AMP2083C
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 full C-Band 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

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ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification
Operating Frequency Range	4.0 - 8.0 GHz
Power Output @ Psat	250 Watt Min
Power Output @ P1dB	150 Watt Min
Power Gain	54 dB Min
Power Gain Flatness	4 dB p-p Max
Gain Adjustment Range	20 dB Min
Input / Output Return Loss	-10 dB Max
2-Tone Intermodulation (IMD)	-30 dBc Typ
Harmonics	-20 dBc Typ
Spurious	-60 dBc Max
Operating Voltage	180 - 240 VAC
Power Consumption	3000 Watt Max
Input Power Protection	+10 dBm Max[1]
Load VSWR Protection	4 : 1: Max[2]
Sample Port Coupling (optional)	-50 dB

Parameter

Notes

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
Operating Ambient Temperature	0 to +50 °C
Storage Temperature	-40 to +85 °C
Relative Humidity	up to 95 %
Altitude	3000 meters
Shock & Vibration	Normal transport[3]

3 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification
Dimensions W x H x D	481 x 222 x 750 mm
Weight	42 Kg.
RF Connectors In/Out/Sample (optional)	Type-N Female
Interface Connector	9-Pin D-Sub
AC Power	IEC 60320-C14
Cooling	Built in Fan Cooling
OPTIONAL: Digital Monitor & Control (DMC)	Ethernet RJ-45 TCP/IP, RS422/485, US
FWD, REV, VSWR, GAIN, ATC, V & I, TEMP	Optional GPIB Interface
Optional Safety Interlock (INT)	Open=STBY/Short=RFON

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	Specification	
Operating Frequency Range	4.0 - 8.0 GHz	
Power Output @ Psat	250 Watt Min	CW or Pulse
Power Output @ P1dB	150 Watt Min	
Power Gain	54 dB Min	0dBm or less 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	44dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated output
Spurious	-60 dBc Max	Non-harmonic
Operating Voltage	180 - 240 VAC	47 - 63Hz
Power Consumption	3000 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 222 x 750 mm	5U, excluding connectors
Weight	42 Kg.	
RF Connectors In/Out/Sample (optional)	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 Fan Cooling	Variable speed
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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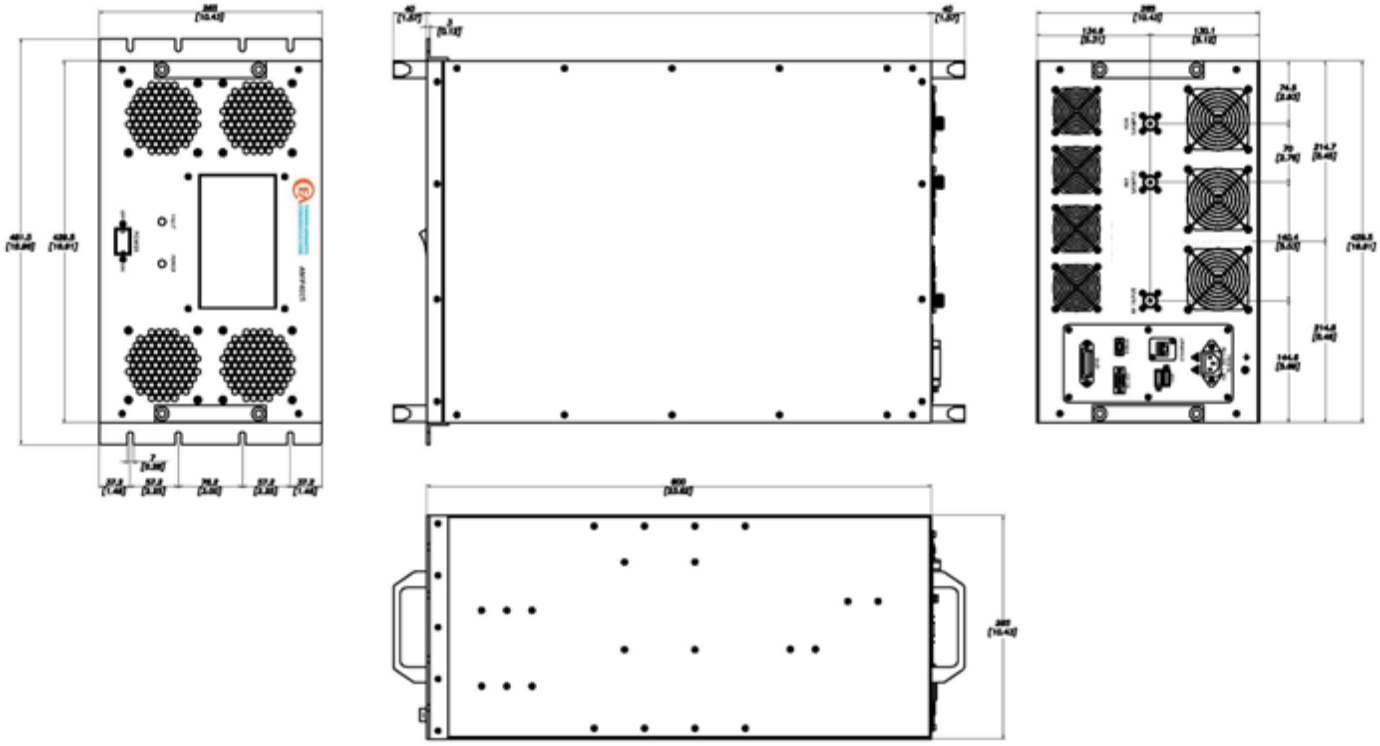
AVAILABLE SPECIAL OPTIONS

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	
Included CPM: Calibrated Power Monitoring (With Option DMC Purchase)	Offset correction entry for +/- 0.2dB accuracy	9-points standard[4]

4 Consult with factory if additional points would be required

OUTLINE DRAWING

SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER