AMP2083PLC-4KW
SOLID STATE HIGH PULSE POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, HIRF/Pulse applications
Small form factor rack-mounted system
Class AB linear Advanced technology design
Instantaneous S-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: 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	4.0 - 8.0 GHz			Peak Pulse	
Power Output @ Peak Pulse	4.0 KW Typ			3.5KW Min	
Input Pulse Characteristics	**Width**	**Duty**	**PRF**	**Rise/Fall**	**Droop**
	up to 100 µS	6 % Max	up to 100 KHz	<50 ns Typ	<1 dB
Power Gain	66 dB Min			0dBm or less for rated Pout	
Power Gain Flatness	4.0 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 Typ			At rated output power	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	100 - 240 VAC			47 - 63Hz	
Power Consumption	1.5 KW 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	480 x 443 x 750 mm	10U - Excluding handles
Weight	45 kg.	
RF Connectors, In / Out / Sample	N-Female/ SC-Female / 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

e

AMP2083PLC-4KW
SOLID STATE HIGH PULSE POWER AMPLIFIER

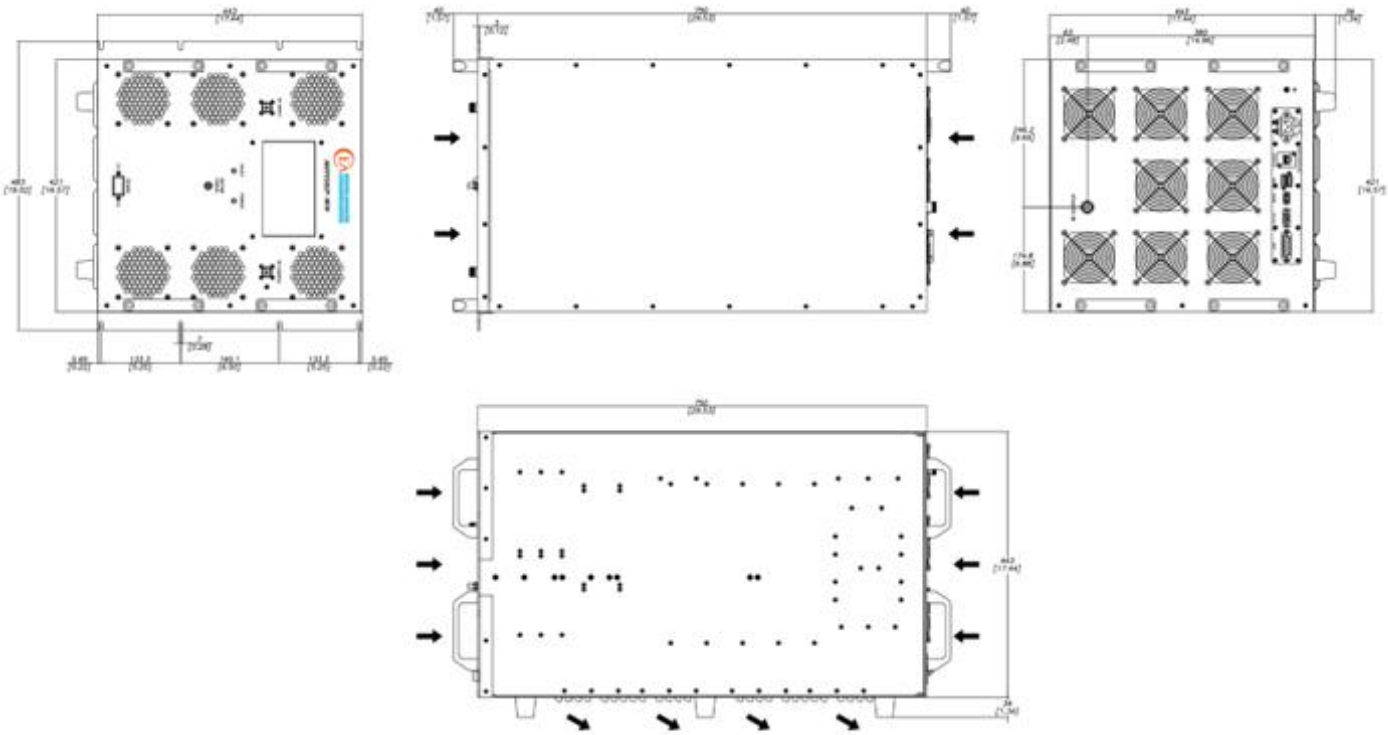
AVAILABLE SPECIAL OPTIONS

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



AMP2083PLC-4KW
SOLID STATE HIGH PULSE POWER AMPLIFIER

CONTROLLER - PRIMARY (MAIN) SCREENS

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
I - 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

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
I - 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

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
I - 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