

dB-8015 Solid State Power Amplifier



GaN Solid State Power Amplifier
100/200W CW
2.0 – 18.0 GHz

The innovative dB-8015 GaN Solid State Power Amplifier operates in the 2.0 to 18.0 GHz frequency band and delivers 100/200 Watts output power in CW operation at midband. The dB-8015 is designed for wideband and high-performance MIL-STD applications where high reliability is critical to system performance. This compact form factor MPM comes in a liquid-cooled package.

Features

- Wideband GaN SSPA
- 2.0 to 18 GHz, 100/200 W, CW
- 28 VDC, 270 VDC or 3 phase 400 Hz
- Liquid Cooled for excellent reliability
- Small and lightweight

Applications

- Electronic countermeasures (ECM)
- Electronic warfare (EW) and simulations
- Multi-band communication systems



dB-8015 Datasheet

dB-8015 Solid State Power Amplifier Specifications

Reliability by Design®

Electrical

Frequency Range	2.0 to 18.0 GHz
Output Power CW (with coolant at 20° C)	150 watts from 2-4 GHz 200 watts from 4-9 GHz 150 watts from 9 to 16 GHz 100 watts from 16 to 18 GHz
Small Signal Gain	50 dB, min.
RF Input Power for Saturation	0 +/- 1 dBm
Duty Cycle	100% (CW)
Input VSWR	2.0:1, max.
Output VSWR	2.0:1, max.
Load VSWR	1.5:1, max., Full Spec Compliance
Load VSWR	2.5:1, max, No Damage
Prime Input Voltage	28 VDC, 270 VDC, or 3 phase 400 Hz, 60 Hz 1400W max (1300W typical)
Prime Power	1300W typical
Interface Control	RS-485

Mechanical

Dimensions	14.0" L x 9.0" W x 6.0" H (inches) 356 L x 229 W x 152 H (mm)
Weight	32 lbs. (15 kg) nominal
Cooling	Liquid cooled Thermal Management with integrated liquid cooled heatsinks
Connectors:	
Prime Power	MS3112 series
Control/Status	MS3112E14-18
RF Input	Type SMA (F)
RF Output	Type N (F)

Environmental

Ambient Temperature	-40° C to +71° C (with liquid maintained at +25° C)
Storage Temperature	-54° C to +90° C
Operating Altitude	Up to 50,000 feet ASL

Specifications subject to change without notice.



About dB Control

Established in 1990, dB Control Corp., a subsidiary of the Electronic Technologies Group (ETG) of HEICO Corp., supplies mission-critical, often sole-source, products worldwide to military organizations, as well as to major defense contractors and commercial manufacturers. dB Control designs and manufactures reliable high-power TWT Amplifiers (TWTAs), microwave power modules (MPMs), transmitters and power supplies with modulators for radar, electronic countermeasures (ECM) and data link applications. The company's high-power amplifiers use solid state, as well as vacuum electron devices and cover the 1 to 50 GHz frequency range. The modularity of dB Control's designs enables rapid configuration of custom products for a variety of platforms, including ground-based and high-altitude military manned and unmanned aircraft. dB Control has an outstanding record of successfully repairing, refurbishing and replacing tightly packaged high-voltage transformers, assemblies and power supplies. The company offers specialized contract manufacturing, transformer winding and testing, full vacuum encapsulation, pressure cure, conformal coating and repair depot services from its modern 40,000 square foot facilities in Fremont, California. www.dBControl.com AS-9100D and ISO-9001:2015 Certified.



dB Control Products

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