amplifier

HD19603

800 – 2000 MHz / 50 Watt

The HD19603 is suitable for broadband high power linear applications, this rack mount amplifier utilizes GaAsFET power 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, machined housings and all qualified components.



- Solid-state linear design
- Instantaneous ultra broadband
- Small form factor and lightweight
- Standard front panel manual gain adjust
- Suitable for all modulations CW/FM/PM/AM/Pulse/Digital
- 50 Ohm Input/Output impedance
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS @ T=25°C, 50Ω System

Characteristics	Rating	Min	Typ	Max	Units
Frequency Response	BW	800		2000	MHz
Power Output CW	P_{sat}	50			Watts
Power Output @ 1 dB G.C.P	P_{1dB}	40			Watts
Gain @ P1dB G.C.P	G_{1dB}		46		
Input Power for Rated Output	P_{in}		0		dBm
Gain Flatness	ΔG			±1.5	dB
Gain Adjustment Range	FGA	25	30		dB
Input/Output VSWR @ 50 ohm	S11/S22			2.0:1	-
Noise Figure @ maximum gain	NF		7	10	dB
Harmonics @ 1 dB G.C.P	H		-20		dBc
Third Order Intercept Point	IP3		+58		dBm
Spurious Signals	Spur		-70	-60	dBc
Supply Voltage (single phase)	VAC	100		240	VAC
Power Consumption	Pd			400	Watts

MECHANICAL SPECIFICATIONS

Dimensions W x H x D	19 x 3.5 x 18	Inch
Weight	27 lb.	lb.
RF Connectors see options	Type-N female front or rear panel	
Cooling	Built in forced-air system	

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	Tc	0		50	°C
Non-operating Temperature	Tstg	-40		+85	°C
Relative Humidity w/o condensation	RH	95			%
Altitude	Alt	10,000	30,000		Feet
Shock & Vibration	SH / VI		Airborne		-

PROTECTIONS

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

1 Comac Loop Ronkonkoma, NY 11779 Phone: (631) 588-3877 Fax: (631) 588-3879
e-mail: sales@rfamplifiers.com Web: http://www.rfamplifiers.com

HD Communications Corp.
Ronkonkoma, NY USA

Home of RFAmplifiers.com

Solid State Broadband High Power RF Amplifier

HD19603

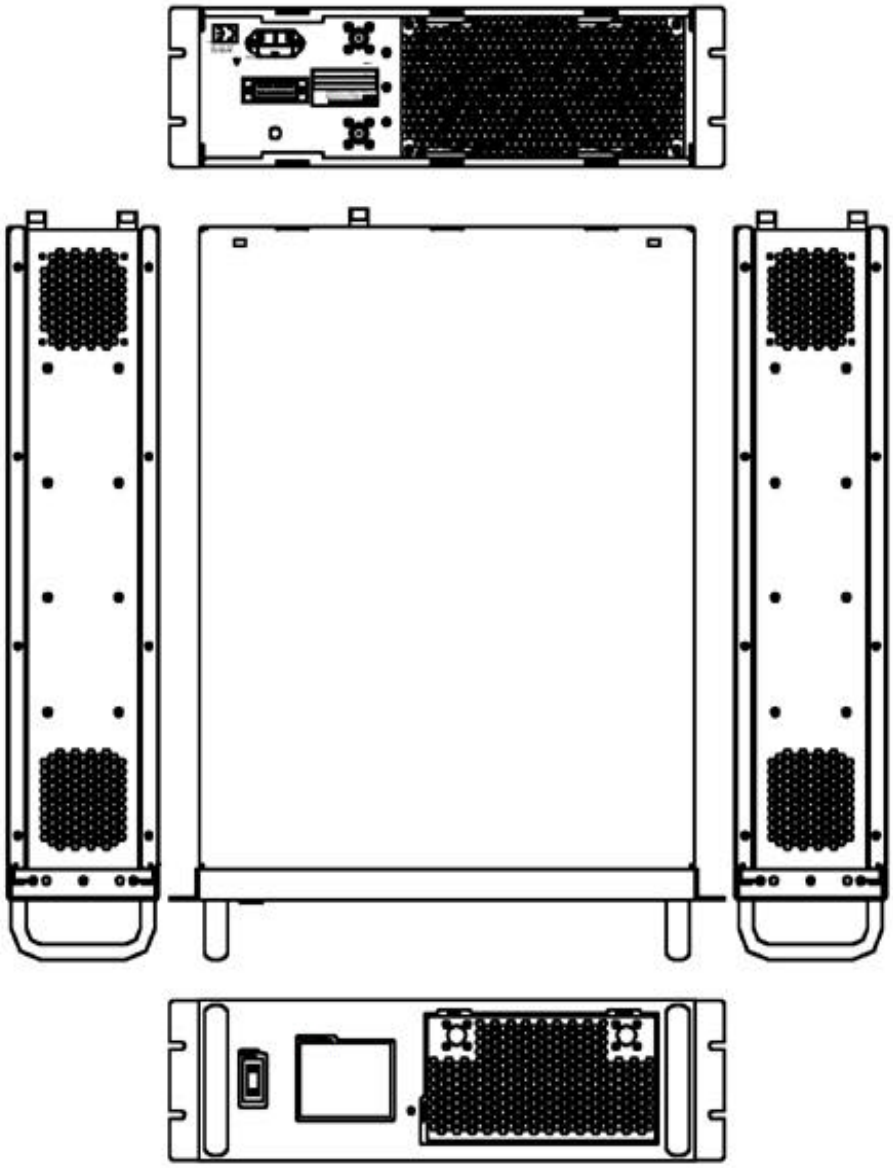
800 – 2000 MHz / 50 Watt

AVAILABLE OPTIONS

Option	Number	Description	Price
FGA	**061**	Front panel manual gain adjustment 10 turns	Standard
LCD	**062**	Touchscreen Digital Display, including Fwd/Rev Power indication (dB or Watt scale), Gain Adjustment, ALC Fast/Slow, On/Off, Standby mode, Fault indication, Rear panel HPIB IEEE-488.2 or Full Duplex RS232 remote interface	3,500
FCN	**051**	Front Panel Type-N female	N/C
RCN	**052**	Rear Panel Type-N female	N/C

Available Option Packages: 03, 04, 05, 05

OUTLINE DRAWING SHOWN WITH OPTION PACKAGE 05



1 Comac Loop Ronkonkoma, NY 11779 Phone: (631) 588-3877 Fax: (631) 588-3879
e-mail: sales@rfamplifiers.com Web: http://www.rfamplifiers.com