

AMP2085DBP-1KW

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
 Linear high peak pulse S & C-Band pulse applications
 Built-in protection circuits with extensive monitoring
 Local LCD & remote flexible interfaces
 High efficiency with unprecedented reliability and ruggedness



ELECTRICAL SPECIFICATION: 50Ω, 25°C

Parameter	Specification			Notes	
Band	A	B		Band switching @ 15 mS Typ	
Operating Frequency Range	2.0 - 4.0 GHz		4.0 - 8.0 GHz		
Power Output @ Pulse	1.0 KW Typ			Peak Pulse	
Input Pulse Characteristics	Width	Duty	PRF	Rise/Fall	Droop
	up to 100 μS	6 % Max	up to 100 KHz	<50nS Typ	<1 dB
Power Gain	60 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 Typ			At rated output power	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	180 - 240 VAC, single phase			47 - 63Hz	
Power Consumption	750 Watt 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 354 x 700 mm	8U, excluding handles
Weight	37 kg.	
RF Connectors, In / Out / Sample	N-Female/ N-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 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

e

AMP2085DBP-1KW

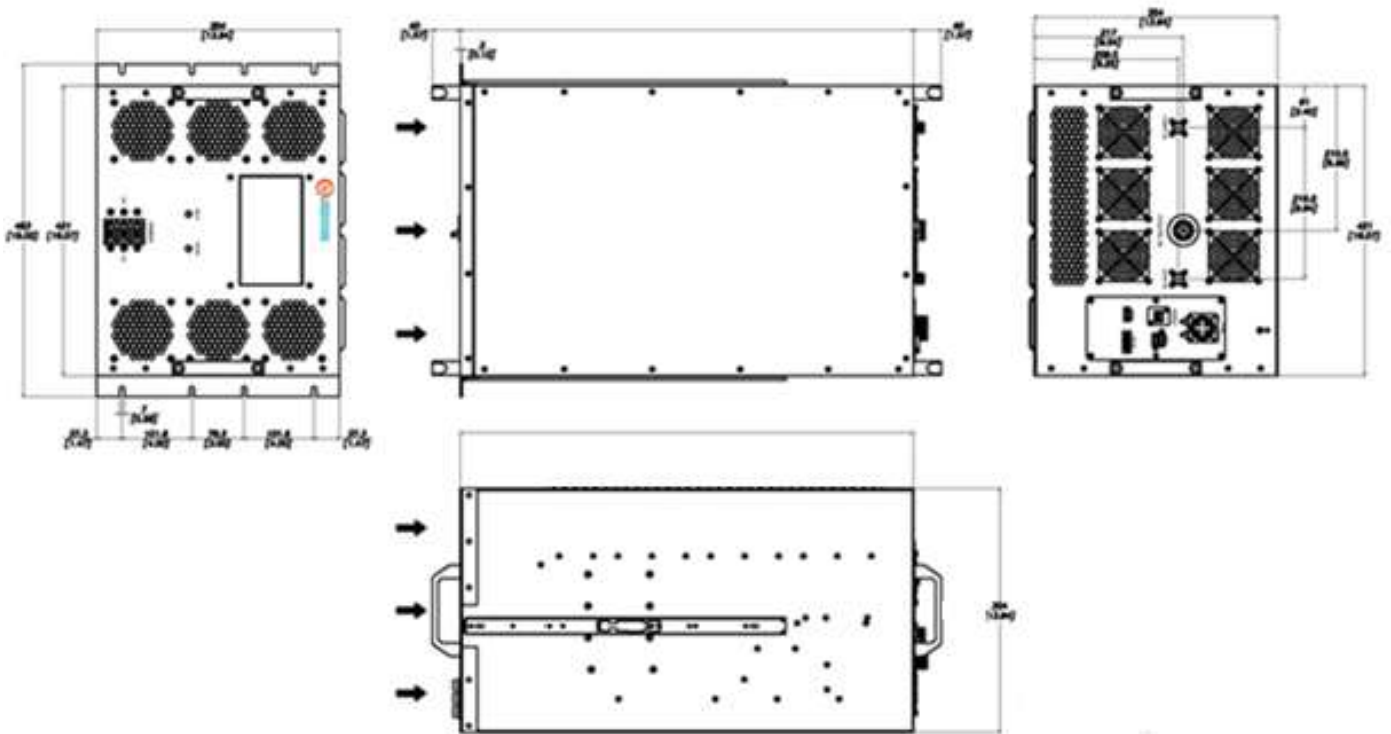
SOLID STATE HIGH PULSE POWER AMPLIFIER

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	9-points standard ⁴

⁴ Consult with factory if additional points would be required.

OUTLINE DRAWING SHOWN WITH LCD DIGITAL CONTROLLER



CONTROLLER - PRIMARY (MAIN) SCREENS

 Labels: a, b, c, d, e, f, g, h, i, j, k, L, m, n, o	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
 Labels: a, b, c, d, e, f, g, h, i, j, k, L, m	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
 Labels: a, b, c, d, e, f, g, h, i, j, k, L, m, n, o	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