HD Communications Corp.
Ronkonkoma, NY USA

Home of RFAmplifiers.com

Solid State Broadband High Power RF Amplifier

20 – 500 MHz / 100 - 1000 Watt

These amplifiers were designed for broadband VHF and UHF high power linear applications. These amplifiers are utilizing high power push-pull MOSFET devices that provide high gain, wide dynamic range, low distortions, 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, machined housings and qualified components.

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

SPECIFICATIONS

Parameter	Symbol	HD18028	HD18004	HD20358	HD18869	HD19033	Units	Range
Operating Frequency	BW	**20**	**500**	**100**		**500**	MHz	Min
Output Power CW	P_{Typ}	120	220	350	600	1100	Watts	Typ
Output Power CW	P_{Sat}	**100**	**200**	**300**	**500**	**1000**	Watts	Min
Output Power @ 1dB G.C.P	P_{1dB}	60	120	240	400	700	Watts	Min
Power Gain @ 1dB G.C.P	G_{1dB}	50	54	54	56	60	dB	Min
Gain Adjustment Range	FGA	25	25	25	25	25	dB	Nom
Gain Flatness	ΔG	±1.5	±1.5	±1.5	±1.5	±1.5	dB	Max
Input/Output VSWR	S11/S22	-10	-10	-10	-10	-10	dB	Max
Third Order Intercept Point	IP3	+58	+61	+63	+66	+69	dBm	Typ
Harmonics @ P1dB G.C.P	H	-20	-20	-20	-20	-20	dBc	Typ
Spurious Signals	Spur	-60	-60	-60	-60	-60	dBc	Max
Noise Figure at full Gain	NF	10	10	10	10	10	dB	Max
Load VSWR @ full CW	Ψ	∞	∞	∞	∞	∞	-	Nom
Operating Voltage Range	VAC	ACA	ACA	ACB	ACB	ACB	VAC	Min
Power Consumption AC	P_d	400	1000	1500	2500	5000	Watts	Max
Dimensions		R3U	R3U	R5U	R5U	2xR5U	-	Nom
Weight		47	47	70	80	250	lb.	Max
Connectors RF In/Out (std.)		RCN	RCN	RCN	RCN	RCN	-	-
Option packages		Opt07 Opt08 Opt09 Opt10	Opt07 Opt08 Opt09 Opt10	Opt15 Opt16 Opt17 Opt18	Opt15 Opt16 Opt17 Opt18		-	-

ENVIRONMENTAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	Tc	0		+50	°C
Non-operating Temperature	Tstg	-40		+85	°C
Relative humidity w/o cond.	RH	0		95	%
Altitude	ALT	10,000	30,000		Feet
Shock and Vibration	SH / VI		Airborne		-

Refer to table for systems options

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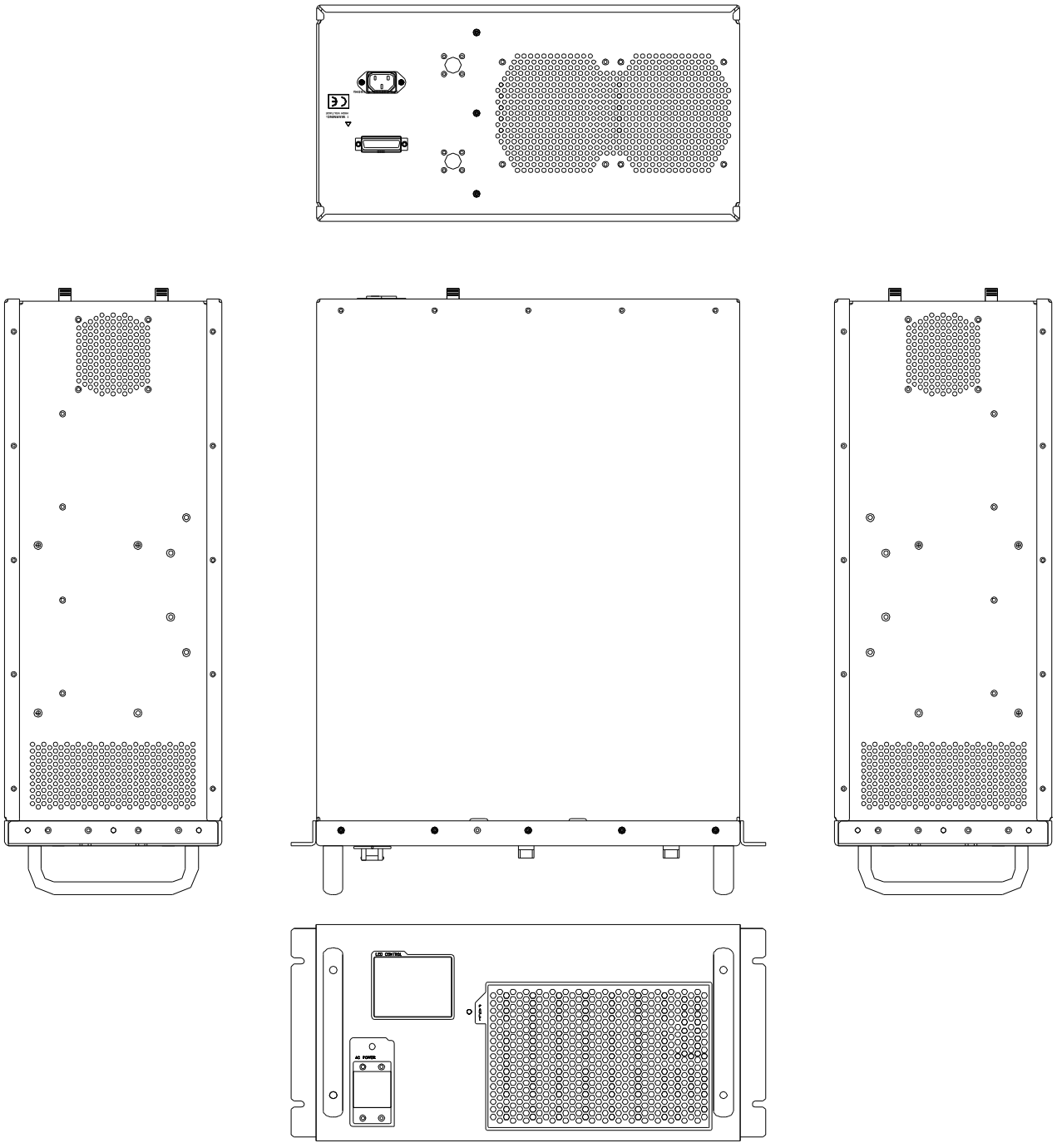
OUTLINE DRAWING SHOWN WITH OPTION PACKAGE 18



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