

dB-8015 Microwave Power Module



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

The innovative dB-8015 GaN Solid State Power Amplifier Microwave Power Module operates in the 2.0 to 18.0 GHz frequency band and delivers 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

- Very Wideband GaN SSPA
- 2.0 to 18 GHz, 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

Electrical

Frequency Range 2.0 to 18.0 GHz

Output Power CW 150 watts from 2-5.5 GHz

200 watts from 5.5-13.5 GHz

100 watts from 13.5 to 18GHz

Small Signal Gain 50 dB, min.

RF Input Power for Saturation 0 +/- dB

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, 270VDC, or 3 phase 400 Hz, 60Hz

1400W max (1300W typical)

Prime Power 1300W typical

Mechanical

Dimensions 14.0" (L) x 9.0" (W) x 6.0" (H)

Weight 32 lbs., 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

Specifications subject to change without notice.

Reliability by Design®

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



