



(GEN) AMP6031P SOLID STATE PULSE HIGH POWER AMPLIFIER



FEATURES

- Ku Band high power pulse generator
- Small form factor, rack mounted system
- High power GaN pulse devices
- Suitable for linear pulse applications
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes	
Operating Frequency Range	15.4 - 15.7 GHz				
Peak Output Power	2000 Watt Peak Min			1% nominal duty-cycle with output isolator	
Output Power Flatness	0 to +2 dB			Over operating & Temp Range	
Saturated Gain	63 dB Min				
Pulse Characteristics	Width	Duty	PRF	Rise / Fall	Droop
	0.3 μ Sec	1 - 3 %	5 KHz Max, \pm 5% staggering	75 nSec	<0.8 dB Max
Output Power Control	20 dB Variable				
Input / Output VSWR	1.5 : 1			Relative to 50 Ohm	
Harmonics	-60 dBc Max			Internal Harmonics Filter	
Phase drift within pulse	7.5° Max (Linear)				
Out of Band Spurious levels	-65 dBc Max				
Over Temp. Alarm	ON: TTL Low >75°C OFF: TTL High <70°C				
Load VSWR	2.5 : 1			Without damage	
Gate Control Inputs	PA OFF: TTL High PA ON: TTL Low			TTL pulse precedes RF by 2 μ Sec	
AC Input Voltage	230 VAC, \pm 10%, 50 Hz \pm 3 Hz				
Noise Figure	<15 dB				
Phase Noise	-70 dBc/Hz @ 100 Hz from carrier				
Synthesizer Step	250 KHz Nom				

ENVIRONMENTAL CHARACTERISTICS

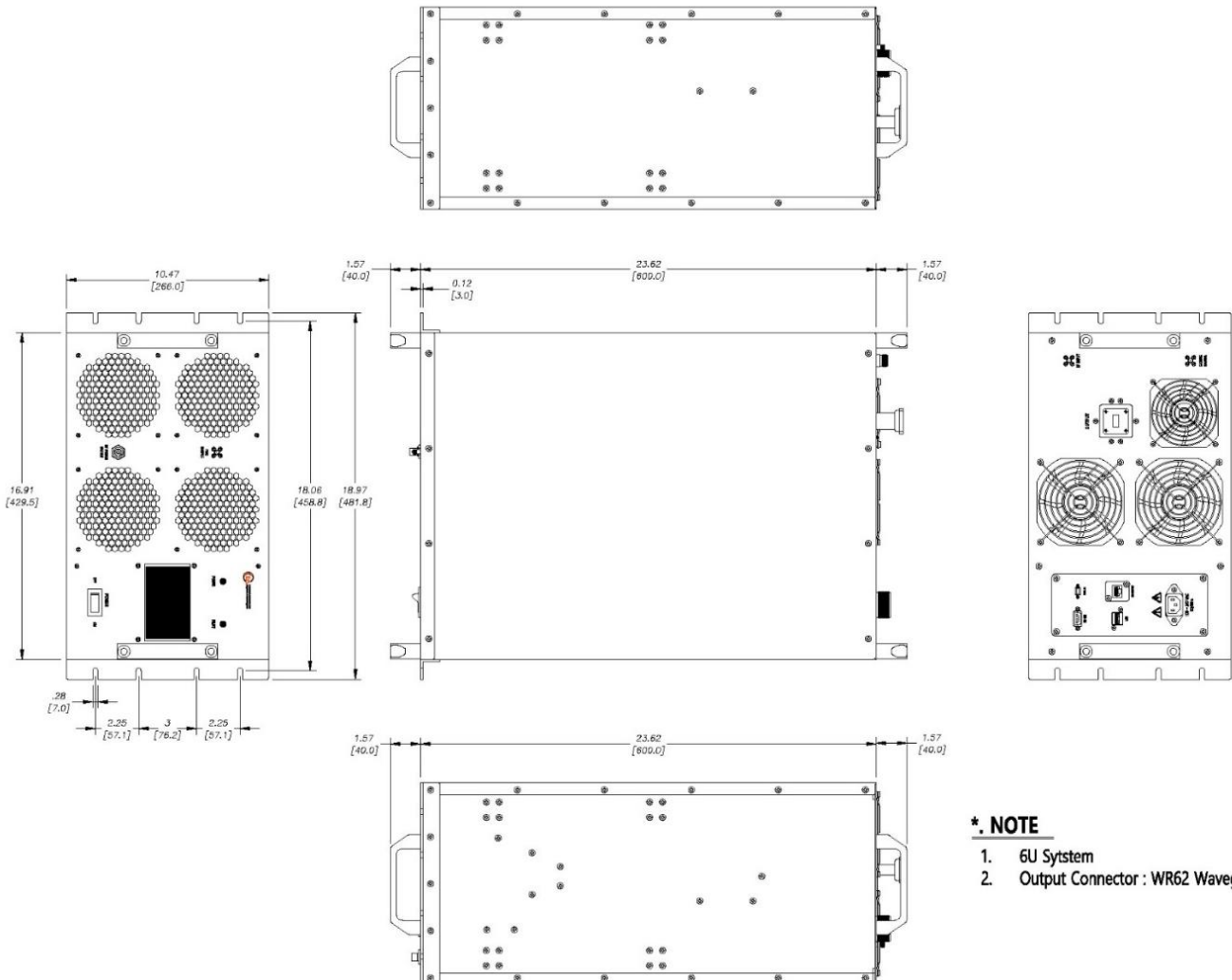
Parameter	Specification	Notes
Operating Ambient Temperature	-20 to +55°C	MIL-STD 810F, 502.4/501.4
Storage Temperature	-30 to +70°C	MIL-STD 810F, 502.4/501.4
Relative Humidity	95% @ 40°C	MIL-STD 810F, Method 507.4
Shock (Bump)	25 g for 6 mSec, 2-3 Bumps/Sec. 400 Bumps	MIL-STD 810F, Method 516.5
Vibrations	2m/S ² from 20 -50 Hz 2m/S ² from 20 -500 Hz	MIL-STD 810F, Method 514.5
Altitude	5160 m	MIL-STD 810F, Method 500.4
EMI/EMC	Conducted Susceptibility, Radiated Emissions	MIL STD 461E, Method CS101 MIL STD 461E, Method RE102

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MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	430 x 600 x 266 mm	Standard 6U
Weight	20 Kg. Max	
RF Input Connector	Built-In Synthesizer	
RF Output Connector	WR 62 UBR 140 (Choke Flange)	Aluminum w threaded holes
RF Sample Port	SMA (F) Jack	0 - 6 dBm
Detected RF Power	BNC (F)	Pulsed DC
AC Power	Amphenol, 97 - 3102A-2209 P (3 pin)	or equivalent
Transmit Gating Signal	3 pin D38999 SERIES III (M) Circular connector	RS422
Monitor & Control	Ethernet RJ-45 circular connector TCP/IP RS232 D-sub 9S port for redundancy	Optional Remote Bluetooth application
Cooling	Built in Fan Cooling	

OUTLINE DRAWING



*. NOTE

1. 6U System
2. Output Connector : WR62 Waveguide