HD32142
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, HIRF, radar, TWT driver, high power pulse applications, or EMI/RFI, lab, Pulse, and all communication applications
Small form factor, rack mounted system
Class AB Linear high power advanced technology design
Suitable for S-Band high power linear pulse applications
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	9.6 - 9.9 GHz				
Power Output @ Peak Pulse	500 Watt Min				
Pulse Characteristics	**Width**	**Duty**	**PRF**	**Rise/Fall**	**Droop**
	up to 50 µS	10 % Max	up to 10.0 KHz	<100 nS	<1 dB
Power Gain	57 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 capable	
Input Return Loss	-10 dB Max				
Output Power On/Off Ratio	-80 dB Max			TTL Gate Control	
Spurious	-60 dBc Max			Non-harmonics	
Harmonics	-30 dBc Typ			At rated output power	
Operating Voltage	100 - 240 VAC			47 - 63 Hz	
Power Consumption	500 Watt Avg. Max			@ 10% Duty cycle	
Input Power Protection	+3 dBm Max[1]				
Load VSWR Protection	4 : 1: Max[2]			Foldback @ preset limit	
Sample Port (optional)	-60 dBc			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 264 x 600 mm	6U, excluding handles
Weight	20 Kg. Max	
RF Connectors In/Out/Sample (optional)	Type-N Female/WR112/Type-N-Female	Rear panel std. (Front avail.)
Gate Control	BNC Female	Rear panel std. (Front avail.)
AC Power / Control Connector	IEC 60320-C14 / 9-Pin D-Sub	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

4 Chassis depth increases to 750mm with Option DMC.

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.

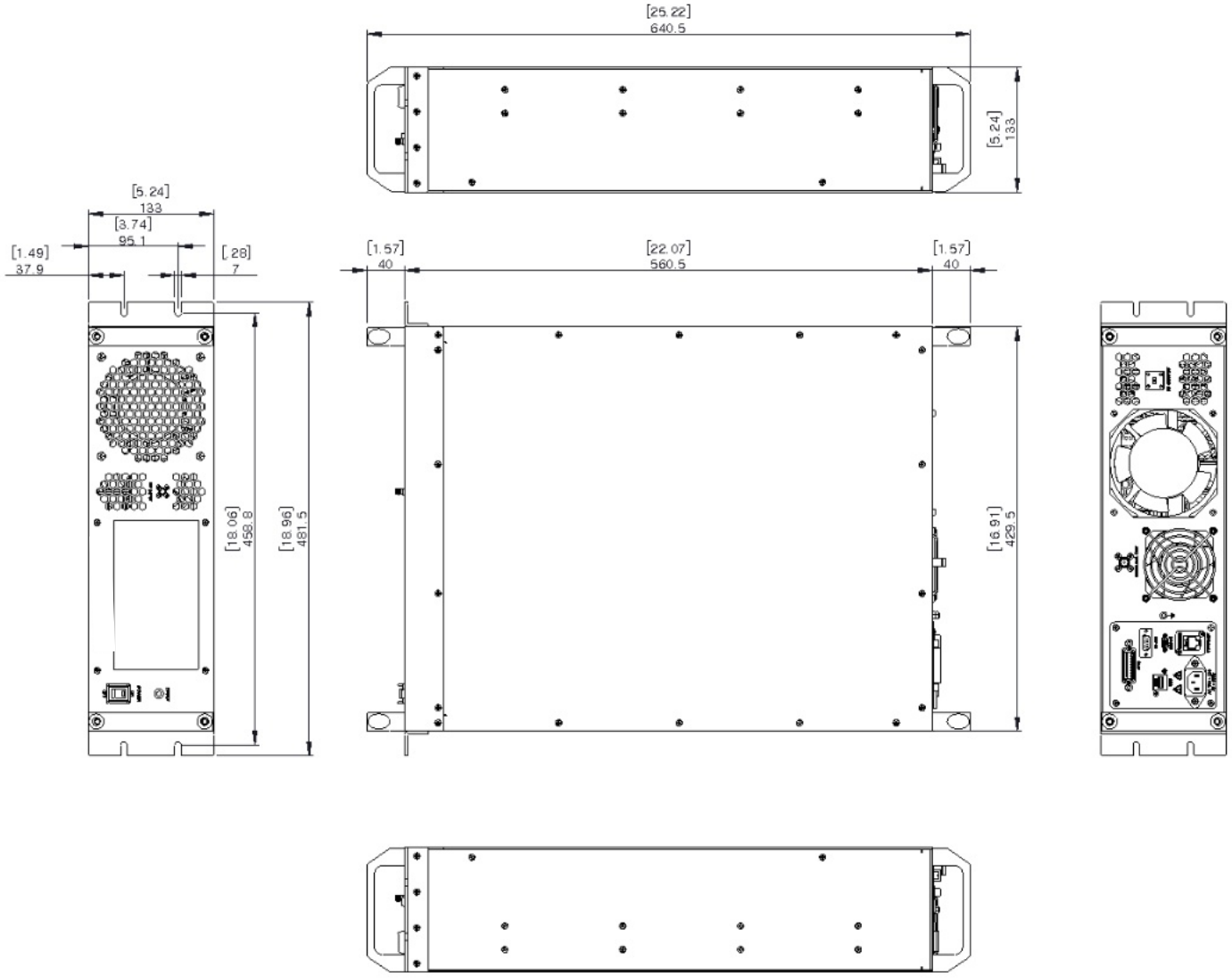
HD32142
SOLID STATE HIGH POWER PULSE AMPLIFIER

AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-60dB, Type N-Female	Rear panel std. (Front avail.)
Option RRS: Reflected RF Sample	-50dB, Type N-Female	Rear panel std. (Front avail.)
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	4-points standard[5]

5 Consult with factory if additional points would be required

OUTLINE DRAWING
SHOWN WITH 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.