

dB Control Products Overview



Traveling Wave Tube Amplifiers

High-power, helix and coupled cavity traveling wave tube amplifiers (TWTAs) cover the 1-50 GHz frequency range and are available with continuous wave or pulsed power. They are suitable for harsh environmental conditions, such as shipboard and ground-based mobile systems and unpressurized airborne environments. The entire line of dB Control TWTAs incorporates proprietary potting and encapsulation processes to provide extremely dense packaging. All TWTAs have been field tested for radar, electronic countermeasures (ECM), data links, communications and instrumentation applications.

Microwave Power Modules

High-efficiency, conduction-cooled microwave power modules (MPMs) cover the 2-40 GHz frequency band and are available with continuous wave or pulsed power. They provide extremely dense packaging and are based on a modular design for easy customization. Each MPM is a complete microwave amplifier that uses both traveling wave tubes and solid state technologies to meet stringent requirements for low size/weight and high power. Applications include radar, ECM, data links, communications and instrumentation.

Power Supplies

Tightly packaged high- and low-voltage power supplies are used in airborne, shipboard and ground-based applications. They are fully qualified for mission-critical military operations and are suitable for very low phase noise and spurious radar transmitters, SAR, multimode radars, data links and more – depending on voltage.






Contract Manufacturing

dB Control offers specialized contract manufacturing services for high-voltage transformers, power supplies, and high-voltage assemblies. Full vacuum encapsulation, pressure cure, conformal coating laboratory services and transformer winding and testing are also available.


Repair Depot

Microwave amplifier components can be repaired, refurbished or replaced by dB Control. The repair depot has a successful record of repairing tightly packaged high-voltage power supplies. Specialized testing services for high-voltage and high-power microwaves are also available.


TWT Amplifiers

Packaging Style	Frequency	Output Power	Applications
Pod Mount 	Sub-bands within 1-50 GHz	20W-500W CW 100W-10kW Pulsed	<ul style="list-style-type: none"> • Airborne Data Links • Airborne/Shipboard/ Ground-Based Radar • Antenna Pattern & Radar Cross-Section Measurements • Airborne/Ground Based Communication Systems • Airborne/Shipboard/ Ground-Based Electronic Countermeasures (ECM) • Electronic Warfare Threat Simulation • EMI/EMC Tests • RF Components Test • RFI Susceptibility Test • Test & Measurement
Split Package 	Sub-bands within 1-50 GHz	20W-500W CW 100W-10kW Pulsed	
Custom Package 	Sub-bands within 1-50 GHz	20W-500W CW 100W-70kW Pulsed Power-combined units to 1kW CW or 10kW Pulsed	
Hub Mount 	Sub-bands within 1-50 GHz	20W-500W CW 100W-10kW Pulsed	
Rack Mount 	Sub-bands within 1-50 GHz	20W-500W CW 100W-10kW Pulsed Power-combined units to 1kW CW or 10kW Pulsed	

Microwave Power Modules

Packaging Style	Frequency	Output Power	Applications
Compact, Conduction Cooled 	Radar Bands X, Ku Bands Wide Bands 2-40 GHz	20W-400W CW, 100W-2kW Pulsed Power	<ul style="list-style-type: none"> • Airborne Data Links • Airborne/Ground-Based Radar • Airborne/Ground-Based Communication Systems • Airborne/Ground-Based Electronic Countermeasures (ECM)

Power Supplies (Airborne and Ground Based)

Packaging Style	Input Voltage	Output Voltage	Power (Watts)
High Voltage 	115 VAC, Single Phase, 50/60Hz 220 VAC, Single Phase, 50/60Hz 115/200 VAC, 3 Phase, 400Hz 208 VAC, 3 Phase, 50/60Hz 220/380 VAC, 3 Phase, 50/60Hz 480 VAC, 3 Phase, 50/60Hz 270 VDC 28 VDC	3-50kV	200W-7kW

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), data links, communications and instrumentation 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 52,100-square-foot facilities in Fremont, California. www.dBControl.com