ELEV: 0.75

High Voltage and Low Voltage Power Supplies, High Power DC/DC and AC/DC Converters



For Airborne, Shipboard and Ground-Based EW, Multimode Radars, SAR, SatCom, Datalinks





GROUND, SHIPBOARD & AIRBORNE MISSION-CRITICAL OPERATIONS | EW

High Voltage and Low Voltage Power Supplies, High Power DC/DC and AC/DC Converters

- · Custom designed to your specifications
- · Multiple standard and non-standard input voltages
- Best in class size, efficiency, regulation, lowest ripple, and power density
- Excellent thermal management options
- · Efficiency up to 92%
- Compact and lightweight to meet SWaP requirements
- Full MIL-spec operation
- · Excellent performance for dynamic and static loads
- Exceptional quality utilizing dB Control's core technologies, in-house manufacturing processes (encapsulation and pressure curing) and testing (RF, environmental, HALT and HASS)
- Specialized Contract Manufacturing and Build-to-Prinit Services

We Qualify for Multiple Military Programs Every Year

- MIL DO-160 MIL-STD 461/704E and MIL-STD 810E guidelines
- Shock and vibration (gun fire, non-gun fire, airborne, shipboard, helicopter)
- Various cooling conditions (conduction cooled -54 °C to +100 °C, ECS and RAM air up to +96 °C; liquidcooled PAO, glycol; and Built-in Heatsink Fan Cooled)
- Severe environmental conditions (temperature shock, temperature cycling, solar radiation, humidity, fungus, rain, wind and ice, snow, sand and dust, salt atmosphere)

For specific applications, contact info@dbcontrol.com.

dB-4128: Integrated Conduction Cooled HVPS used for MPMs.





602 M

dB-2347-01 Airborne Power Supply: up to 1500 VDC input, 6.4 VDC at 68 Amps.



COMMS | RADAR TRANSMITTERS | MULTIMODE RADARS | DATALINKS | SAR

Product Design

dB Control utilizes its core technologies to design, assemble and manufacture high voltage assemblies, power converters and control/monitor logic circuits. We also build transformers. inductors and high voltage modules in house using standard and proprietary RTVs, epoxies and encapsulation processes. The result is superior reliability and compliance with MIL-STD-704 and integrated EMI Filtering to meet MIL-STD-461. To save production time and reduce costs, we have an extensive library of module designs for multiple input/output configurations and specifications.



dB-1202

High Voltage Power Supplies

- Power supplies integrated with TWT output devices
- Prime power capabilities for 28 VDC, 270 VDC and 115 VAC to 380 VAC single phase or 3 phase
- Output Voltages to 50 kVDC
- Grid and FE modules for high PRFs to CW
- Interface Logic Options (Discrete, Serial, Ethernet)



Towed decoy power supply.

Low Voltage / High Current Power Supplies

- Integrated with GaAs or GaN solid state output devices
- Prime power capabilities for 28 VDC, 270 VDC and 115 VAC to 380 VAC single phase or 3 phase
- Multiple outputs: ±5 VDC, 12 VDC, 25 VDC
- Single voltage input: 28 VDC to 2500 VDC
- Multiple high voltages input: 2KV, 4.5 KV
- Various control and interface capabilities: FSK, serial and discrete, CANBUS, RS-485
- Output voltage sequencing, voltage hold-up timing requirements



dB-1206: AC-DC or DC-DC Converter for SSPAs.



In-House Testing

- Temperature, altitude, combined temp/alt and HALT/HASS chambers
- MIL-STD 704 and limited 461 capabilities
- Hot and cold cooling (conduction, ECS, liquid & ambient/altitude)
- · Vibration and shock

Quality

- Full AS9100D and ISO 9001:2015 certification including design and development
- AS9102 Revision A Compliant (First article inspection to IAW current aerospace standards, documentation using official AS9102 forms/format)
- Entire assembly & QA workforce certified for PC-A-610E and J-STD-001E Class 3
- A2LA-accredited equipment calibration
- IPC/EIA J-STD-001 Class 3 certified for soldering electrical and electronic assemblies
- Inspected to IPC-A-600

About dB Control

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Established in 1990, dB Control Corp. supplies mission-critical, often solesource, products worldwide to military organizations, as well as to major defense contractors and commercial manufacturers. dB Control is a subsidiary of the Electronic Technologies Group of HEICO Corp., a publicly traded aerospace and electronics company with more than 60 subsidiaries. dB Control designs and manufactures reliable high-power TWT amplifiers (TWTAs), microwave power modules (MPMs), transmitters, high- and low-voltage power supplies, and modulators for radar, electronic countermeasures (ECM), and data link applications. 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. Acquisitions in 2019 (TTT-Cubed, Inc.), 2021 (Paciwave, Inc.) and 2022 (Charter Engineering, Inc.) added custom RF







sources and receivers, RF/microwave components and integrated subsystems, and precision electromechanical switches and components to the company's product offerings. dB Control also offers specialized contract manufacturing and repair depot services from its modern 40,000-square-foot facilities in Fremont, California. The company is AS9100D- and ISO 9001:2015-certified.



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