

## AMP2100-1LC SOLID STATE HIGH POWER AMPLIFIER

### FEATURES

Designed for EMI/RFI, lab, CW/Pulse and all communication applications Small form factor, rack mounted 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
Operating Frequency Range	2.0 - 4.0 GHz	
Power Output @ Psat	500 Watt Min	CW or Pulse
Power Output @ P1dB	300 Watt Typ	
Power Gain	57 dB Min	Less than 0dBm for rated Pout
Power Gain Flatness	4 dB p-p Max	Constant input power
Gain Adjustment Range	20 dB Min	Local or remote capable
Input / Output Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	$47$ dBm/Tone, $\Delta = 1$ MHz
Harmonics	-20 dBc Typ	At rated output
Spurious	-60 dBc Max	Non-harmonic
Operating Voltage	180 - 260 VAC	47 - 63 Hz
Power Consumption	3500 Watt Max	At rated output
Input Power Protection	+10 dBm Max <sup>1</sup>	
Load VSWR Protection	4 : 1: Max <sup>2</sup>	Foldback @ preset limit
Sample Port Coupling (optional)	-60 dB	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 <sup>3</sup>	

3 MIL Spec available for quotation

#### **MECHANICAL SPECIFICATIONS**

Parameter	Specification	Notes
Dimensions W x H x D	481 x 267 x 650 mm	6U, excluding connectors
Weight	40 Kg.	
RF Connectors In/Out/Sample	Type-N Female	Front or rear panel
Interface Connector	9-Pin D-Sub	Rear panel
AC Power	IEC 60320-C14	Or equivalent
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	
<b>OPTIONAL:</b> 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



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(MAR)

#### **AVAILABLE SPECIAL OPTIONS**

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-60dB, Type N-Female	Front or rear panel
Option RRS: Reflected RF Sample	-50dB, Type N-Female	Front or rear panel
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
Included CPM: Calibrated Power Monitoring (With Option DMC Purchase)	Offset correction entry for +/- 0.2dB accuracy	8-points standard <sup>4</sup>

4 Consult with factory if additional points would be required

OUTLINE DRAWING

SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER



