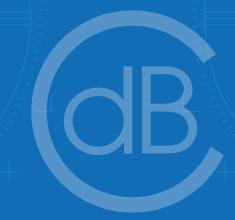


dB-4128 Microwave Power Module



200W CW 6 - 18 GHz



The dB-4128 is a microwave power module (MPM) operating in the frequency range of 6 to 18 GHz. This MPM is a power amplifier that provides 200 Watts pulsed/CW RF output power. The RF signal path consists of a solid state amplifier and a vacuum power booster. The power supply topology uses proprietary low-noise, high-efficiency designs to operate the RF signal path. A high-speed modulator is incorporated for pulse modulation of up to 10 KHz to CW. This compact, conduction-cooled MPM is designed to operate in extreme military environments.

Features

- High-band MPM
- 6 to 18 GHz, 200 W, pulsed to CW
- High PRF pulse modulation
- · Excellent reliability
- Prime input voltage 115 VAC, 400 Hz

Applications

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

Electrical

Frequency Range 6 to 18 GHz

Output Power 200 Watts CW @ 6.5 to 18 GHz

150 Watts CW @ 6.0 to 6.5 GHz

Pulse Operation PRF: 10 KHz max.

Pulse width: 1.0 µsec to CW

Gain at Rated Power 53 dB

Harmonics -2 dBc @ 6.0 GHz

Spurious -50 dBc

Input VSWR 2.0:1 (50 Ω Impedance)

Load VSWR 1.5:1, max. for full specification compliance

Prime Power Input 115/208 VAC, 3 phase, 400 Hz

TWTA Protection Helix Over-Current, Cathode Over-Voltage,

Over-Temperature

Status/Indication Equipment status, faults

Interface ControlDiscrete logicModulation ControlDifferential or TTL

Mechanical

Connectors:

RF Input SMA (F)

RF Output WRD-650 Waveguide
Prime Power MS3112E14-5P
Control/Pulse Input MS3112E14-18P

Dimensions 12.5" (L) x 9.38" (W) x 2.15" (H)

Weight 9.0 lbs.
Cooling Conduction

Environmental

Vibration 10 to 1000 Hz, 0.02g²/Hz Shock 15 g, 11 msec, Half Saw Tooth

Operating Temperature -40° C to +75° C (Base Plate Temperature)

Storage Temperature -54° C to +85° C
Operating Altitude Up to 50,000 feet

Humidity Up to 95% RH Non-Condensing

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 highpower TWT Amplifiers (TWTAs), microwave power modules (MPMs), transmitters and power supplies with modulators for radar, electronic countermeasures (ECM), data links, and communications 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 groundbased 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

