

RF/Microwave & Microelectronics Commercial Products

API Technologies RF/Microwave & Microelectronics | A leader in high-performance RF/Microwave and Microelectronic solutions, API designs, develops and manufactures one of the world's largest selection of filters, passive & active components, amplifiers, power amplifiers, sources, mixers, microelectronics and systems. Our custom designed and standard components support applications such as commercial, wireless, medical, GPS, industrial, oil & gas, commercial avionics, communications, and more. Our products are designed and proven to be high quality and highly reliable.



Filters | Co-location Solutions & Wireless Site Development

API Technologies (Utilizing the combined heritage of CMT, Salisbury Engineering, and FSY Microwave) has developed and produced high quality, High "Q" Filters since 1983, and assisted major wireless carriers and installers with co-location solutions at BTS sites. Key performance features include Low PIM (passive intermodulation), high isolation and low insertion loss. Our engineers and skilled operators represent decades of experience and innovation. We use state-of-the art design software, precision CNC machining, and the highest quality materials available. API is a qualified supplier to customers such as: AT&T, T-Mobile, Sprint-Nextel, Clearwire, GoGo Inflight Internet, CISCO, Motorola, Leap Wireless and many more. API also supplies product to federal, state and municipal communication networks.



Filters | Duplexers, Diplexers, Multiplexers

API Technologies is a leader in the design and production of customer driven, custom filtering solutions. Our Duplexer, Diplexer and Multiplexer designs allow multi-channel utilization for input multiplexing and output multiplexing. Transmit and Receive Channels are isolated by as much as 120 dB with insertion loss as low as 0.5 dB for each port. Our products are designed for extremely low PIM performance. Our Filters and Multiplexers are currently designed and deployed into Base Stations, Communication Towers and Mobile Platforms. API excels in working with the customer in design and development of custom electrical and mechanical specifications tailored to the precise needs and environment of the application.



Filters | High Performance Cavity, Lumped, Ceramic & Coaxial Filters

API specializes in high quality, highly reliable and economical RF & Microwave Filters for commercial applications such as public safety and wireless metering. Products operate in bands from 1 MHz to 50 GHz. Our portfolio of filter products include: Highpass, Lowpass, Bandpass, Bandreject, Duplexers, Diplexers, Multiplexers, and Multifunction Filter Based Assemblies. Our extensive program experience includes: Spectrum Clearing, Co-location Site Interference Mitigation, Communication Uplink / Down Link Systems, Point to Point (line of sight and NLOS) Communications, Broadband Networks, Wireless Test Equipment, and Medical Instrumentation.



SAW Filters | Standard and Custom Packages Available

API Technologies designs and manufactures high performance SAW Filters for commercial, industrial, medical, and military requirements. API provides standard solutions for narrowband and GPS band applications, standard IF and RF bands. Our designs include SPUDT, Tapered SPUDT, DART SPUDT, Coupled Resonator Filter (CRF), Impedance Element Filter (IEF), Transverse Coupled Resonator Filter (TCRF), Reflective SPUDT, Resonators, Surface Transverse Wave (STW), and non-dispersive delay lines. API's design library consists of filters from 20 MHz up to 2600 MHz with semi-standard and custom solutions available.



Passives | Delay Lines, Couplers, Power Dividers

API's broad offering of Couplers and Power Dividers include broadband directional couplers, low loss crossover couplers, TEMlineTM hybrid couplers, and Wilkinson power dividers. Within the product line, API offers models which feature high power handling up to 1500 watts, multi-octave broadband performance, band flatness within +/- 0.4 dB and low loss. Delay line types offered include BAW (Bulk Acoustic Wave), SAW (Surface Acoustic Wave), Coaxial – High Frequency, LC (Lumped Constant), and Steel–Pulse Compression. We are pleased to be able to support telecommunication, commercial, industrial and medical applications with our wide range of product offerings.



Amplifiers | Surface Mount, Pin Through Hole, Connectorized

API Technologies offers a broad selection of Low Noise Amplifiers (LNAs) up to 26 GHz. These amplifiers are provided to diverse markets such as Wireless Infrastructure, WLAN, Smart Energy, Connected Home and Automation, GPS/GNSS, Automotive, Test & Measurement, Energy Management. API Technologies amplifier solutions leverage the extensive design knowledge, technical leadership, manufacturing expertise and superior quality recognized over the years as Q-Bit and Amplifonix. Not only does API offer an extensive selection of off-the-shelf products, custom designs are an integral portion of our product offerings.



Power Amplifiers | GaN, LDMOS, GaAs, and Bipolar Device Technologies

API brings the use of today's most advanced tools to our design and manufacturing of Power Amplifiers operating up to 26 GHz and 1 KW pulsed output. In addition to the wide bandwidth and high efficiency, API can incorporate built-in user control interfaces, high input protection circuitry, built-in monitoring, voltage regulation, thermal temperature compensation, and harmonic filters fault monitoring to provide solutions to our customers varied requirements. Excellent design capability, plus API's extensive inhouse machining capability, provide for rapid prototype development and production. Select from our standard products or let our dedicated engineering staff develop your custom requirement.



Frequency Sources | Low Phase Noise and High Precision

API offers the broadest selection of sources in the industry. Configurations include standard or custom designs for Phase Locked Oscillators (PLO), Dielectric Resonator Oscillators (DRO), Coaxial Resonator Oscillators (CRO), SAW Oscillators, Voltage Controlled Oscillators (VCO), Digitally Tuned Oscillators (DTO), Frequency Multiplied Oscillators (FMO), Master Reference Oscillators (MRO), Multiplied Phase Locked Oscillators (MPLO), Comb Generators, and Frequency Synthesizers. API's Sources operate as high as 26 GHz. Whether you need low phase noise or superior frequency stability, API has a standard product or can design a custom part to meet your requirements.



Mixers | Frequency Ranges from 0.5 MHz to 26.5 GHz

API Technologies' hybrid mixer product line (formerly Magnum Microwave) offers products in both double and triple balanced configurations. Available in many industry-standard surface mount, drop-in and connectorized housings, these mixers are ideal for wireless and broadband communications, test and instrumentation, medical, industrial, or high reliability applications. API's excellent performance is achieved through component customization and optimization. API's mixers can be purchased as a standalone component, or can be combined with many of our other RF components for an integrated solution to meet specific performance or packaging needs.



Antennas | Single Band / Dual Band / Multi-Polarization / Arrays / Active Devices

Since 1998, the API family has produced Antennas for the commercial, medical, industrial, defense and space industries. The product line includes ceramic patch, 2x2 L-Band Array, Low Observable, Soldier Wearable, Thuraya, RFID tag for down-hole applications, Wi-Fi Pro Dual-Band antennas and various other specialized types and configurations. API's PA25 and PA45 ceramic patch elements and assemblies have Iridium and GlobalStar certifications. Our extensive line of antenna products can be found in countless applications and industries throughout the world. Choose from one of our standard designs, or let our talented engineering staff generate a custom design for your specific application.



Microelectronics | State-of-the-Art Engineering and Manufacturing Capabilities

API Technologies, a world class leader in the Microelectronic Vertically Integrated Solutions industry, is your one stop and full service partner for high performance products. Our expert engineers will design and manufacture your custom, build-to-print solutions, or work with you on your circuit design to create a microelectronic solution from prototype through qualification. Making your design, smaller, lighter, cooler and more reliable is what we do best. Our talented team works with multiple Microelectronics technologies including: Mixed Signal & Power, RF, Microwave & MMW, Optoelectronics & LED Illumination, Thin Film & SAW Fab, A/D & D/A Converters, PIN Diode Drivers.

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 full technology integration provide for rapid turn-around from prototype to production.

Learn more at http://micro.apitech.com

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