

AMP2090C SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, and general communication applications
 Small form factor, rack mounted system
 Class A/AB linear design using high power advanced devices
 Instantaneous ultra-wide bandwidth
 Suitable for all signal channel modulation applications
 Built-in protection circuits with extensive monitoring
 Optional all remote-control platforms
 High efficiency, with unprecedented reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50 Ω , 25°C

Parameter	Specification	Notes
Operating Frequency Range	800 - 4200 MHz	
Power Output @ Psat	1000 Watt Min	CW
Power Gain	60 dB Min	
Power Gain Flatness	4.0 dB p-p Max	Constant input power
Input Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	50dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	180 - 240 VAC / 47 - 63 Hz	3-Phase available
Power Consumption	6000 Watt Max	At rated Pout
Input Power Protection	+10 dBm Max ¹	
Load VSWR Protection	4 : 1 Max ²	Foldback @ preset limit ²
Sample Port (optional)	-60 dB Nom	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	2 x 6U + 3U	15U, without cabinet
Weight	100 Kg	Without cabinet
RF Connectors In / Out / Sample (optional)	Type-N Female / 7/16 DIN / Type-N-Female	Front or rear panel
AC Power / Interface	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent
Cooling	Built in Fan Cooling	Optional: Built in LC Quiet-Cool
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 RCI: Rack Cabinet Integration	Cabinet Height specified at time of order	Option RCI: (quoted separate)
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 purchase of Option DMC)	Offset correction entry for +/- 0.2dB accuracy	9-points standard ⁴

⁴ Consult with factory if additional points would be required

OUTLINE DRAWING

