



AMP2041-1 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, and general communication applications
 Suitable for linear CW and composite signal channel modulation standards & applications
 Small form factor, rack mounted system
 Class A/AB linear design
 High power advanced technology devices
 Instantaneous ultra-wide bandwidth
 Built-in protection circuits, forward & reflected RF Sample ports
 High reliability and ruggedness with extensive monitoring & protection circuits
 All remote-control platforms included
 High efficiency, with unprecedented reliability and ruggedness



ELECTRICAL SPECIFICATION: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	1.0 - 2.5 GHz	
Output Power @ Psat	2.2 KW Min / 2.5KW Typ	CW
Output Power @ P1dB	1.6 KW Typ	1.4 KW Min
Power Gain	63 dB Min	0dBm in or less for rated Pout
Power Gain flatness	4.0 dB p-p Max / ±1.5dB Typ	Constant input power
Gain adjustment range	25 dB Min	>30dB Typ
Input Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	<-30 dBc Typ	54dBm/Tone, Δ = 1MHz
Modulation	AM, FM, or Pulse modulation	Faithfully reproduced
Harmonics	-20 dBc Max	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	208 VAC, 50-60 Hz ±10 %	3-Phase WYE
Power Consumption	12 KW Max	
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



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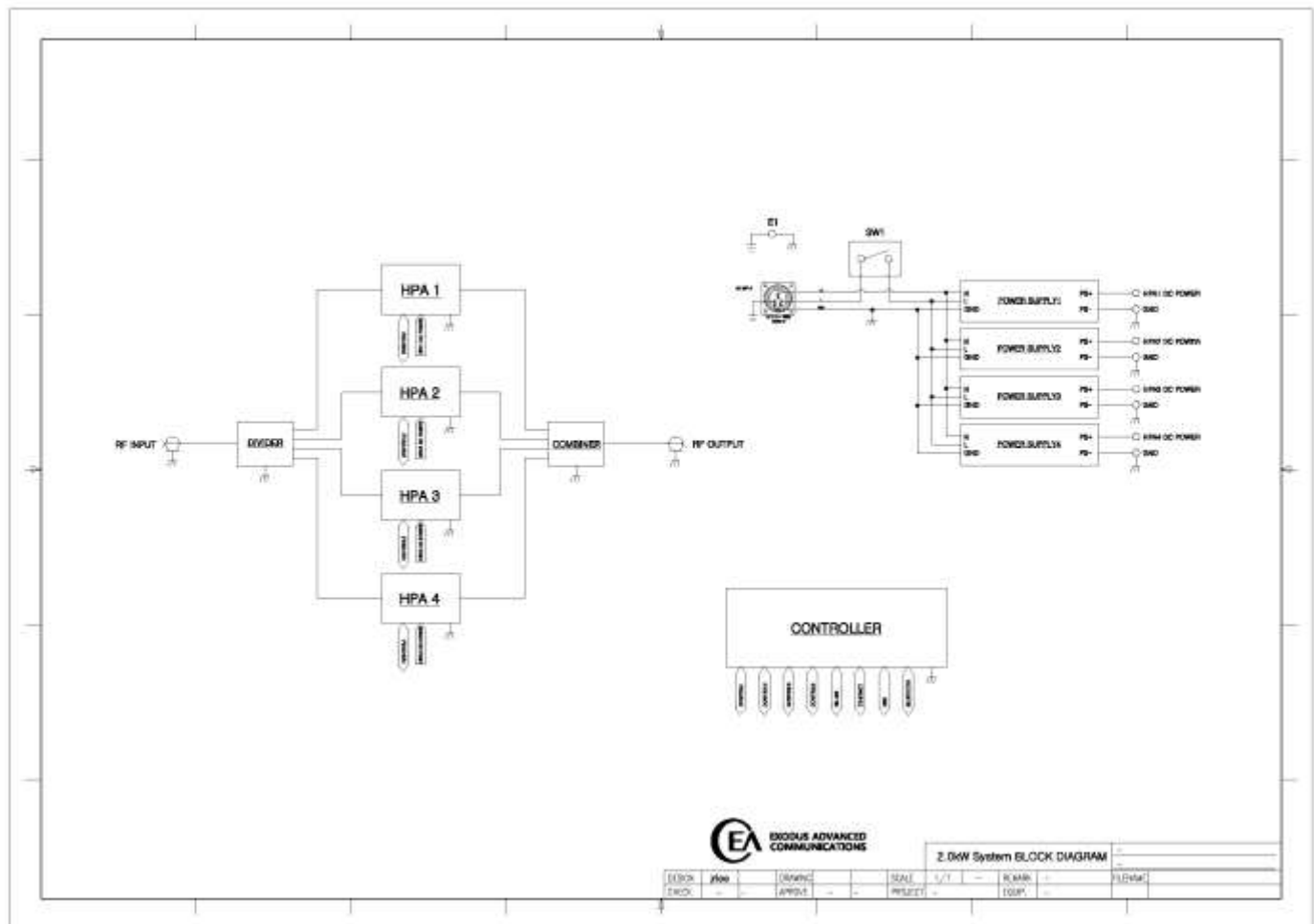
MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	Rack Cabinet	32U
Weight	600 lbs. Nom.	
RF Safety Interlock	Rear Panel	Contact open Interlock enable
RF Connectors Input/Output/ RF Sample (optional)	Type N-F / 1 5/8" Female Type N-F	RF Input/Sample Front Panel Std. RF Output Rear Panel Std.
Cooling	Built in forced air	Air entry in front /out rear panel
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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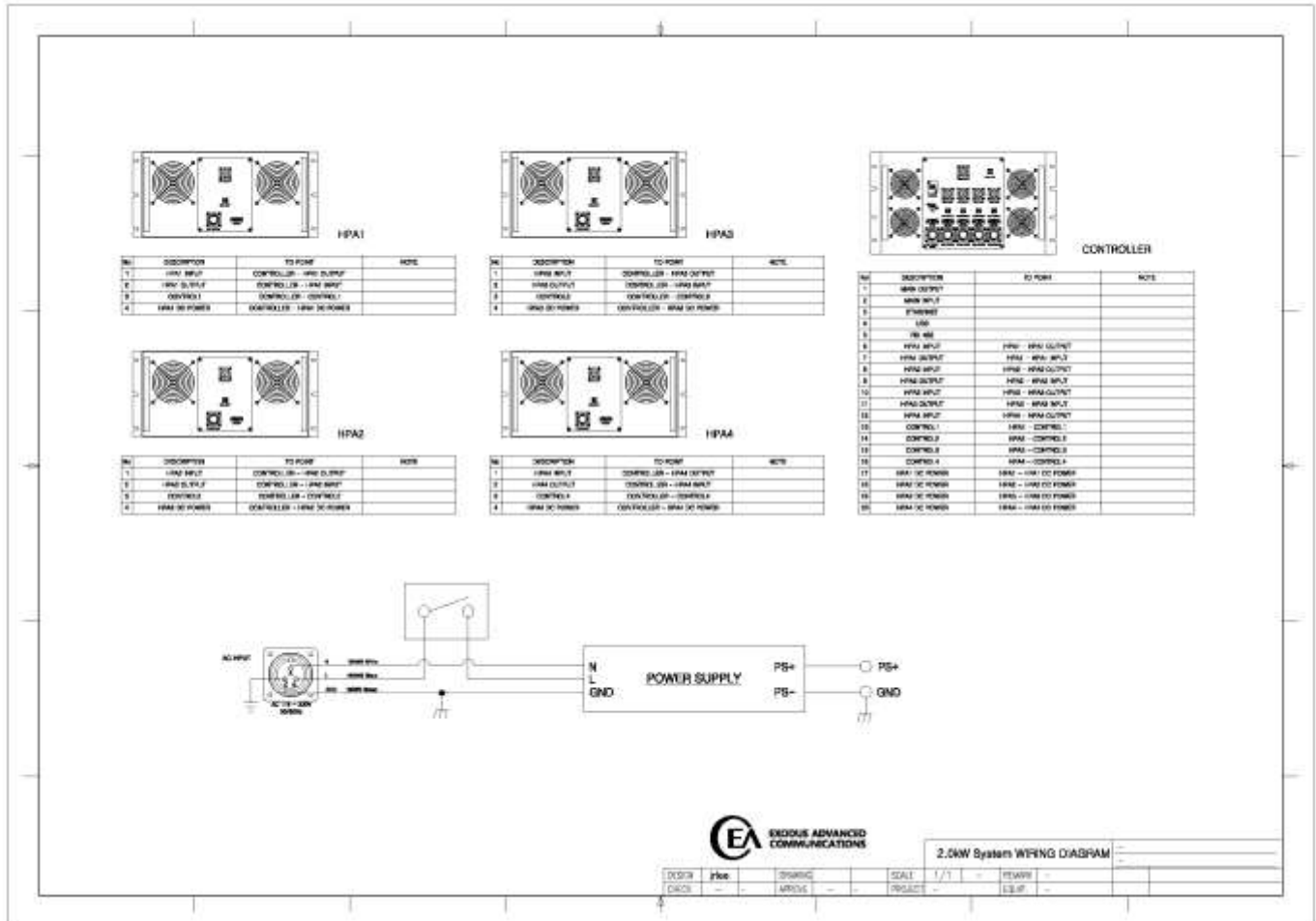
OUTLINE DRAWING & BLOCK DETAILS

● 2.2KW System Block Diagram



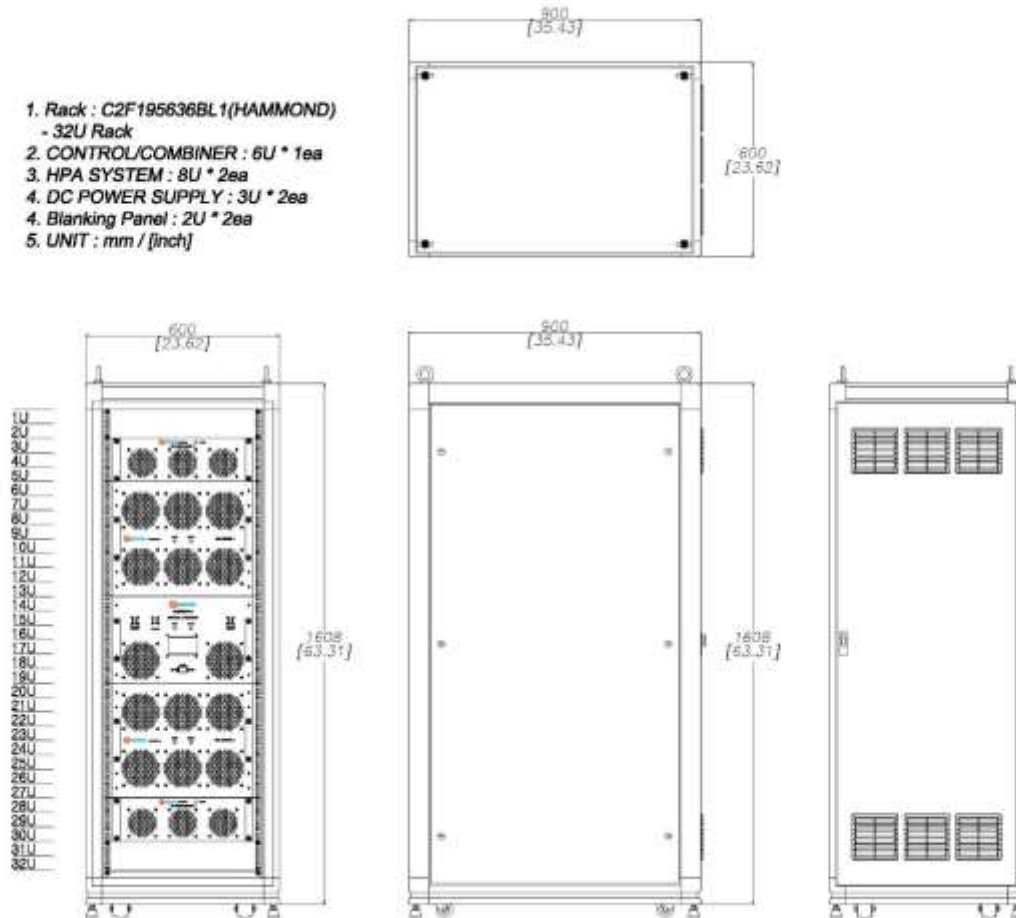
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2.2KW System Wring Diagram



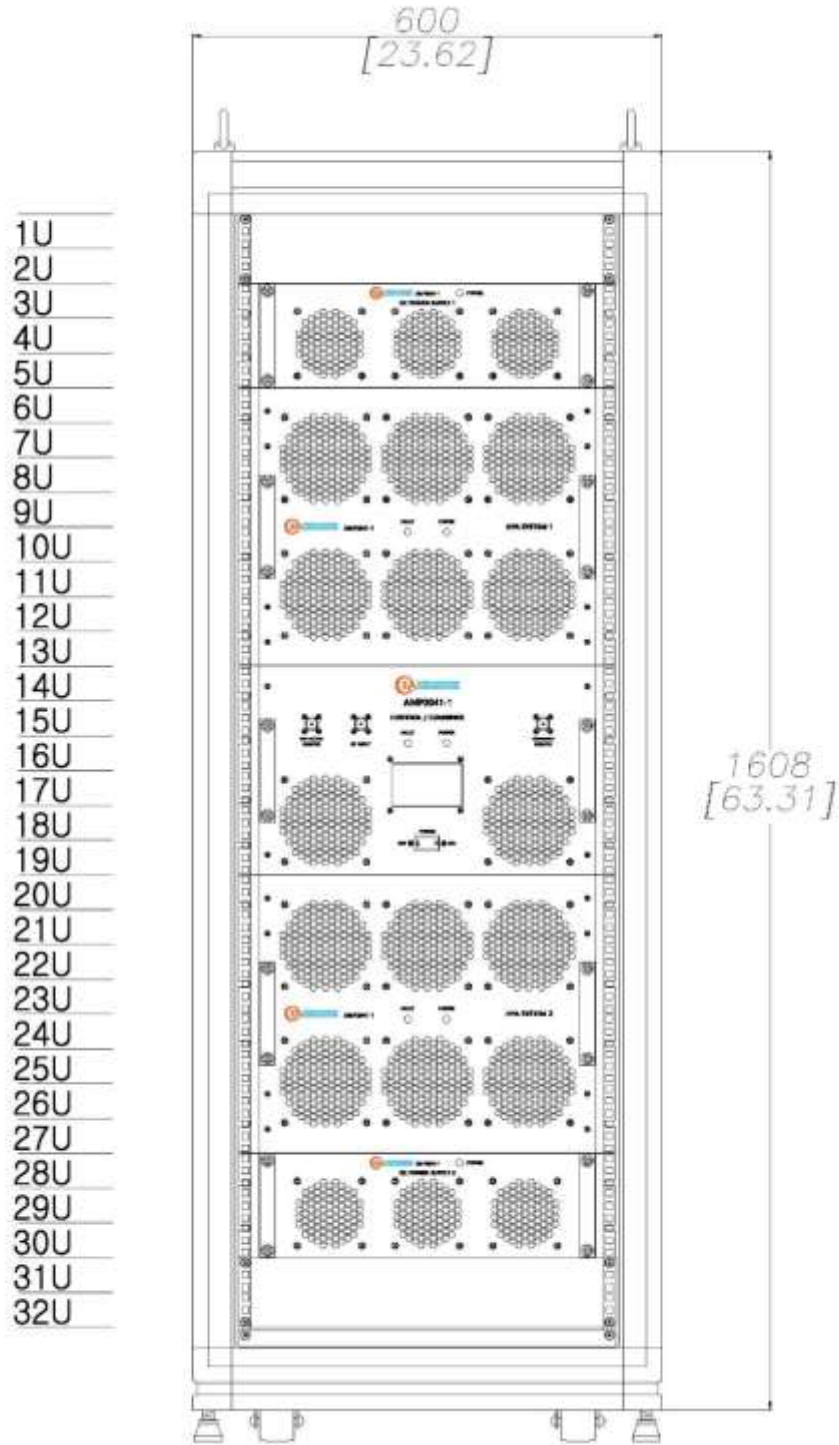
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- AMP2041-1(3U+8U+6U+8U+3U) System Outline



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- AMP2041-1(3U+8U+6U+8U+3U) System Front



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- AMP2041-1(3U+8U+6U+8U+3U) System Rear

