

AMP4042 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	850 - 1450 MHz	
Power Output @ Psat	1000 Watt Min	CW or Pulse
Power Output @ P1dB	400 Watt Typ	
Power Gain	60 dB Min	0dBm or less for rated Pout
Power Gain Flatness	2 dB p-p Max	Constant input power
Gain Adjustment Range	20 dB Min	Local or remote
Input / Output Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	50dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated output
Spurious	-60 dBc Max	Non-harmonic
Operating Voltage	200 - 240 VAC	47 - 63 Hz
Power Consumption	4 KW Max	At rated output
Input Power Protection	+10 dBm Max ¹	
Load VSWR Protection	5 : 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	482 x 222 x 560 mm	3U, excluding handles
Weight	32 Kg. Max	
RF Connectors In/Out/Sample	Type-N Female/7/16 Female/Type-N Female	Front or rear panel
Gate Control	BNC Female	Front panel
AC Power / Interface Connector	IEC60320-14 / D-Sub 9-Pins	Rear panel
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	-40dB, Type N-Female	Front or rear panel
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
Option DCP ⁵ : DC Prime Power (-28 or -48)	Consult with factory for (special DC Power)	DCP-28VDC or DCP-48VDC
Included CPM: Calibrated Power Monitoring (With Option DMC purchase)	Offset correction entry for +/- 0.2dB accuracy	8-points standard ⁴

⁴ Consult with the factory if additional points would be required.

⁵ Size may increase with DC Prime Power option.

OUTLINE DRAWING SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER

