

Standard and Custom RF/ Microwave Amplifiers for Military and Commercial Applications

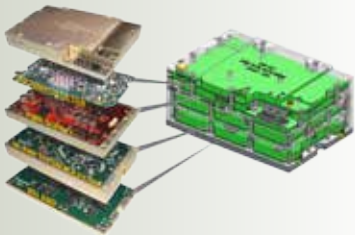
A leading provider of high performance RF, microwave and microelectronic solutions, API designs, develops and manufactures small signal amplifiers, power amplifier modules and subsystems, amplifier drivers and gain blocks, and integrated amplifier assemblies. Our standard and custom designed high reliability amplifier products are designed to address the most challenging current and emerging military and commercial requirements such as electronic warfare, satellite communications, radar, wireless, and aerospace.

API remains on the cutting edge of amplifier technology through out-of-the-box engineering and the manufacture of designs that reach increasing levels of complexity, power and performance. With the ability to provide integrated multifunction amplifier assemblies as well as user-configurable units, API can tailor a solution to your unique requirement.



Power Amplifier Modules | GaN, GaAs, LDMOS, and E-pHEMT

Utilizing both in-house chip and wire (hybrid), thin film, and SMT technology, API's power amplifiers draw from a wide range of leading edge semiconductors like GaN, GaAs MESFET, E-pHEMT, and LDMOS. Amplifiers are offered in class 'A,' 'AB,' linear, and 'C' designs in operating frequencies up to 26 GHz with output levels from 500mW to 3200W. API's chip and wire power amplifiers feature a unique void-free, low thermal resistance die attach process ensuring exceptional reliability and stability for critical military, commercial and space applications.



Power Amplifier Subsystems | Fully Integrated, Multi-Function Solution

Experts at vertical integration, API is a leading manufacturer of multi-function power amplifier subsystems and integrated amplifier assemblies incorporating multi-band amplifiers, switched harmonic filter banks and high efficiency DC converters with integrated adaptive biasing controls to ensure high reliability. API Technologies exploits the benefits of innovative semiconductor technologies, paving the way toward increased power density and complexity while reducing the overall size of the amplifier system. This translates to power amplifier solutions that are not only highly reliable and efficient, but also small and light weight.



GaN Solid State Pulsed Power Amplifiers | TWT Amplifier Replacement

API Technologies' line of Gallium Nitride (GaN) power amplifiers utilize pulsed, solid state power amplifier technology and include designs that operate with output power levels up to 3200W and frequencies to 18 GHz. API Technologies' solid state pulsed power amplifiers are suited for wide band operation and narrow band specific applications. These amplifiers utilize state of the art thermal simulation and scanning tools as well as multiple design technologies resulting in reduced size, excellent thermal performance and improved reliability.



Power Amplifier Drivers & Gain Blocks | Excellent Linearity, Low Noise

API Technologies' power amplifier drivers and gain blocks offer a convenient solution when additional gain is required over frequency bands up to 26 GHz. Designed to support various system requirements, API's drivers and gain blocks are packaged in configurations required for general and specific applications. API's complete line of GaN-based power amplifier drivers offer unparalleled reliability and thermal performance for applications requiring high levels of gain and output power.



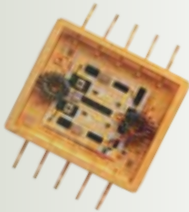
High Frequency Amplifiers | High Frequencies, Broad Bandwidths

API Technologies designs and develops high frequency amplifiers for commercial, defense and space applications. Standard designs start at 4 GHz, with modified standard designs reaching 50 GHz. Standard internal voltage regulators allow for a wide selection of available power supplies and laser-welded housings offer protection from harsh environments. Modifications to most standard high frequency amplifier models do not require NRE charges. All models are RoHS & REACH compliant.



Low Noise & Low Phase Noise Amplifiers | Multiple Package Options

API's ultra low phase noise amplifiers offer guaranteed phase noise performance, improved spurious signal suppression, better signal to noise ratio and improved sub-clutter visibility. Ideal for use in Doppler radar, missile illuminators and other data transmission systems, these designs are offered in multiple package designs to fit customer applications. API's line of low noise amplifiers offer noise figure performance as low as 1 dB in various package options. Designs are fully customizable without NRE charges. Our low noise amplifiers are fully matched and perform without the need for external circuitry. MIL-STD Screening is available on all models.



High Linearity Amplifiers | Ultra High Linearity, High IP3 Performance

With second order intercept performance as high as +113 dBm, API's high linearity amplifiers offer superior signal integrity and excellent intermodulation performance. This line of high linearity amplifiers is ideal for base station transceivers, repeaters, defense and aerospace applications or wireless applications. High linearity amplifiers are available as low as .3 MHz and up to 3.6 GHz in standard designs. Most designs are customizable without NRE charges and MIL-STD Screening is available on all models.



Configurable Amplifiers | Custom Solutions, Without NRE Charges

API Technologies suite of configurable amplifiers includes high frequency amplifiers, low noise amplifiers, threshold detectors, and limiting amplifiers. Customization options include frequency range, noise figure, gain, output intercept points, power supply voltage, as well as preferred package style. Customers can easily modify our standard designs based on their own performance criteria, which can reduce up-front engineering and development time, and result in cost savings and shorter lead times.



Filtered GPS LNAs | COTS-Based, MIL-Qualified Models

API Technologies' 312 Series Filtered GPS LNA is designed to amplify GPS signals by filtering out interference. This standard, off-the-shelf assembly has a short lead time, excellent anti-jam performance and a Sub 2 dB noise figure. It is configurable to user-specified gain, supply bias options, GPS band frequencies, and number of outputs. The 312 Series is COTS part qualified to the most critical of environments for military and airborne applications. Semi-custom and fully customizable designs are also offered.

API Technologies' customers benefit from unparalleled engineering and industry expertise. We provide complete standard and custom solutions in a timely manner. Our in-house machining, state-of-the-art engineering, and technology integration provide for rapid turn-around from prototype to production.