HD31005
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	3.3 - 4.9 GHz	
Power Output @ Psat	300 Watt Min	CW
Power Gain	55 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Gain Adjustment Range	20 dB Min	Local or remote capable
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	44dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated output power
Non-Harmonics Spurious	-60 dBc Max	Non-harmonic
Operating Voltage	100 - 240 VAC	47-63 Hz
Power Consumption	1800 Watt Max	At rated output
Input Power Protection	+5 dBm Max[1]	
Load VSWR Protection	4 : 1: Max[2]	Foldback @ preset limit

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	430 x 133 x 560 mm	3U, excluding handles
Weight	20 kg.	
RF Connectors In/Out	Type-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
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.

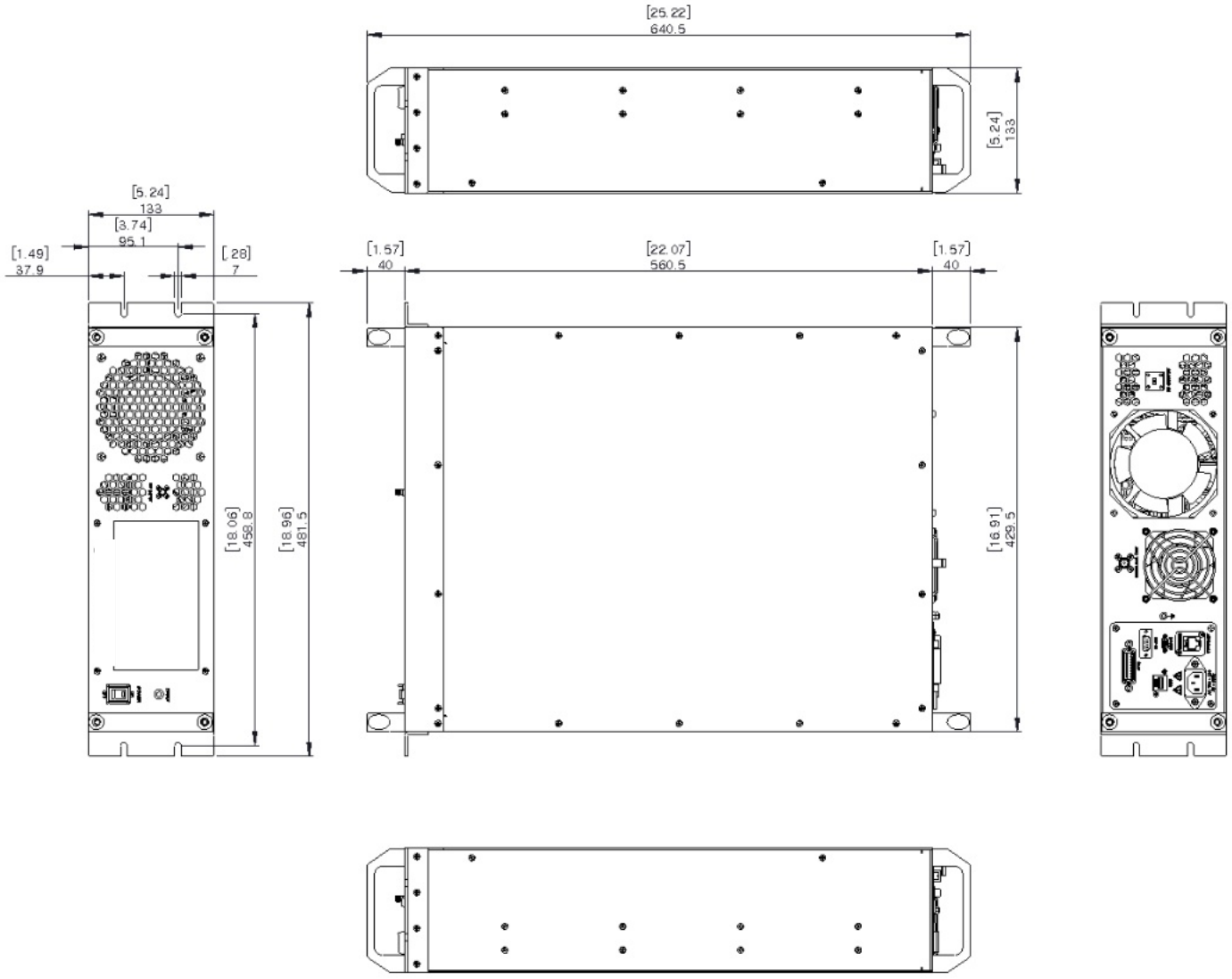
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AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-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[5]

5 Consult with factory if additional points would be required.

OUTLINE DRAWING
SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER



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