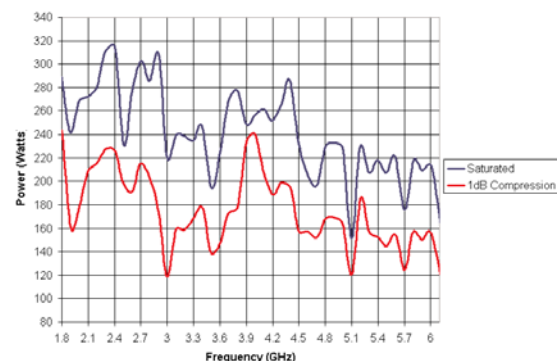


# The MILMEGA 1.8 to 6 GHz Broadband Class A Solid State Microwave Amplifier Range

The MILMEGA 1.8-6.0 GHz broadband amplifier range has an innovative design which utilises the latest GaN technology. This provides an architecture with unique features and benefits which differentiate the range from other solid state amplifiers, permitting an impressive array of input/output and sample port options and cost-effective power or bandwidth upgrades.

## AS1860-100, 100 Watt P1dB 1.8-6.0 GHz Broadband Amplifier

Psat (min):	130.0 W	Power consumption:	1500 W
Psat (min)	51.1 dBm	Primary Power:	85-265V (47/63Hz)
P1dB (min):	100.0 W	RF Input:	Type N female
P1dB (min):	50.0 dBm	RF Output:	Type N female
Noise figure (max):	8.0 dB	Weight:	47 kg
Gain variation:	± 3.0 dB	Size:	6U
Harmonic distortion (max):	-20 dBc		



## Class leading linearity and noise specifications

- Gain variation with temperature <math><0.06\text{ dB}/^\circ\text{C}</math>
- IP3 typically 8dB> P1dB
- Harmonics -20 dBc max
- Spurious (max) -70dBc
- Spurious (typical) -80 dBc

## Max power

- Unbeatable power density
- 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
- Consistent over greater than octave bandwidths

## High visibility status and power indicators

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

## Other standard features

- Ethernet, USB and RS232 connections allowing "plug and play" simplicity with the most current user interfaces
- All data is measured at 25 °C driven from a 50 R source and driving into a 50 R load
- Input power (for rated output) 5 dBm
- Input power (no damage) 15 dBm
- Input VSWR (impedance 50 R nominal) 2:1 max
- Output VSWR (impedance 50 R nominal) 2:1 typical
- Load VSWR (any phase) is infinite
- Line input frequency 47-63 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

## 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

## Other amplifiers available in the 1.8-6.0 GHz range:

- AS1860-30 – 30 watt
- AS1860-50 – 50 watt



Designers and Manufacturers of High  
Power Microwave and RF Amplifiers

