

API Technologies Debuts Two Power Amplifier Solutions at the International Microwave Symposium: New GaN and LDMOS amplifiers leverage company's expertise in high performance power amplifier modules and complex integrated amplifier assemblies



ORLANDO, Fla. and Phoenix, AZ - IEEE MTT-S International Microwave Symposium (IMS 2015), Booth #3236– (PR Newswire) – May 18, 2015 – API Technologies Corp. (NASDAQ:ATNY) (“API” or the “Company”), a leading provider of high performance RF, microwave, millimeterwave, and power solutions, debuts two new power amplifier products to support military and public safety applications involving communications and jamming.

The release of the new QBS-620 Dual Channel Rack Mount GaN Power Amplifier Assembly extends API's product line beyond discrete power amplifiers to fully integrated solutions with even higher levels of functionality. The QBS-620 is a dual channel, rack mount GaN power amplifier module designed for shipboard communications; other military and commercial applications include battlefield and mobile communication platforms. The unit, weighing approximately 65 lbs., consists of two (2) identical channels, each containing a 200W amplifier, VHF & UHF switched harmonic filter banks, SP3T high powered switches, a controller, and an AC/DC power supply. All components, as well as the custom 19 inch enclosure, are developed and manufactured by API. The rugged architecture with its sealed plenum makes the QBS-620 ideal for use in harsh environmental or weather conditions encountered by field-deployed military equipment.

API's Communications Band Signal Jamming Power Amplifier (QBS-617) highlights API's expanded use of LDMOS technology. Designed for communication band signal jamming, the QBS-617 can be used in various public safety applications, for risk mitigation of remote controlled explosions, and to prevent cellular services in and around secure military and government facilities. The modular amplifier offers a minimum output power of 100W at 1dB compression with a gain of 52 dB.

Packaged in a small aluminum chassis, only several inches in size, the power amplifier utilizes a balanced architecture with an isolator on the output to promote thermal spreading and reliability under adverse conditions, and comes configured with the following standard features: temperature compensation, forward/reverse power detection, VSWR monitor, and thermal shutdown.

Dennis Barrick, Technical Marketing Director, RF, Microwave & Microelectronics (RF2M-US), API Technologies, said, “With an extensive heritage in the development of high performance power

amplifier solutions designed to meet system-level integration challenges, the introduction of these two power amplifiers signifies an expansion of API's portfolio of high reliability communications-enabling solutions for military and commercial applications.”

API's power amplifiers are manufactured in the United States using in-house thin and thick film technology, in-house chip and wire (hybrid) and SMT manufacturing, as well as conventional PC board designs. These new amplifier solutions are an extension of the Company's broad RF and microwave amplifier product offering, which includes small signal, low noise, and high dynamic range products using various semiconductor technologies, for commercial, military, medical, and industrial applications.

Technical Specifications

- Dual Channel Rack Mount GaN Power Amplifier (QBS-620)
- 150W Typical Peak Output Power
- Frequency range of 30 - 512 MHz
- Broadband CW, FM, FSK, PSK, CPM, AM Modulation HPA
- Integrated Switched Filter Bank to ensure -60 dBc harmonic levels
- Output Power Control and Leveling
- High Efficiency 110V AC/DC Power Supply
- Shipboard and Military Communications
- Communications Band Signal Jamming Power Amplifier (QBS-617)
- 100W Minimum Output Power @ 1dB Compression
- Typical frequency range of 1930 - 2000 MHz
- Class 'AB' Amplifier utilizing LDMOS semiconductor technology
- Typical Gain of 51dB
- Communications & Signal Jamming Applications

For more information on these and other power amplifier products from API Technologies, visit:<http://micro.apitech.com/high-power-amplifiers.aspx>