

AA-12G-8KWP Advanced Amplifiers SOLID STATE HIGH PULSE POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, HIRF/Pulse applications Instantaneous L-Band octave bandwidth Small form factor rack-mounted system Class AB linear Advanced technology design Linear high peak pulse applications Built-in protection circuits with extensive monitoring Local LCD & remote flexible interfaces High efficiency with unprecedented reliability and ruggedness





ELECTRICAL SPECIFICATION: 50Ω. 25°C

Parameter		Specification		Notes	
Operating Frequency Range		1.0 - 2.0 GHz		Peak Pulse	
Power Output @ Peak Pulse		8.0 KW Min			
Input Pulse Characteristics	Width	Duty	PRF	Rise/Fall	Droop
	up to 100 μS	6 % Max	up to 100 KHz	<50ns Typ	<1 dB
Power Gain		69 dB Min		OdBm or less for rated Pout	
Power Gain Flatness		5.0 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 Min		TTL Gate Control	
Harmonics		<-20 dBc Typ		At rated output power	
Spurious		-60 dBc Max		Non-harmonics	
Operating Voltage	200 - 240	200 - 240 VAC, single or three phase		50 - 60Hz	
Power Consumption		3500 W Max		At rated Pout	
Input Power Protection		+10 dBm Max ¹			
Load VSWR Protection		4 : 1: Max ²		Foldback @ preset limit	
Sample Port (optional)	-60 dB		N-Female		

¹ Units with optional digital monitor and control, for basic units <10 Sec without damage

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

AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes	
Option RI: Rack Cabinet Integration	14U standard rack height	Alternate height TBQ	
Option FRS: Forward RF Sample	-70dB, Type N-Female	Front or rear panel	
Option RRS: Reflected RF Sample	-60dB, Type N-Female	Front or rear panel	
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability		
Included CPM: Calibrated Power Monitoring	Offset correction entry for +/- 0.2dB accuracy	7-points standard ⁴	
(With purchase of Option DMC)			

⁴ Consult with factory if additional points would be required.

² Units with optional digital monitor and control, for basic units <1 minute at rated Pout



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MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes	
Dimensions W x H x D	See Outline	13U or 14U in rack	
Weight	250 lbs. Nom.	<350 lbs rack integrated	
	RF Input Type-N Female	Front Panel	
RF Connectors In / Out / Sample	RF Output SC or 716 Female	Rear Panel	
	RF Sample Type-N Female	Front Panel	
Gate Control	BNC Female	Front Panel	
Interface Connector	9-Pin D-Sub	Rear panel	
AC Power	MS	Or equivalent	
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling		
OPTIONAL: Digital Monitor & Control (DMC)	Ethernet RJ-45 TCP/IP, RS422/485, USB		
FWD, REV, VSWR, GAIN, ALC, V & I, TEMP,	Optional GPIB Interface	IEEE rear panel	
Optional Safety Interlock (INT)	Open=STBY/Short=RFON	BNC-F rear panel	