HD35223
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, and general Pulse & Phased-Array applications
Small form factor, rack mounted system
Class A/AB linear design
High power advanced technology devices
Instantaneous bandwidth
Built-in protection circuits
High reliability and ruggedness with extensive monitoring
All remote-control platforms included
High efficiency, with unprecedented reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	2.9 - 3.5 GHz			Peak Pulse	
Power Output @ Pulse	15 KW Min			Pin = ±2dBm for 15KW	
Input Pulse Characteristics	**Width**	**Duty**	**PRF**	**Rise/Fall**	**Droop**
	up to 200 µS	20 % Max	up to 100 KHz	<50 nS Typ	<1 dB
Power Gain	72 dB Min			0dBm or less for rated Pout	
Power Gain Flatness	2.0 dB p-p Max			Constant input power	
Gain Adjustment Range	20 dB Min			Local or Remote	
Input Return Loss	-10 dB Max				
Output Power On/Off Ratio	80 dB Min			TTL Gate Control	
Harmonics	-25 dBc Max			At rated output power	
Spurious	-50 dBc Max			Non-harmonics	
Operating Voltage	220/380VAC, 3-Ph, 47 - 63Hz			Opt: 120/208VAC, 3-Ph	
Power Consumption	15.0 KW Avg Max			At rated Pout	
Input Power Protection	+5 dBm Max[1]				
Load VSWR Protection	4 : 1: Max[2]			Foldback @ preset limit	
Sample Port (optional)	-70 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, each module is circulator protected for rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	-20 to +55°C [4]
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
4 Option ETR, extended temp range

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.

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MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	600 x 31U x 1700 mm	31U including cabinet
Weight	450 kg. Nom.	rack integrated
RF Connectors In/Out/Sample	RF Input Type-N Female RF Output WR284 RF Input Type-N Female	Front or rear panel Rear panel Front or rear panel
Gate Control	BNC Female	Front panel
Interface Connector	9-Pin D-Sub	Rear panel
AC Power	MS3106E 32-17P	Or equivalent
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	Air-Cooled
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

AVAILABLE SPECIAL OPTIONS

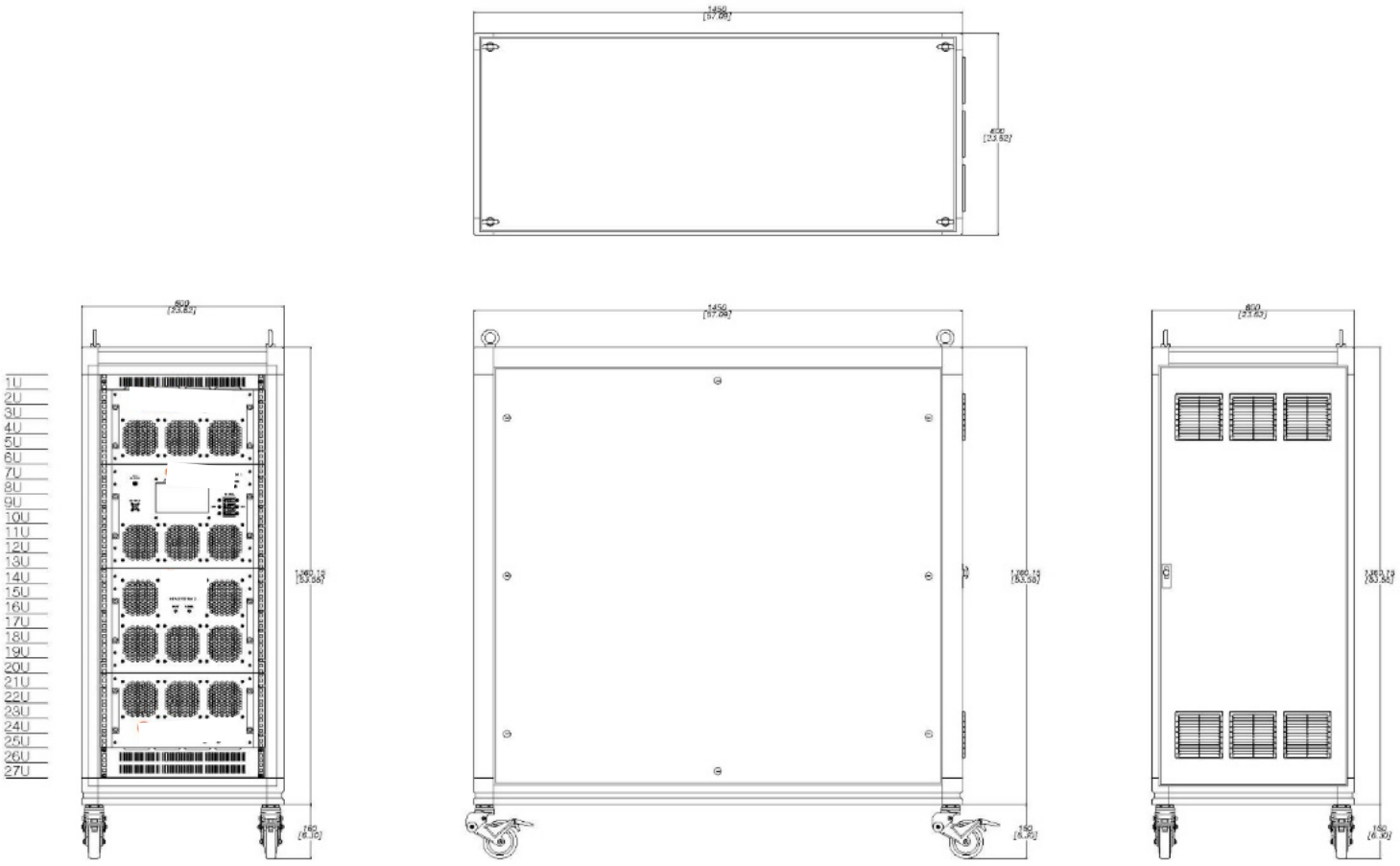
Parameter	Specification	Notes
Option NPC: Not Power Combined[5]	8 Separate 2KW RF Outputs[5]	N or SC Female RF Outputs
Option FRS: Forward RF Sample	Not available on non-combined versions	-70dB, N-Female (Front or rear panel)
Option PSA: Phase Shift Adjustment[5]	Phase Shifter Adjustment for each 2KW Module	Front or rear panel
Option ETR: Extended Temperature Range	-20 to +55°C	
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
Option RI: Taller Rack Cabinet Integration	27U standard rack height	Alternate height TBQ
Included CPM: Calibrated Power Monitoring (With purchase of Option DMC)	Not Available on non-combined versions	

5 System is comprised of 8 x 2KW RF outputs, phase/gain matched to within acceptable tolerance factory defined.
6 Consult with factory if additional points would be required.

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OUTLINE DRAWING
SHOWN WITH LCD DIGITAL CONTROLLER
System: 2 x 7U PA drawers, 1 x 5U PS/controller drawer, 1 x 5U Cooling drawer



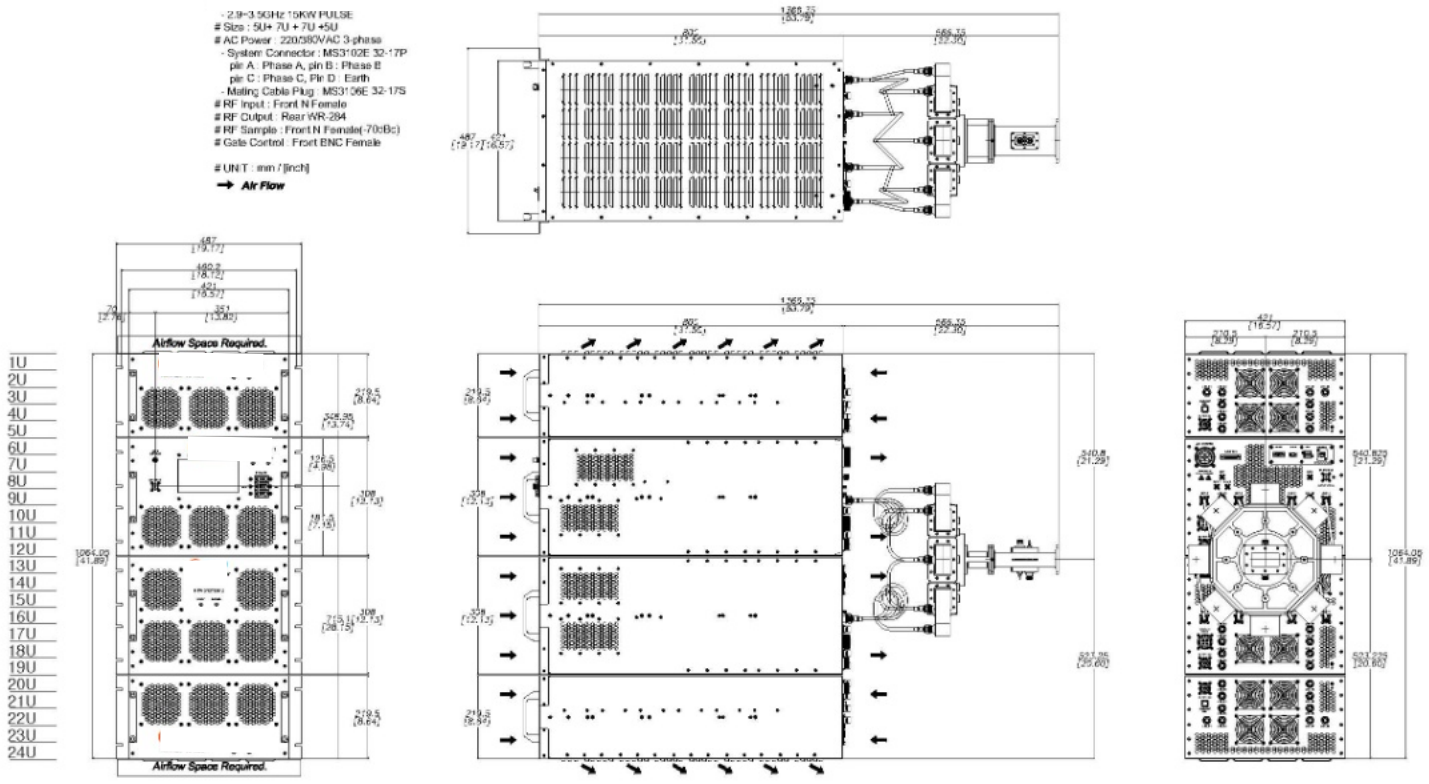
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OUTLINE DRAWING

System Assembly Outline



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