

# dB-8035 Solid State Power Amplifier



**GaN Solid State Power Amplifier  
300W CW 1.0 – 6.0 GHz**

The dB-8035 is a Solid State Power Amplifier (SSPA) providing 300 Watts CW power over the frequency range of 1 GHz to 6 GHz. Wide band solid state modules are used for power amplification. It utilizes modular architecture and low noise power supply topology with high efficiency solid state power conversion circuits. An embedded micro-controller provides the interface, control and protection functions as well as extensive fault diagnostics and status indication for the SSPA. Standard interface protocol is Ethernet. The SSPA Amplifier is packaged in a 19" rack mount package with a color screen display. Cooling of the SSPA is accomplished by integral forced air-cooling arrangement.

## Features

- Wideband SSPA 1.0 to 6.0 GHz, 300 W, CW
- 180 to 240 VAC
- Integral Forced Air Cooling
- Instant On (No Warm-Up)

## Applications

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



dB-8035 Datasheet

# dB-8035 Solid State Power Amplifier Specifications

**Reliability by Design®**

## Electrical

|                                 |   |
|---------------------------------|---|
| Frequency Range                 | 1.0 to 6.0 GHz  |
| RF Output Power                 | 300 watts CW, minimum   |
| Gain Flatness                   | 4 dB p-p  |
| RF Drive Level For Rated Output | +2 dBm  |
| Spurious                        | -60 dBc, maximum  |
| Harmonic Output                 | -20 dBc, maximum  |
| Input VSWR                      | 2.0:1 maximum   |
| Output VSWR                     | 2.0:1 maximum   |
| Load VSWR                       | 1.5:1 Continuous for Spec Compliance                            |
| Load VSWR                       | 3.0:1 max, no damage  |
| SSPA Protection                 | SSPA/Power Supply Over-Temp<br>Excessive VSWR (Reflected Power) |
| Input Voltage                   | 180-240 VAC, 1 Phase, 60 Hz                                     |
| Power Consumption               | 2500 watts, maximum   |
| Front Panel Controls            | Power On/Off  |
| Front Panel Indicators          | HPA On/Off, Forward Power, Reflected Power,<br>HPA Faults       |
| Remote Control Interface        | Ethernet  |

## Mechanical

|                       |   |
|-----------------------|---|
| Dimensions            | 8.74" H x 22.1" L x 19.0" W (inches)<br>222 H x 561.34 L x 482.6 W (mm) |
| Weight                | 100 lbs (45.4 kg) nominal   |
| Cooling               | Forced Air with Integral Fans   |
| Connectors:           |   |
| Input Power Connector | IEC 60320-C14   |
| Remote Control        | 9 pin D-Sub   |
| RF Input              | Type N (F), front panel   |
| RF Output             | Type N (F), front panel   |

## Environment

|                       |                             |
|-----------------------|-----------------------------|
| Operating Temperature | 0° C to +50° C              |
| Storage Temperature   | -40° C to +85° C            |
| Humidity              | Up to 95% RH Non-Condensing |
| Operating Altitude    | Up to 10,000 feet           |
| Shock & Vibration     | Normal transport            |

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](http://www.dBControl.com) AS-9100D and ISO-9001:2015 Certified.



dB Control Products

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