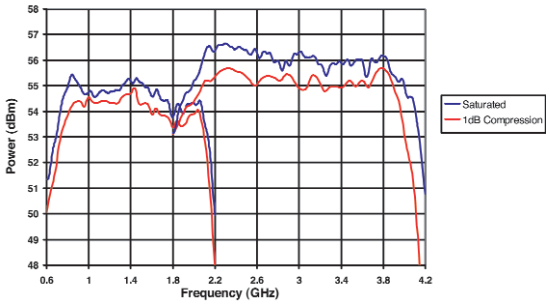
# The MILMEGA Series 2000 Broadband Dual Band Class A Solid State Microwave Amplifier Range

The AS0840 series of solid sate power amplifiers follows the MILMEGA tradition for compact, upgradeable microwave power amplifier solutions with field proven reliability. Developed to cover the frequency band 0.8 - 4.0 GHz in two bands (0.8 GHz to 2 GHz and 2 GHz to 4 GHz), the topology has significant advantages over single band solutions

## AS0840-200/200, 200 Watt 0.8 GHz-4.0 GHz Dual Band Broadband Amplifier

| | |
|---|---|
| **Power 0.8-2.0 GHz** | |
| Psat (min): | 214 W |
| Psat (min) | 53.3 dBm |
| P1dB (min): | 190.5 W |
| P1dB (min): | 52.8 dBm |
| Noise figure (max): | 6.0 dB |
| **Power 2.0-4.0 GHz** | |
| Psat (min): | 200 W |
| Psat (min) | 53.0 dBm |
| P1dB (min): | 178 W |
| P1dB (min): | 52.5 dBm |
| Noise figure (max): | 8.0 dB |

| | |
|---|---|
| Gain variation: | ± 2.5 dB |
| Harmonic distortion (max): | -20 dBc |
| Power consumption: | 4000 W |
| Primary Power: | 85-260 V or 110 V* |
| | (50/60 Hz) |
| RF Input: | Type N female |
| RF Output: | Type N female |
| Weight: | 87 kg |
| Size: | 12U |




* Option 26 required for 110 V operation.
Note: AS0840-200/200 when switched through single output (0.8-4.0 GHz) saturated power is 53.0 dBm min and P1dB is 52.5 dBm min)



## 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 0.8-4.0 GHz Dual Band range:

- AS0840-6/6 - 6 watt
- AS0840-30/30 – 30 watt
- AS0840-55/55 – 55 watt
- AS0840-100/100 – 100 watt

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MILMEGA Limited Ryde Business Park Nicholson Road Ryde, Isle of Wight PO33 1BQ United Kingdom
Tel. +44 (0) 1983 618004 or call toll free in the US on 877-645-6342 Fax. +44 (0) 1983 811521 sales@milmega.co.uk www.milmega.co.uk