



AMP2083P-2KW

SOLID-STATE HIGH-POWER PULSE AMPLIFIER

FEATURES

- Designed for EMI/RFI, lab, HIRF/Pulse applications
- Small form factor rack-mounted system
- Class AB linear Advanced technology design
- Instantaneous C-Band octave bandwidth
- Linear high peak pulse applications
- Built-in protection circuits with extensive monitoring
- Local LCD & remote flexible interfaces
- High efficiency with unprecedented reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50 Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	4.0 - 8.0 GHz	Peak Pulse
Peak Output Power	2.0 KW Typ	
Pulse Characteristics	Width	Rise/Fall <50ns Typ
	up to 100 μs	
	Duty	
	10 % Max	
	PRF	
	up to 100 KHz	
Power Gain	63 dB Min	0dBm or less for rated Pout
Power Gain Flatness	5.0 dB p-p Max	Constant input power
Gain Adjustment Range	20 dB Min	Local or remote capable
Input Return Loss	-10 dB Max	
Output Power On/Off Ratio	80 dB Max	TTL Gate Control
Harmonics	-20 dBc Max	At rated output
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	100 - 240 VAC	47 - 63Hz
Power Consumption	1000 W Max	At rated Pout
Input Power Protection	+10 dBm Max ¹	
Load VSWR Protection	4 : 1: Max ²	Foldback @ preset limit
Sample Port (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 ³	

3 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	481 x 222 x 635 mm	5U, excluding connectors
Weight	30 Kg. Nom	
RF Conn. Input / Output / Sample (optional)	Type N-Female	Front or rear panel
Gate Control	BNC Female	Front panel
AC Power Connector	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

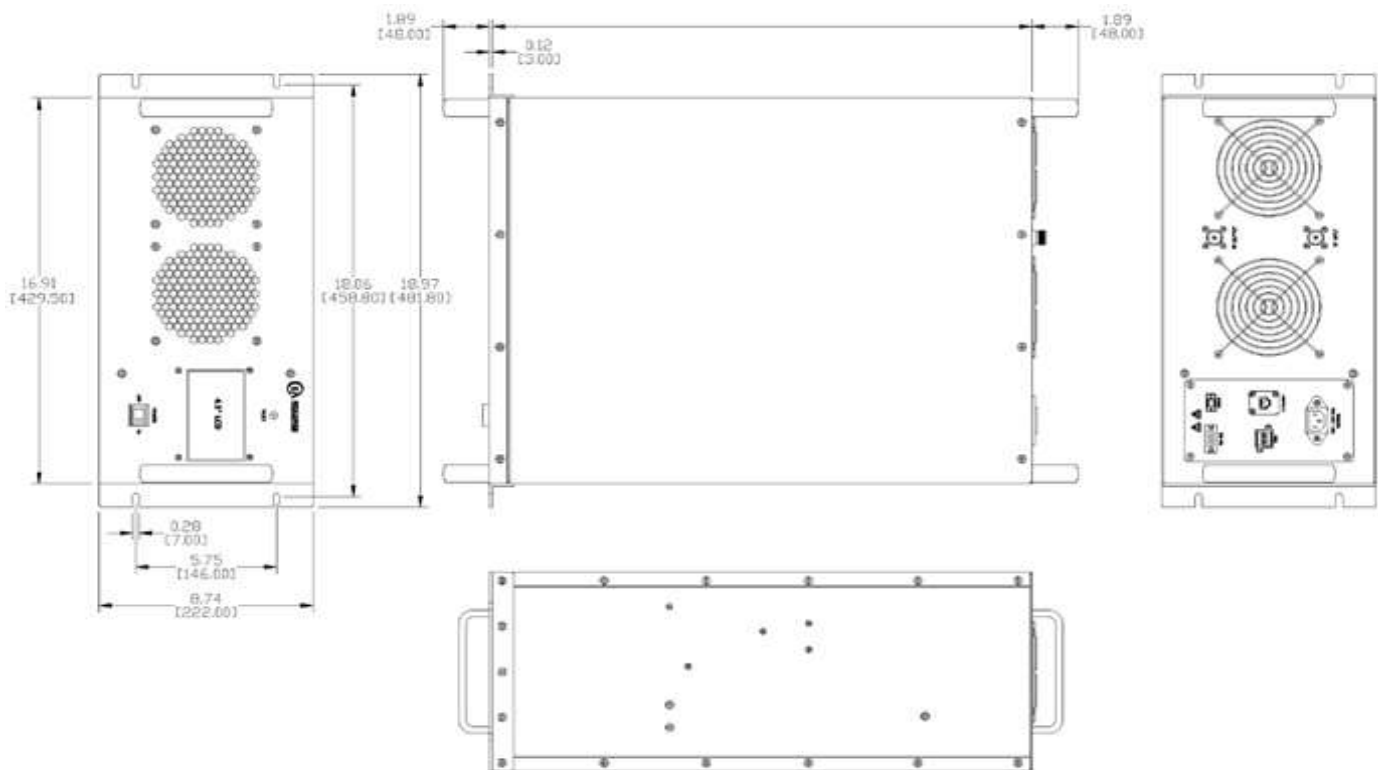
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AVAILABLE SPECIAL OPTIONS


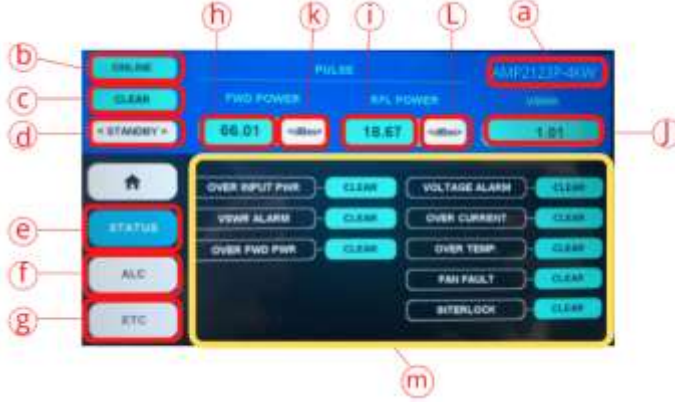

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-60dB, Type N-Female	Front or rear panel
Option RRS: Reflected RF Sample	-50dB, Type N-Female	Front or rear panel
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
Included CPM: Calibrated Power Monitoring (With purchase of Option DMC)	Offset correction entry for +/- 0.2dB accuracy	5-points standard ⁴

⁴ Consult with factory if additional points would be required.

OUTLINE DRAWING SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER



CONTROLLER - PRIMARY (MAIN) SCREENS

 <p>Labels: (b) ONLINE, (c) CLEAR, (d) STANDBY, (h) FWD POWER, (k) dBm/Watt, (i) RFL POWER, (L) dBm/Watt, (a) AMP2083P-2KW, (j) VSWR, (m) VOLT_CURRENT, (n) DUTY_TEMP, (e) STATUS, (f) ALC, (g) ETC, (o) TABLE menu window.</p>	<ul style="list-style-type: none"> a - Model: Amplifier model number b - STANDBY/ONLINE: Display STANDBY/ONLINE status c - CLEAR/FALUT: Display CLEAR/FAULT status d - STANDBY/ONLINE: Display STANDBY/ONLINE control e -STATUS: Displays fault & alarm monitors f - ALC: ALC menu button g - ETC: Screen selection button h - FWD POWER: Display FWD POWER value l - RFL POWER: Display RFL POWER value j - VSWR: Display VSWR value k - dBm/Watt: Display dBm/Watt selection & status L - dBm/Watt: Display dBm/Watt selection & status m - Volt_Current: Voltage & current monitor selection n - Duty_Temp: Pulse-Duty & temperature monitor selection o - Display status of the selected TABLE menu window
 <p>Labels: (b) ONLINE, (c) CLEAR, (d) STANDBY, (h) FWD POWER, (k) dBm/Watt, (i) RFL POWER, (L) dBm/Watt, (a) AMP2083P-2KW, (j) VSWR, (m) TABLE menu window, (e) STATUS, (f) ALC, (g) ETC.</p>	<ul style="list-style-type: none"> a - Model: Amplifier model number b - STANDBY/ONLINE: Display STANDBY/ONLINE status c - CLEAR/FALUT: Display CLEAR/FAULT status d - STANDBY/ONLINE: Display STANDBY/ONLINE control e -STATUS: Displays fault & alarm monitors f - ALC: ALC menu button g - ETC: Screen selection button h - FWD POWER: Display FWD POWER value l - RFL POWER: Display RFL POWER value j - VSWR: Display VSWR value k - dBm/Watt: Display dBm/Watt selection & status L - dBm/Watt: Display dBm/Watt selection & status m - Display status of the fault & alarm status
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