HD31173
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, CW/Pulse and all communication applications
Small form factor, rack mounted system
Instantaneous ultra-wide bandwidth
Class A/AB Linear design
High power advanced technology devices
Built-in protection circuits, with extensive monitoring
Local LCD & remote flexible interfaces
High efficiency, with unprecedented reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 25°C, 50Ω

Parameter	Specification	Notes
Operating Frequency Range	80 - 1000 MHz	
Power Output @ Psat	300 Watt Min	CW or Pulse
Power Output @ P1dB	250 Watt Typ	
Power Gain	55 dB Min	0dBm or less for rated Pout
Gain Adjustment Range	>20 dB Min	Local or remote capable
Power Gain Flatness	4.0 dB p-p Max	Constant input power
Input Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	45dBm/Tone, Δ = 1MHz
Harmonics	<-20 dBc Typ	At rated output power
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	180 - 240 VAC	47-63 Hz
Power Consumption	2 KW Max / <1.5 KW Typ	At rated output
Input Power Protection	+10 dBm Max[1]	
Load VSWR Protection	4 : 1: Max[2]	Foldback @ preset limit
Sample Port (optional)	-50 dB	N-Female

1 Units with optional digital monitor and control, for basic units <10 Sec without damage
2 Units with optional digital monitor and control, for basic units <1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport[3]	

3 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	430 x 177 x 700 mm	4U, excluding handles
Weight	26 kg.	
RF Conn. In / Out / Sample	N-Female	Front or rear panel
Interface Connector	9-Pin D-Sub	Rear panel
AC Power	IEC 60320-C14	Or equivalent
Safety Interlock Connector	D-Sub (Optional BNC female)	Open=STBY/Short=RFON
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	60-65 dBa Typ
STANDARD: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP, **OPTIONAL**: Safety Interlock	Ethernet RJ-45 TCP/IP, RS422/485, USB Open=STBY/Short=RFON	BNC Female on rear panel

338 Jericho Tpk, Unit 387 Syosset, NY 11791 Phone: 631-588-3877
www.rfamplifiers.com sales@hdcom.com www.rfcomp.com

Specifications subject to change without notice.
Specifications and drawings may vary with selected options.

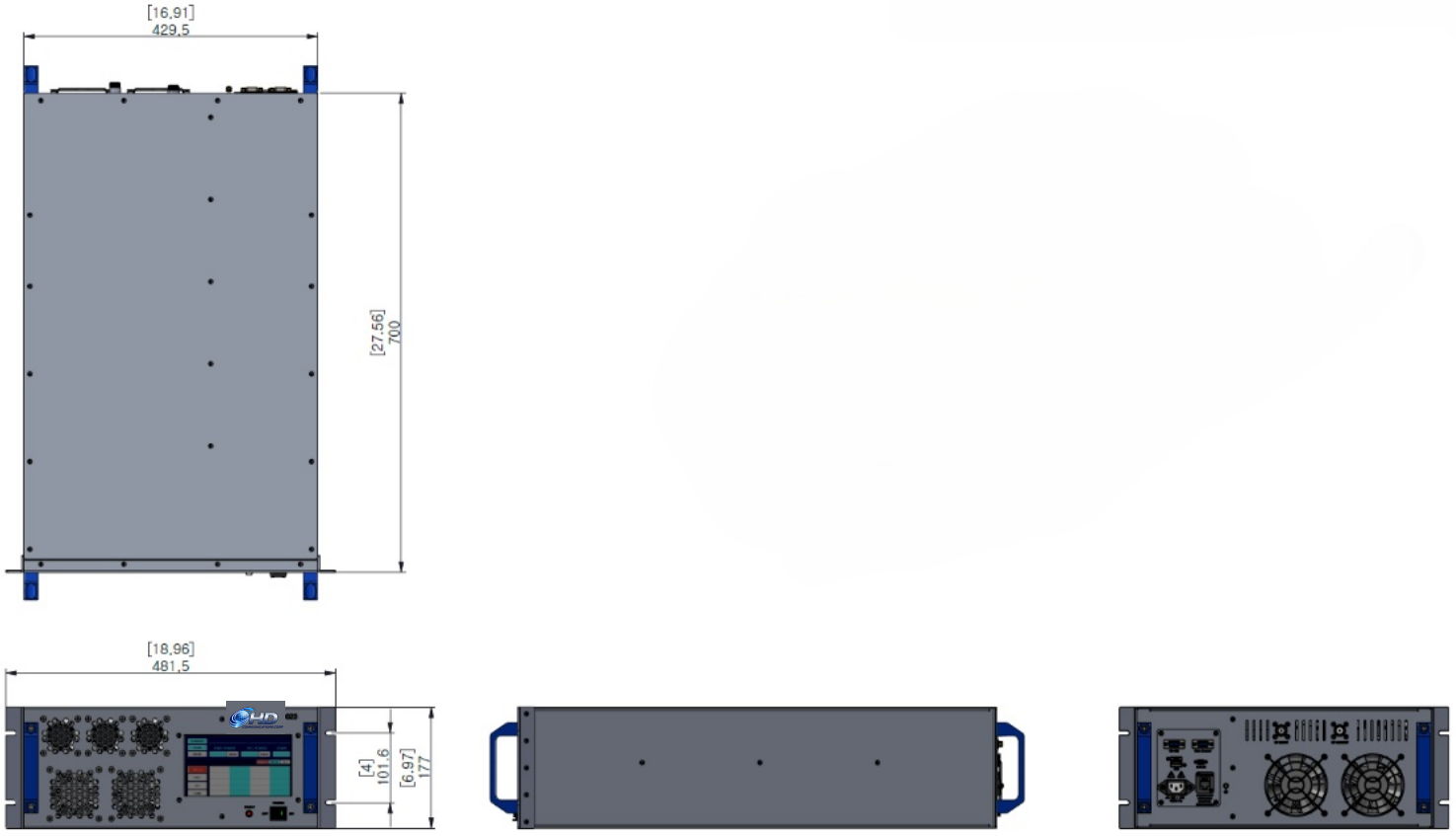
HD31173
SOLID STATE HIGH POWER AMPLIFIER

AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-40dB, Type N-Female	Front or rear panel
Option RRS: Reflected RF Sample	-40dB, Type N-Female	Front or rear panel
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
Included CPM: Calibrated Power Monitoring (With purchase of Option DMC)	Offset correction entry for +/- 0.2dB accuracy	11-points standard[4]

4 Consult with the factory if additional points would be required.

OUTLINE DRAWING
SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER



338 Jericho Tpk, Unit 387 Syosset, NY 11791 Phone: 631-588-3877
www.rfamplifiers.com sales@hdcom.com www.rfcomp.com

Specifications subject to change without notice.
Specifications and drawings may vary with selected options.