# The MILMEGA Series 2000 Broadband Class A Solid State Microwave Amplifier Range

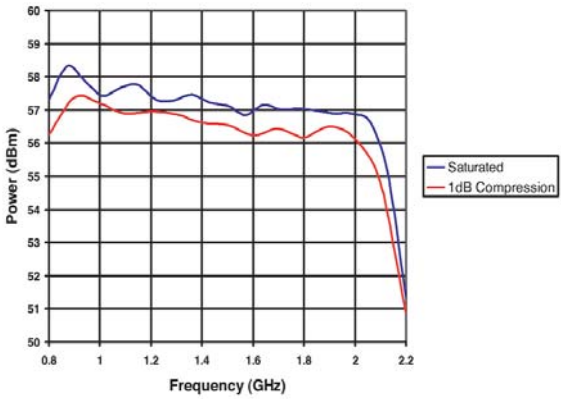
The MILMEGA Series 2000 1.0 GHz-2.0 GHz broadband amplifiers have an award winning innovative design which implements the latest GaAs FET and MMIC technologies. This provides an architecture with unique features and benefits which differentiate Series 2000 from other solid state amplifiers, permitting an impressive array of input/output and sample port options and cost-effective power or bandwidth upgrades.

## AS0102-400, 400Watt 1.0 GHz-2.0 GHz Broadband Amplifier

| | |
|---|---|
| Psat (min): | 400 W |
| Psat (min) | 56.0 dBm |
| P1dB (min): | 355 W |
| P1dB (min): | 55.5 dBm |
| Noise figure (max): | 6.0 dB |
| Gain variation: | ± 1.0 dB |
| Harmonic distortion (max): | -20 dBc |

| | |
|---|---|
| Power consumption: | 4000 W |
| Primary Power: | 180-260 V or 110V* |
| | (50/60Hz) |
| RF Input: | Type N female |
| RF Output: | Type N female |
| Weight: | 47 kg |
| Size: | 6U |

*Option 26 required for 100V operation






## Class leading linearity and noise specifications

- Gain variation with temperature <0.06 dB/°C
- IP3 typically 10 dB> P1 dB
- Harmonics –20 dBc min
- Spurious (max) –70dBc
- Spurious (typical) –80 dBc

## Max power

- Unbeatable power density
- Series 2000 will maintain full forward power into any load condition
- Combiner/coupler integration as standard allows samples of incident and reflected power to be measured with virtually no loss
- 100% tested into short and open circuit
- Up to 250 watts in a single 3U unit
- Consistent over greater than octave bandwidths
- Broadband CW power output to 1 kW

## High visibility status and power indicators

- Series 2000 incorporate colour led bar graph displays on the front panel giving an indication of incident and reflected power

## Other standard features

- 15 way rear mounted D-type allowing remote operation via TTL commands whilst providing access to an output signal sample
- All data is measured at 25 °C driven from a 50 W source and driving into a 50 W load
- Input power (for rated output) 5 dBm
- Input power (no damage) 15 dBm
- Input VSWR (impedance 50 Ohm nominal) 2:1 max
- Output VSWR (impedance 50 Ohm nominal) 2:1 typical
- Load VSWR (any phase) is infinite
- Line input frequency 47-65 Hz
- Operating temperature (ambient air) 0 to 40 °C
- Storage temperature -40 to 70 °C.

## Built-in protection

- In the event of internal temperature exceeding 70 °C, the amplifier blocks will automatically switch off to avoid damage
- Unit incorporates a rear panel mounted connector for interlock BR2-female

## Easily rack mounted

- Amplifiers are standard 3U high units and may be combined in rack mounted form to build higher power amplifiers

## Bench models

- 3U high units have bench case options

## Warranty

- 5 year parts and labour warranty on all Series 2000 amplifiers

## Other amplifiers available in the 1.0-2.0 GHz range:

- AS0102-1L – 1 watt lab unit
- AS0102-8L – 8 watt
- AS0102-30L – 30 watt lab unit
- AS0102-30 – 30 watt
- AS0102-55 – 55 watt
- AS0102-100 – 100 watt
- AS0102-200 – 200 watt
- AS0102-250 – 250 watt
- AS0102-800 – 800 watt
- AS0102-1000 – 1000 watt

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