dB Control
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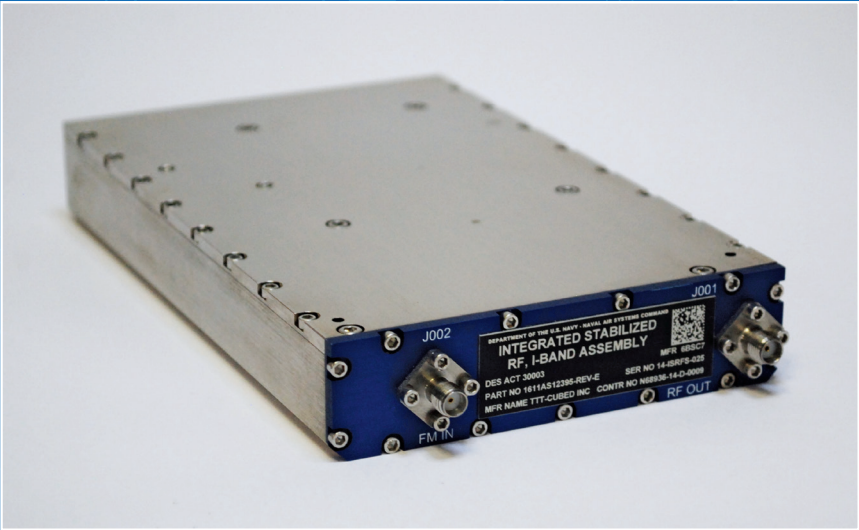
dB-9003 Integrated Stabilized RF Source



I-Band Frequency Range
Four Modes of Frequency Modulation

The dB-9003 is a custom-mounted Integrated Stabilized RF Source (ISRFS) operating in the I-Band frequency range providing highly accurate RF Source at high frequency switching speeds. The ISRFS can be controlled and set up with a digital port. The ISRFS units are packaged in a custom configuration with conduction cooling.

Features

- I-Band Frequency Range
- 8 to 12 GHz
- Four modes of frequency modulation
- Four types of modulation: AM, FM, phase and pulse modulation
- High accuracy
- Wide temperature operating range

Applications

- Radars
- Radar simulation
- Electronic countermeasures (ECM)
- Electronic warfare (EW) threat simulation
- Test and measurement

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dB-9003 ISRFS Specifications

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Electrical

Frequency Range	8 to 12 GHz
Nominal Output Power	+17 dBm
Frequency Measurement Accuracy	Open Loop Mode: ± 9MHz max., ± 4MHz typical over the entire temperature range Closed Loop Mode: ± 1MHz max., ± 0.2MHz typical over the entire temperature range
Frequency Switching Speed	1uS to be within ± 1 MHz accuracy
Modulation Modes	Four modes of Digital Frequency Modulations: ± 100KHz ± 10MHz ± 100MHz ± 500MHz
Modulation Types	AM, FM, Phase and Pulse Modulation
Amplitude Control Pulse	Digital Amplitude Control: 8-bit control Word with LSB of 0.125dB, total of 50dB max.
Shaping Modulations	Digital pulse control (RF ON/OFF) with max. output of -60dBm when off
Spurs	Below -60 dBm
Nominal Power Consumption	30W

Mechanical

Connectors:	
FM Input	Type SMA (F)
RF Output	Type SMA (F)
Digital Control and DC In	VMA
Dimensions	7.0" (L) x 4.0" (W) x 1.0" (H)
Weight	1.8 lbs.
Cooling	Conduction

Environmental

Operating Temperature	-40° C to +71° C, ambient
Operating Altitude	Up to 40,000 feet ASL
Humidity	Up to 95% RH non-condensing

Options

- Custom frequency bands and output power
- Different prime power input
- Custom frequency, amplitude measurement accuracy
- Custom pulse width measurement accuracy
- Custom modulation types
- Customizable digital interface for control/communication
- Digital noise generator/source

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

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