

AA-118G-50 SOLID-STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, CW/Pulse and all communication applications Small form factor, rack mounted Dual-Band system Class A/AB Linear design

High Power Advanced technology devices Instantaneous ultra-wide bandwidth

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
Band	Band A	Band B	Band switching @ 15 mS Max
Operating Frequency Range by Band	1.0 - 6.0 GHz	6.0 - 18.0 GHz	CW or Pulse
Power Output @ Psat	50 Watt Min		
Power Output @ P1dB	30 Watt Typ		
Power Gain	47 dB Min		OdBm or less for rated Pout
Power Gain Flatness	4.0 dB p-p Max	6.0 dB p-p Max	Constant input power
Input Return Loss	-10 dB Max		
2-Tone Intermodulation (IMD)	-30 dBc Typ		37dBm/Tone, $\Delta = 1MHz$
Harmonics	-20 dBc Typ		At rated Pout
Spurious	-60 dBc Max		Non-harmonics
Operating Voltage	100 - 240 VAC		47 - 63Hz
Power Consumption	1000 Watt Max		At rated output
Input Power Protection	+10 dBm Max ¹		
Load VSWR Protection	4 : 1: Max²		Foldback @ preset limit
Sample Port (optional)	-50 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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	483 x 178 x 560 mm	4U, excluding handles
Weight	25 Kg. Max	
RF Conn. In / Out / Sample (optional)	N-Female	Front or rear panel
Interface Connector	9-Pin D-Sub	Rear panel
AC Power	IEC 60320-C14	Or equivalent
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor & Control (DMC ⁴)	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

⁴ Option DMC, LCD controller option may reduce output power by up to -0.5dB

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



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AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-40dB, Type N-Female	Front or rear panel
Option RRS: Reflected RF Sample	-40dB, 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	10-points standard⁵
(With purchase of Option DMC)		

⁵ Consult with factory if additional points would be required.