



# AMP2014A SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

Designed for EMI/RFI, lab, and general communication applications  
 Small form factor, rack mounted system  
 High power advanced linear device technology  
 Instantaneous P & L wide bandwidth  
 Built-in control, monitoring, and protection circuits  
 Local LCD & remote flexible interfaces  
 High efficiency, with unprecedented reliability and ruggedness



## ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

| Parameter                    | Specification           | Notes                       |
|------------------------------|-------------------------|-----------------------------|
| Operating Frequency Range    | 500 - 1200 MHz          |                             |
| Power Output @ Psat          | 1000 Watt Min           | CW or pulse                 |
| Power Gain                   | 60 dB Min               | 0dBm or less for rated Pout |
| Power Gain Flatness          | 3.0 dB p-p Max          | 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             | 50dBm/Tone, Δ = 1MHz        |
| Harmonics                    | <-20 dBc Typ            | At rated Pout               |
| Spurious                     | -60 dBc Max             | Non-harmonics               |
| Operating Voltage            | 180 - 264 VAC           | 47 - 63Hz                   |
| Power Consumption            | 4500 Watt Max           | At rated Pout               |
| Input Power Protection       | +8 dBm Max <sup>1</sup> | <10 Sec without damage      |
| Load VSWR Protection         | 5 : 1 Max <sup>2</sup>  | <1 Minute at rated Pout     |

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                                                                                                           | 430 x 221 x 560 mm                                                                       | 5U, excluding handles               |
| Weight                                                                                                                         | 40 Kg.                                                                                   |                                     |
| RF Connectors In/Out                                                                                                           | Type-N Female                                                                            | Front or rear panel                 |
| AC Power                                                                                                                       | IEC 60320-C14                                                                            | Or equivalent                       |
| Interface Connector                                                                                                            | 9-Pin, D-Sub                                                                             |                                     |
| 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                                                     | -50dB, 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 | 12-points standard <sup>4</sup> |

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

## OUTLINE DRAWING

