

AS0820-1000

0.8 - 2.0 GHz 1000 Watt Class A Solid State Amplifier



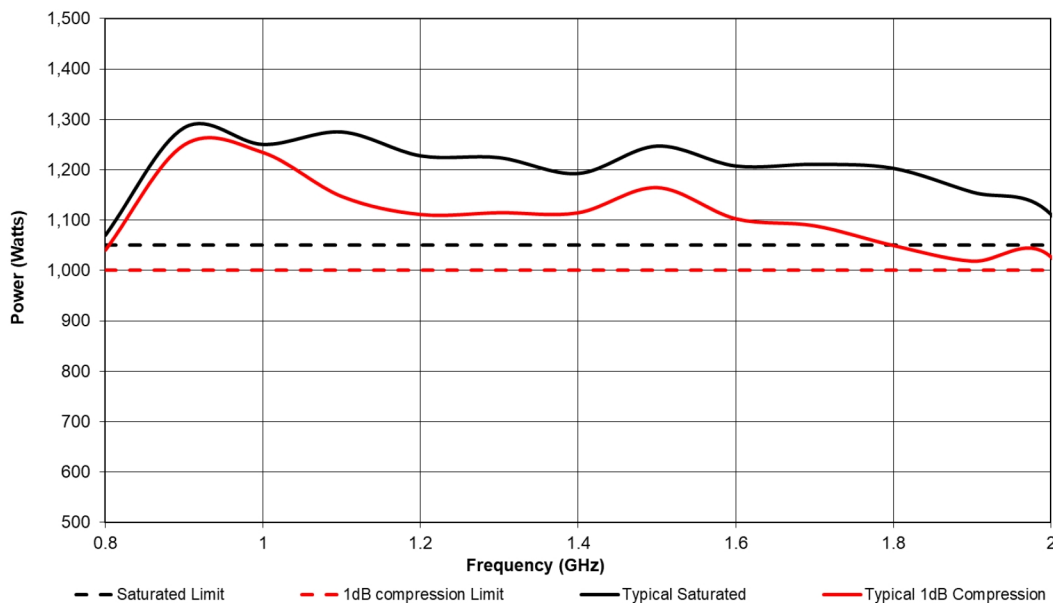
MAIN FEATURES

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

The AS0820 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 0.8 - 2 GHz this GaAs 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.



RF Specifications

Frequency Bands	Single Band
Frequency (min.) GHz	0.8 GHz
Frequency (max.) GHz	2 GHz
Psat (min)	1050 W
P1dB (min.)	1000 W
Small Signal Gain	55 dB
Gain Variation (max) ±	+/- 1.0 dB
Harmonics @ P1dB (typ)	-20 dBc
Spurious (min.)	-70 dBc
3rd Order Intercept Point	10 dB > P1dB
Noise Figure	6 dB
RF Sample Port Coupling Factor (nom)	50 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)

Mechanical Specifications

Safety Interlock	Via rear panel mounted BR2-female
Supply Voltage	See, "Available Variants" chart below
Supply Frequency	47 to 63
Supply Power (typ.)	8.3 kVA
RF Input Connector	Type N female
RF Output Connector	Type 7/16 female
RF Sample Port Connectors	Type N female
Com. Interface	GPIO, RS232, Ethernet & USB
Weight kg	165 kg
Dimensions	19 inch, 20U Rack, 800 mm Deep (WxHxD)
Cooling System	Air Cooled, Self-contained

Available Product Configurations

Product	Configuration	Item #
AS0820-1000-003	Front Panel RF Connectors, 3 Phase, STAR 5 Wire 380 to 415 VAC Line to Line + N	3-342509
AS0820-1000-004	Rear Panel RF Connectors, 3 Phase, STAR 5 Wire 380 to 415 VAC Line to Line + N	3-342510
AS0820-1000-005	Front Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line	3-342511
AS0820-1000-006	Rear Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line	3-342512