HD31577
SOLID STATE PULSE HIGH POWER AMPLIFIER

Communications Corp.

FEATURES

High power GaN pulse devices
Suitable for X-Band linear pulse applications
Built-in Ethernet Control and Protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Operating Frequency Range	9.0 - 9.9 GHz			
Peak Output Power	8000 Watt Min			5% Duty Cycle
Input Power	0 dBm Nom			Pulsed
Saturated Gain	69 dB Min			
Pulse Characteristics	**Duty**	**Width**	**PRF**	
	5 % Max	0.2 - 50 µSec	10 KHz Max	
Pulse Droop	0.5 dB Max			@ 50 µSec
Rise / Fall Time	50 nSec			
Input / Output VSWR	1.5 : 1			Relative to 50 Ohm
Harmonics	-20 dBc Max			Internal Harmonics Filter
Out of Band Spurious levels	-50 dBc Max			
Load VSWR	2.5 : 1			Without damage
Gate Control Inputs	TTL - gating pulse must precede RF by 2 µSec			
AC Input Voltage	115 VAC, 3 Phase, 400 Hz			
RF Output Sample	-60 dB			Continuous DC Voltage

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50°C	
Vibrations	MIL-STD 810G, Method 514.6	
Altitude	10,000 feet	30,000 feet non-operating

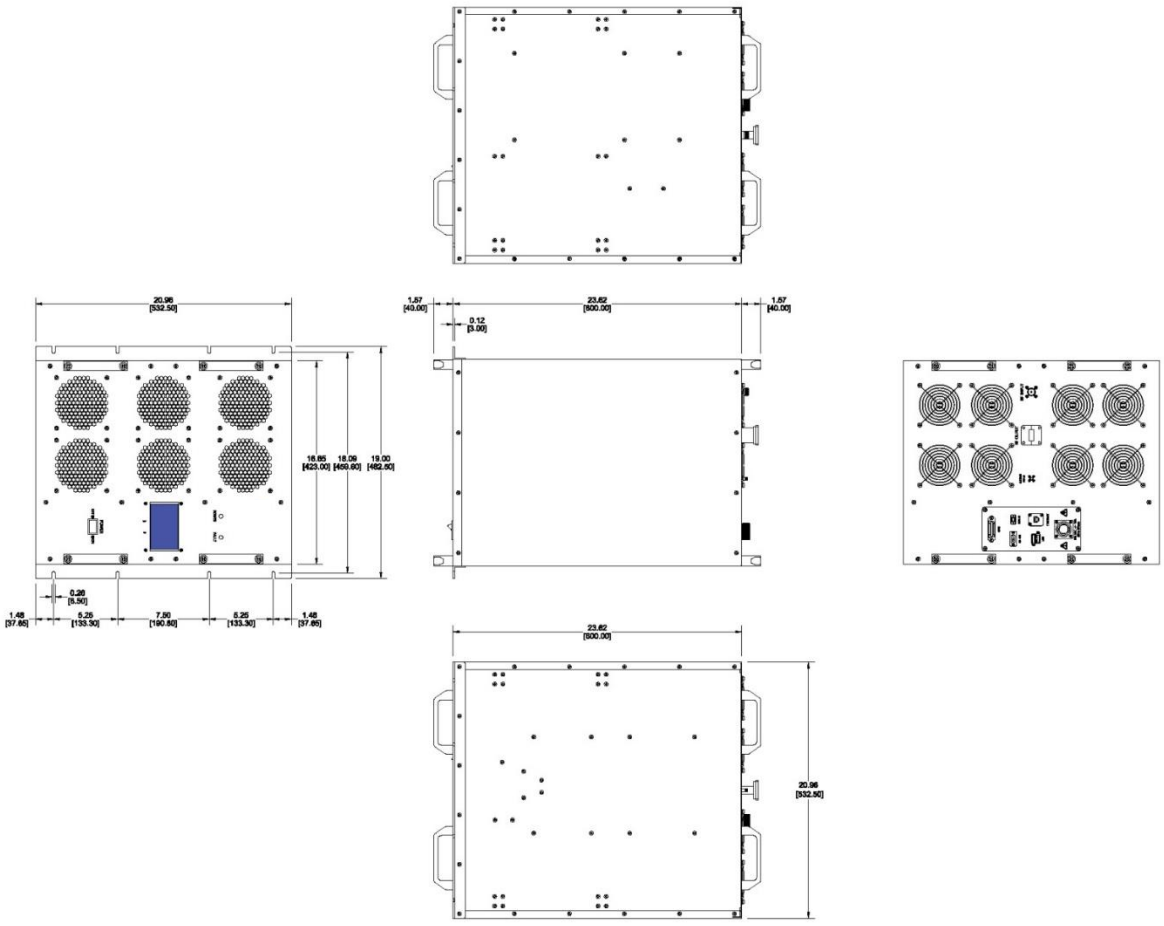
MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	See preliminary outline drawing	12U, 19” rack
Weight	TBD	
RF Input Connector	SMA (F) Jack	
RF Output Connector	WR-112 Waveguide flange	Waveguide pressure sensor
RF Sample Port	SMA (F) Jack	
AC Power	MS3122E14-5P	or similar
Transmit Gating Connector	MS circular or similar	
Monitor & Control	Ethernet RJ-45 circular connector TCP/IP RS422/485 D-sub 9S port for redundancy	
Cooling	Built in Fan Cooling	Front Inlet, Rear outlet
Elapse Hour Meter	Internally tracked via software	Ethernet status message

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OUTLINE DRAWING



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