

dB Control introduces pulsed power-combined wideband TWT amplifiers

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By Courtney Howard
Executive Editor

FREMONT, Calif., 10 Sept. 2012. dB Control, a manufacturer of high-powered microwave amplifiers, radar/electronic countermeasure (ECM) transmitters, and power supplies, will introduce a suite of four pulsed power-combined traveling wave tube amplifiers (TWTAs) in at the 49th Annual AOC International Symposium and Convention in Phoenix, Ariz., this month.

“Protection from future threats is non-negotiable in the defense industry--and TWT technology continues to make this possible. This new suite of amplifiers proves that TWTAs remain an unparalleled and reliable option for rugged, high-power military applications. And with only one RF input and one RF output, they are extremely easy to operate,” says Steve Walley, dB Control vice president of business development.

The new devices are well suited for test and measurement, RFI/EMI/EMC testing, antenna pattern and radar cross-section measurements, electronic countermeasures (ECM), and electronic warfare (EW) simulation. Available for local or remote operation, dB Control's new TWTAs use two wideband, periodic permanent magnet (PPM)-focused TWTs to amplify CW, AM, FM, or pulse-modulated signals.

Specifications include:

dB-3901:

10kW PW output, 6% duty cycle, 2-4 GHz frequency range

dB-3902:

8kW PW output, 6% duty cycle, 4-8 GHz frequency range

dB-3903:

9kW PW output, 8% duty cycle, 8-12 GHz frequency range

dB-3904:

7kW PW output, 6% duty cycle, 12-18 GHz frequency range

The TWTAs employ a modular architecture and low-noise power supply topology. dB Control designed and manufactured the TWTAs in-house, using proprietary transformer fabrication, encapsulation, and high-voltage potting techniques developed specifically for demanding military applications.