HD31165
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 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	1 - 1000 MHz	
Power Output @ Psat	50 Watt Typ	CW or Pulse
Power Gain	47 dB Min	0dBm or less for Rated Power
Gain Adjustment Range	20 dB Min	Local or remote capable
Power Gain Flatness	4 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	37dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated output
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	100 - 240 VAC	47 - 63 Hz
Power Consumption	600 Watt Max	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	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	482 x 133 x 560 mm	3U, excluding handles
Weight	14 Kg. Max	
RF Conn. In / Out / Sample (optional)	N-Female	Front or rear panel
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent (rear panel)
Cooling	Built in Fan Cooling	Variable speed
STANDARD: Digital Monitor & Control[4] 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

4 DMC option may reduce Pout by 1dB.

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

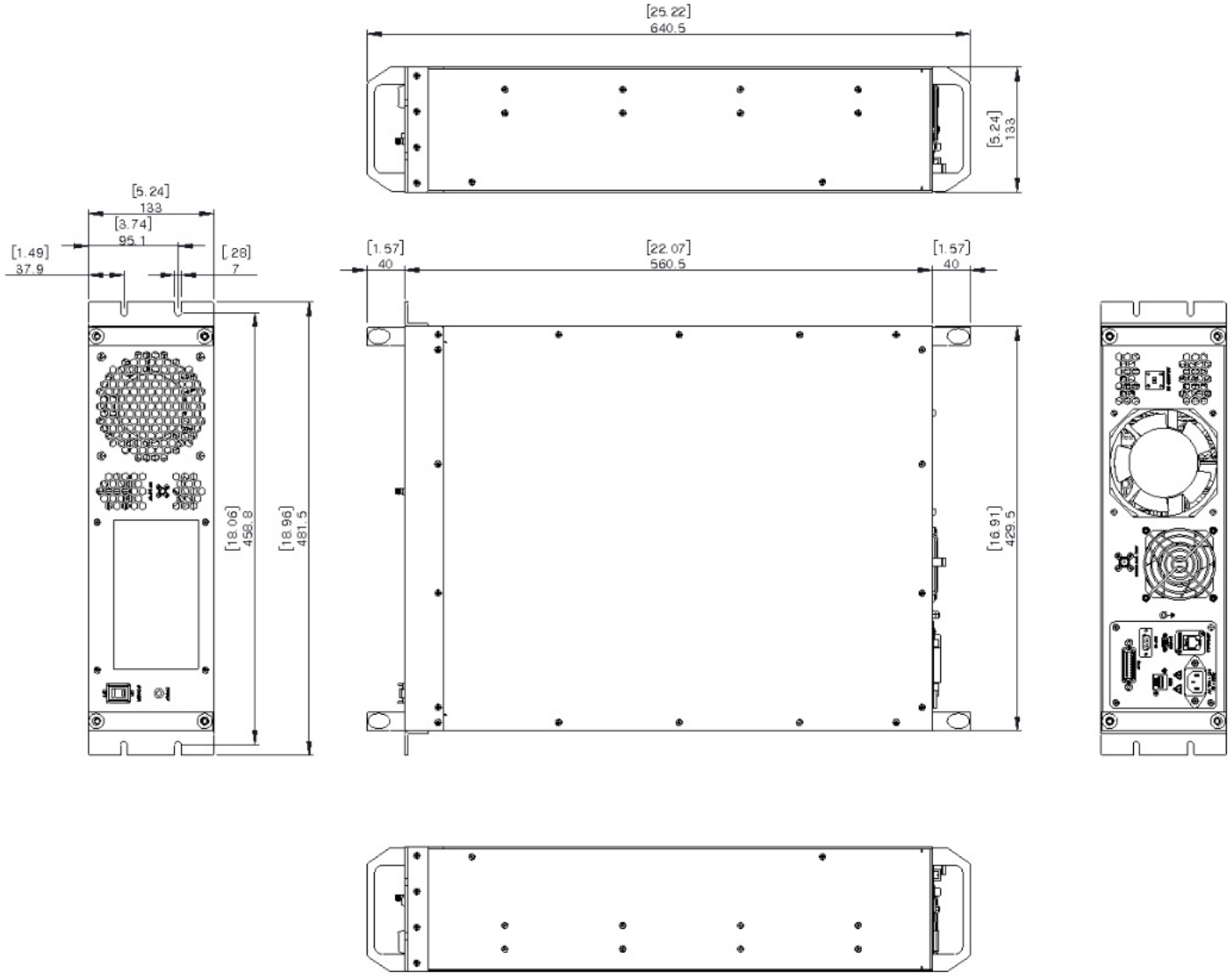
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AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-50dB, Type N-Female	Front or rear panel
Option RRS: Reflected RF Sample	-50dB, 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	7-points standard[5]

5 Consult the factory if additional points are required.

OUTLINE DRAWING
SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER



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