HD31181
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	500 - 1000 MHz	
Power Output @ Psat	500 Watt Min	CW or Pulse
Power Output @ P1dB	350 Watt Typ	
Power Gain	57 dB Min	0dBm or less for rated Pout
Power Gain Flatness	3 dB p-p Max	Constant input power
Gain Adjustment Range	20 dB Min	Local or remote capable
Input / Output Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	47dBm/Tone, Δ = 1MHz
Harmonics	-15 dBc Typ	At rated output
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	180 - 240 VAC	50 - 60Hz
Power Consumption	2500 Watts Max	At rated output
Input Power Protection	+8 dBm Max[1]	
Load VSWR Protection	4 : 1: Max[2]	Foldback @ preset limit
Sample Port Coupling (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	up 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	421 x 220 x 600 mm	5U, excluding handles
Weight	28 Kg. Max	
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
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor & Control (DMC) FWD, REV, VSWR, GAIN, ALC, V & I, TEMP, Optional Safety Interlock (INT)	Ethernet RJ-45 TCP/IP, RS422/485, USB Optional GPIB Interface Open=STBY/Short=RFON	IEEE rear panel BNC-F rear panel

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

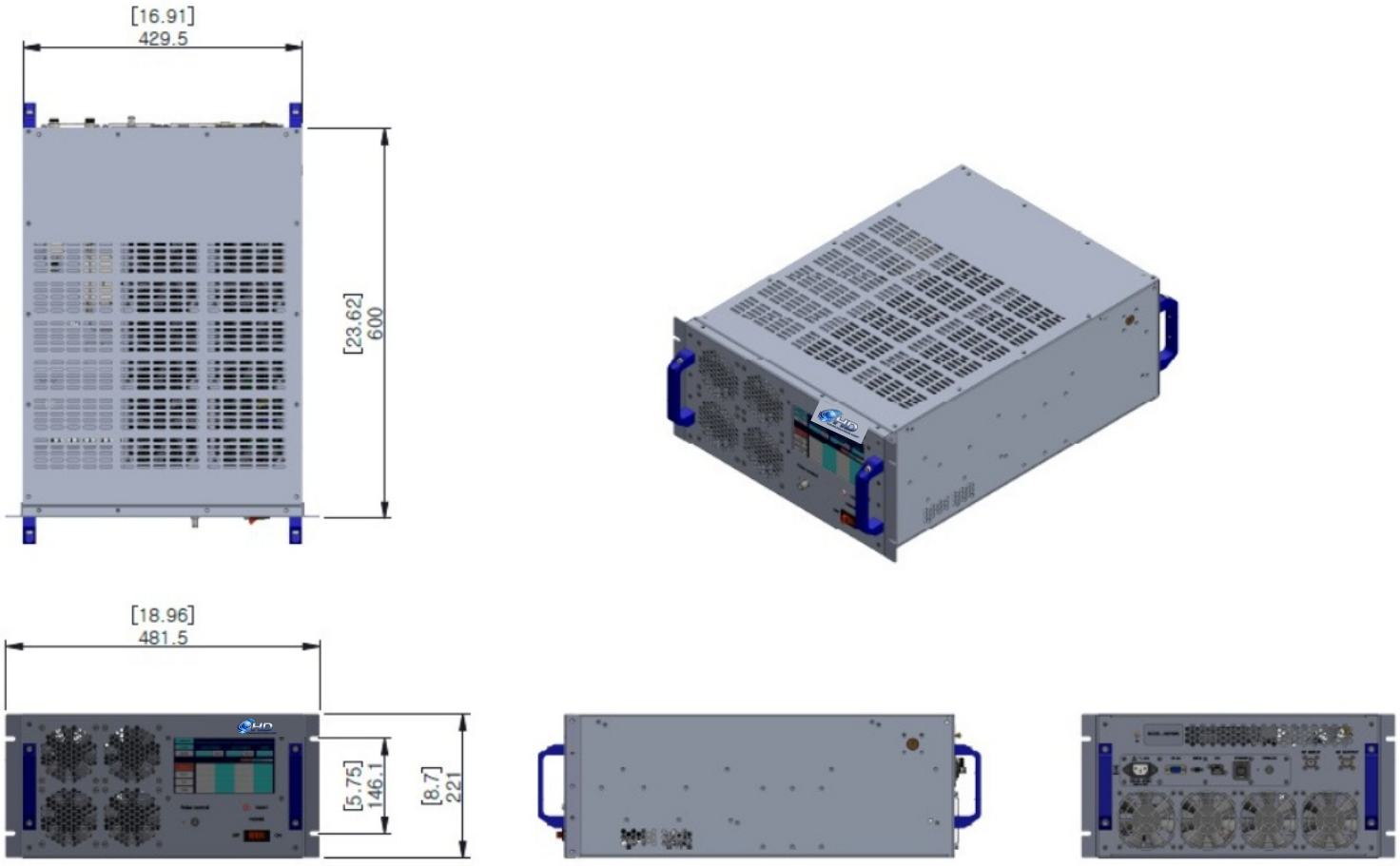
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AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-50dB, 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	5-points standard[4]

4 Consult with factory if additional points would be required.

OUTLINE DRAWING
SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER



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