

AS1860-100

1.8 - 6.0 GHz 100 Watt Class A P1dB Solid State Amplifier



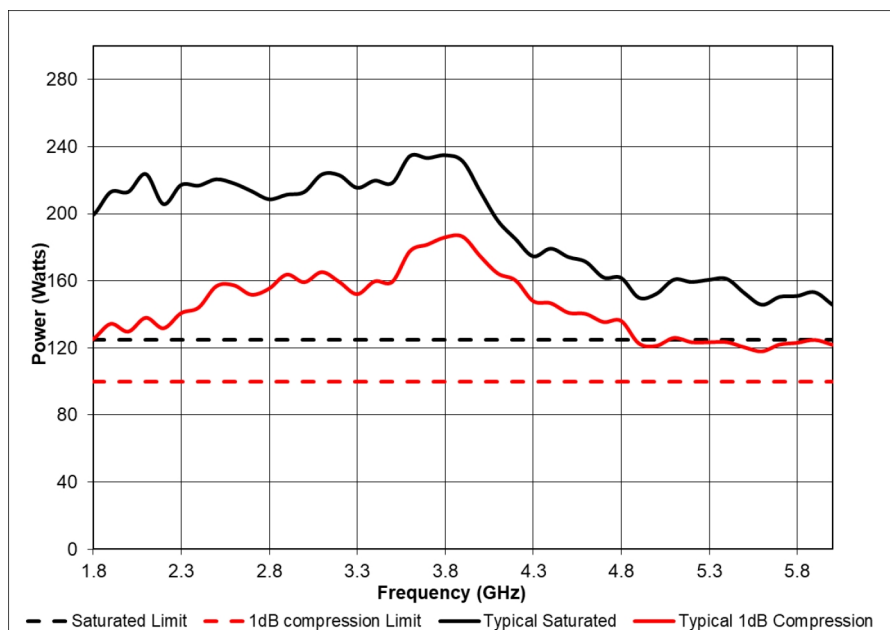
MAIN FEATURES

- Class A Operation
- 100% Mismatch Tolerant with no Foldback
- Calibrated Dual Directional Coupler
- Ethernet, USB, RS232 & GPIB Interface
- 5 Year Warranty

The AS1860 series of solid-state power amplifiers follows the MILMEGA tradition for compact, upgradeable microwave power amplifier solutions with field proven reliability. A modular design enables easy in country service, maintenance and factory upgrades to higher power models.

Developed to cover the frequency band 1.8 - 6 GHz this GaN based amplifier produces high P1dB performance with excellent linearity and low harmonics making this series ideal for multiple applications including various EMC standards, Telecoms and Instrumentation testing.

Powered from a switched mode power supply for high efficiency, high power factor and wide voltage range operation. The unit is air-cooled with integral fans and is protected against faulty cooling by excess temperature sensing. A safety interlock connector is provided, which the user can short circuit to ground, to put the amplifier into standby mode. Front panel indicators are provided to indicate over-temperature and RF interlock condition.



Technical Specifications

Frequency Bands	Single Band
Frequency (min.) GHz	1.8 GHz
Frequency (max.) GHz	6 GHz
Psat (min)	125 W
P1dB (min.)	100 W
Small Signal Gain	46 dB
Gain Variation (max) ±	+/- 3.0 dB
Harmonics @ P1dB (typ)	-20 dBc
Spurious (min.)	-70 dBc
3rd Order Intercept Point	10 dB > P1dB
Noise Figure	8 dB
RF Sample Port Coupling Factor (nom)	47 dB
Modulation Formats	AM, FM, Pulse
Maximum Input Power (no damage)	10 dBm
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unconditional
Output Impedance	50 Ohm
Input VSWR	2:1 (max)
Output VSWR	2:1 (typical)

General Specifications

Safety Interlock	Via rear panel mounted BR2-female
Supply Voltage	90 to 264 VAC
Supply Frequency	47 to 63
Supply Power (typ.)	1.3 kVA
RF Input Connector	Type N female
RF Output Connector	Type N female
RF Sample Port Connectors	Type N female
Com. Interface	GPIO, RS232, Ethernet & USB
Weight kg	50 kg
Dimensions	19 inch, 6U, 527mm (WxHxD)
Cooling System	Air Cooled, Self-contained

Available Variants

Product	Configuration	Item #
AS1860-100-001	Front Panel RF Connectors	3-342326
AS1860-100-002	Rear Panel RF Connectors	3-342327