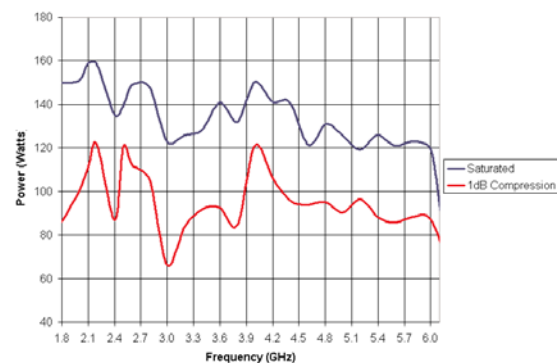


The MILMEGA 1.8 to 6 GHz Broadband Class A Solid State Microwave Amplifier Range

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.

AS1860-50, 50 Watt P1dB 1.8-6.0 GHz Broadband Amplifier

Psat (min):	80.0 W	Power consumption:	800 W
Psat (min)	49.0 dBm	Primary Power:	85-265V (47/63Hz)
P1dB (min):	50.0 W	RF Input:	Type N female
P1dB (min):	46.9 dBm	RF Output:	Type N female
Noise figure (max):	8.0 dB	Weight:	25 kg
Gain variation:	± 3.0 dB	Size:	3U
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 $8\text{ dB} > P1\text{ dB}$
- Harmonics -20 dBc max
- Spurious (max) -70 dBc
- 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 $25\text{ }^\circ\text{C}$ driven from a $50\text{ }\Omega$ source and driving into a $50\text{ }\Omega$ load
- Input power (for rated output) 5 dBm
- Input power (no damage) 15 dBm
- Input VSWR (impedance $50\text{ }\Omega$ nominal) 2:1 max
- Output VSWR (impedance $50\text{ }\Omega$ nominal) 2:1 typical
- Load VSWR (any phase) is infinite
- Line input frequency $47\text{--}63\text{ Hz}$
- Operating temperature (ambient air) $0\text{ to }40\text{ }^\circ\text{C}$
- Storage temperature $-40\text{ to }70\text{ }^\circ\text{C}$.

Built-in protection

- In the event of internal temperature exceeding $70\text{ }^\circ\text{C}$, 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
- AS1860-100 – 100 watt



THE QUEEN'S AWARD
FOR INNOVATION
2012

Designers and Manufacturers of High
Power Microwave and RF Amplifiers

