

# AMP40028 SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

Designed for EMI/RFI, lab, and general communication applications  
 Small form factor, rack mounted system  
 Class A/AB linear design  
 High power advanced technology devices  
 Instantaneous wide bandwidth  
 Built-in protection circuits, forward RF Sample port  
 High reliability and ruggedness with extensive monitoring  
 Remote-control platforms included  
 High efficiency, with unprecedented reliability and ruggedness  
 LEGACY PN: AMP4065A-1LC



## ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	18.0 - 26.5 GHz	
Power Output @ Psat	150 Watt Min / 200 Watt Typ	CW or Pulse
Power Gain	52 dB Min	0dBm or less for rated Pout
Power Gain Flatness	4.0 dB p-p Typ	Constant input power
Gain Adjustment Range	20 dB Min	Local or remote capable
Input Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	42dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Max	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	120/208 VAC, 3-Ph, 47 - 63 Hz	Opt: 230/400VAC, 3-Ph
Power Consumption	4000 Watt Max	At rated output
Input Power Protection	+8 dBm Max <sup>1</sup>	
Load VSWR Protection	4 : 1: Max <sup>2</sup>	Foldback @ preset limit
Sample Port Coupling (optional)	-50 dB Nom	2.92 mm K-Female

<sup>1</sup> Units with optional digital monitor and control, for basic units <10 Sec without damage

<sup>2</sup> 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 <sup>3</sup>	

<sup>3</sup> MIL Spec available for quotation

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	421 x 353 x 850 mm	8U, excluding connectors
Weight	55 Kg. Nom	
RF Connectors In/Out/Sample (optional)	2.9 mm-F / WR42 / 2.9mm-F	Front or rear panel
Interface Connector	9-Pin D-Sub	Rear panel
AC Power	MS Style	Or equivalent
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	
<b>OPTIONAL:</b> 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

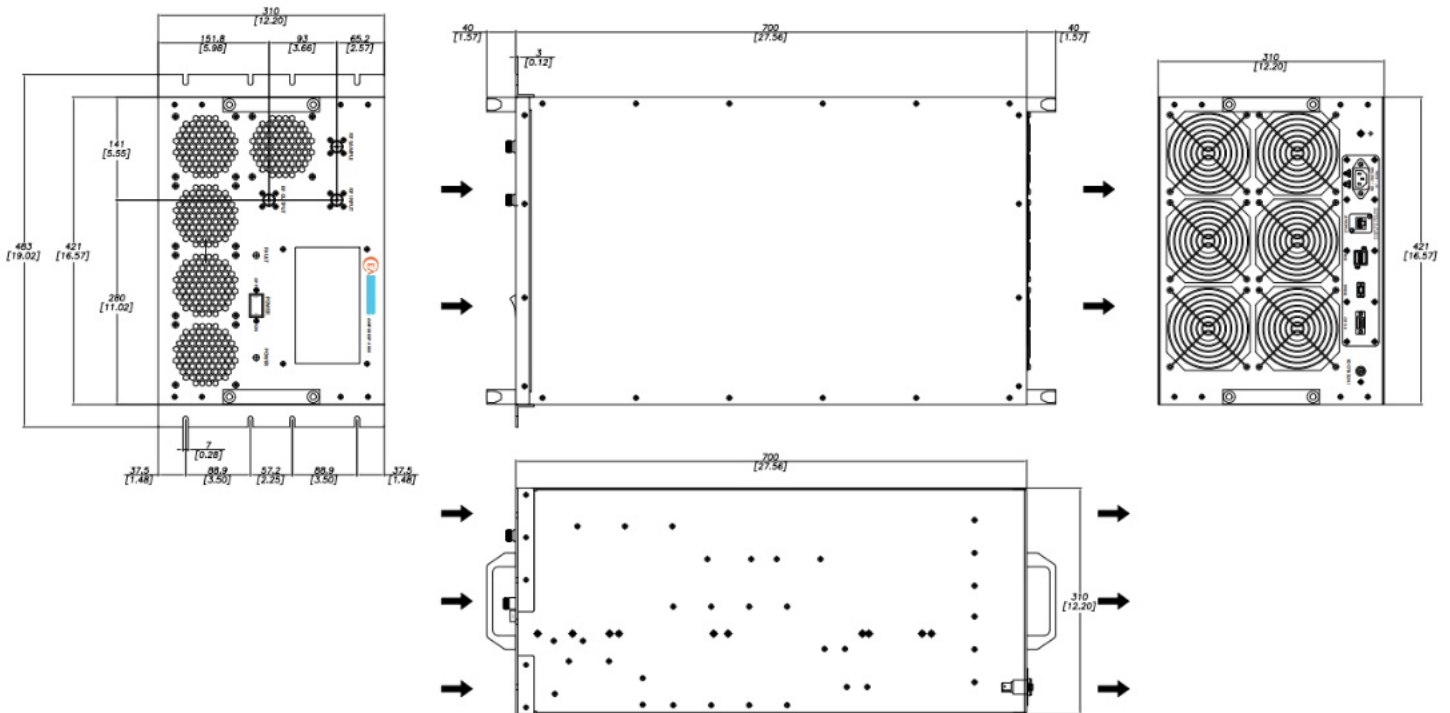
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### AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-50dB, Type K-Female	Front or rear panel
Option RRS: Reflected RF Sample	-50dB, Type K-Female	Front or rear panel
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
<b>Included CPM:</b> Calibrated Power Monitoring (With purchase of Option DMC)	Offset correction entry for +/- 0.2dB accuracy	15-points standard <sup>4</sup>

<sup>4</sup> Consult the factory if additional points are required

### OUTLINE DRAWING SHOWN WITH LCD DIGITAL CONTROLLER



## OUTLINE DRAWING CONTROLLER - PRIMARY (MAIN) SCREENS

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