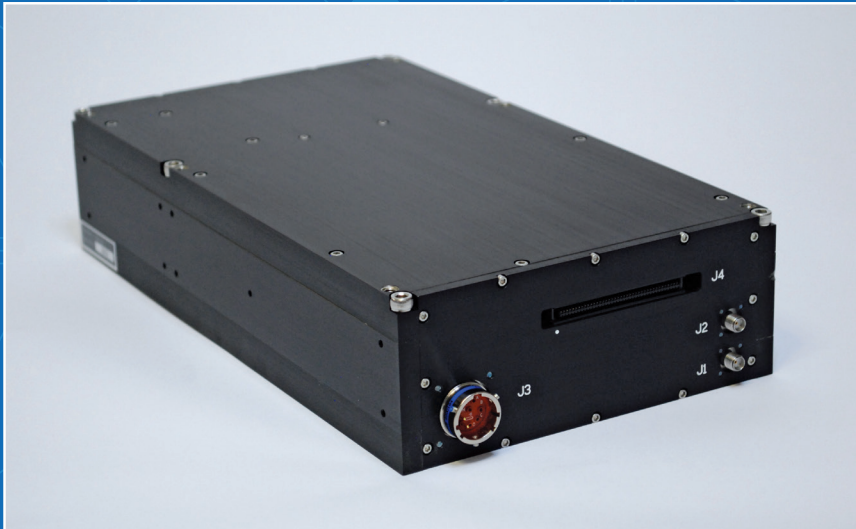


## dB-9002 Dual Instantaneous Frequency Measurement Unit



6 – 12 GHz  
6 – 18 GHz  
100 ns to CW



The dB-9002 is a custom-mounted Dual Instantaneous Frequency Measurement (DIFM) unit operating in the C, X and Ku-band frequency range providing highly accurate measurements at 100 nanoseconds (ns) to CW pulse width measurements. The DIFM units measure dual frequencies, as well as power level and pulse duration. The DIFM units are packaged in a custom configuration with integral forced-air and conduction cooling.

### Features

- Wideband IFM
- Dual Frequency 6 to 12 and 6 to 18 GHz
- Pulse width 100 ns to CW
- High Accuracy

### Applications

- Electronics attack detection
- Airborne RF recorder
- Radars
- Electronic countermeasures (ECM)
- Electronic warfare (EW) threat simulation
- Test and measurement
- Antenna pattern and radar cross section measurements

# dB-9002 DIFM Specifications

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## Electrical

Frequency Range	6 to 12 GHz and 6 to 18 GHz
Amplitude Measurement Range	-50 to 0 dBm
Duty Cycle	5%, max.
Pulse Width Measurement	100 ns to CW
Frequency Measurement Accuracy	± 3MHz max., ± 1MHz typical over the entire temperature range
Amplitude Control Pulse	± 5dB Max, ± 2dB typical over the entire temperature range
Pulse Width Measurement Accuracy	± 25 nsec
Nominal Power Consumption	110W

## Mechanical

Connectors:	
Prime Power	MS27508E12F8P
RF Input 1	Type SMA (F)
RF Input 2	Type SMA (F)
Digital Input/Output	P50E-080P1-SR1-EA
Dimensions	12.5" (L) x 6.5" (W) x 2.5" (H)
Weight	10 lbs.
Cooling	Forced air with integral fan and conduction

## Environmental

Operating Temperature	-20° C to +50° C, ambient
Operating Altitude	Up to 40,000 feet ASL
Humidity	Up to 95% RH non-condensing

## Options

- Custom frequency bands
- Different prime power input
- Custom frequency, amplitude measurement accuracy
- Custom pulse width measurement accuracy
- Customizable digital interface for control/communication

*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)

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