

# AMP2069-1 SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

Designed for EMI/RFI, lab, CW/Pulse, Automotive & comm. 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, 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       | 80 - 250 MHz             |                             |
| Power Output @ Psat             | 1200 Watt Min            | CW or Pulse                 |
| Power Output @ P1dB             | 800 Watt Min             | 1000W Nom                   |
| Power Gain                      | 62 dB Min                | 0dBm or less for rated Pout |
| Power Gain Flatness             | 4 dB p-p Max             | Constant input power        |
| Gain Adjustment Range           | 20 dB Min                | Local or remote             |
| Input / Output Return Loss      | -10 dB Max               |                             |
| 2-Tone Intermodulation (IMD)    | -30 dBc Typ              | 52dBm/Tone, Δ = 1MHz        |
| Harmonics                       | -20 dBc Typ              | At rated output             |
| Spurious                        | -60 dBc Max              | Non-harmonic                |
| Operating Voltage               | 180 - 240 VAC            | 47 - 63 Hz                  |
| Power Consumption               | 5 KW Max                 | At rated output             |
| Input Power Protection          | +10 dBm Max <sup>1</sup> |                             |
| Load VSWR Protection            | 4 : 1: Max <sup>2</sup>  | Foldback @ preset limit     |
| Sample Port Coupling (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 <sup>3</sup> |                |

3 MIL Spec available for quotation

## MECHANICAL SPECIFICATIONS

| Parameter                                                                                                                      | Specification                                                                            | Notes                               |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------|
| Dimensions W x H x D                                                                                                           | 482 x 310 x 750 mm                                                                       | 7U - excluding handles              |
| Weight                                                                                                                         | 47 Kg. Typ                                                                               |                                     |
| RF Connectors In/Out/Sample                                                                                                    | N-Female / 716-Female / N-Female                                                         | Front or rear panel                 |
| Interface Connector                                                                                                            | 9-Pin D-Sub                                                                              | Rear panel                          |
| AC Power                                                                                                                       | MS3102E 22-22P                                                                           | Or equivalent                       |
| Cooling                                                                                                                        | Built in Fan Cooling                                                                     | Variable speed                      |
| <b>OPTIONAL:</b> Digital Monitor & Control (DMC)<br>FWD, REV, VSWR, GAIN, ALC, V & I, TEMP,<br>Optional Safety Interlock (INT) | Ethernet RJ-45 TCP/IP, RS422/485, USB<br>Optional GPIB Interface<br>Open=STBY/Short=RFON | IEEE rear panel<br>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                |                                |
| <b>Included CPM:</b> Calibrated Power Monitoring<br>(With purchase of Option DMC) | Offset correction entry for +/- 0.2dB accuracy | 6-points standard <sup>4</sup> |

<sup>4</sup> Consult with factory if additional points would be required

## OUTLINE DRAWING SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER

