

# High Performance Microwave Power Modules







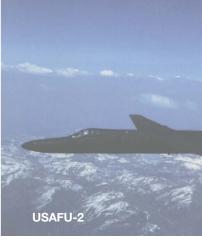
for Radar, ECM, EW Simulation, SatCom, Datalinks

2CALE: TKW/PXF







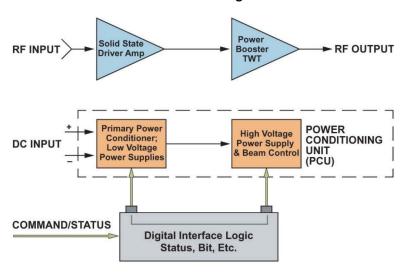


#### Microwave Power Modules - The Best of Both Worlds

In many modern military applications, stringent requirements for size and weight must be met without sacrificing power or performance. dB Control's high-efficiency, conduction-cooled Microwave Power Modules (MPMs) provide extremely dense packaging across the 2-45.5 GHz frequency band.

Our MPMs are based on a modular design for easy customization and are available with continuous wave or pulsed power. Each MPM is a complete microwave amplifier that uses traveling wave tubes and solid state technologies, along with high-voltage and low-voltage power supplies, to provide the best of both worlds for military and commercial applications.

#### **MPM Block Diagram**



#### **Description:**

- Compact Microwave Power Amplifier (CW or Pulse Waveform)
- RF Signal Path (Solid State Driver Amplifier, Mini-booster TWT)
- Compact Power Conditioner (TWT Beam Control/Modulator, Integrated Logic Interface, Control, Monitoring & Protection)
- · Conduction-Cooled Package
- · Air-Cooled or Water-Cooled Package











# **Applications**

Multimode Radars
Synthetic Aperture Radar (SAR)
Manned and Unmanned Platforms
Electronic Counter Measures (ECM)

High-Performance EW Simulation Satellite Communications Multi-Band Communication Systems Datalinks



dB-4127

## Microwave Power Modules

dB-3201 MPM (26.5-40 GHz, 125/100 Watts pulsed to CW)

dB-3201H MPM (30-38 GHz, 125 Watts, CW)

dB-3202 MPM (27.5-31 GHz, 200 Watts, CW)

**dB-3205 MPM** (43.5-45.5 GHz, 80 Watts, CW)

**dB-3758 MPM** (9-10 GHz, 1 kW pulsed, 5% duty cycle)

**dB-3774B MPM** (6-18 GHz, 1 kW pulsed, 5% duty cycle)

dB-4127 MPM (6-18 GHz, 200 Watts pulsed to CW)

**dB-4128 MPM** (6-18 GHz, 200 Watts pulsed to CW,

prime input voltage 115 VAC, 400 Hz)

dB-4150 MPM (6-18 GHz, 100 Watts pulsed to CW, Ethernet interface)

dB-8015 GaN Solid State Power Amplifier MPM (2-18 GHz,

200 Watts CW, 28 VDC or 3-Phase 400 Hz)



dB-3774B



dB-3758



dB-8015





### About dB Control

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.





