



AMP2090A-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 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	1.0 - 4.0 GHz	Functional from 700MHz
Power Output @ Psat	350 Watt Min / 450Watt Typ	CW
Power Output @ P1dB GCP	250 Watt Min / 300Watt Typ	
Power Gain	56 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	46dBm/Tone, Δ = 1MHz
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 ¹	
Load VSWR Protection	4 : 1: Max ²	Foldback @ preset limit
Sample Port Coupling (optional)	-50 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 ³	

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	N-Female/716-Female/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	
OPTIONAL: Digital Monitor & Control (DMC) FWD, REV, VSWR, GAIN, ALC, V & I, TEMP, Optional Safety Interlock (INT)	Ethernet RJ-45 TCP/IP, RS422/485, USB Optional GPIB Interface Open=STBY/Short=RFON	IEEE rear panel BNC-F rear panel

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AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-50dB, 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	7-points standard ⁴

⁴ Consult with factory if additional points would be required

OUTLINE DRAWING SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER

