
RF & microwave signal conditioning
and electromagnetic spectrum
management solutions, from
components to complete subsystems.

SOLUTIONS GUIDE



RF/Microwave Components & Microelectronic Solutions

Applications include: Defense (CNI, Electronic Warfare, Jamming/Anti-Jamming, Radar, Missile Defense, C4ISR, UAV/UAS, IFF, Satellite Links, Military Aircraft), Space, Commercial (Wireless Service Providers, Wireless Telecom Infrastructure, Broadcast Networks, Energy, Land Mobile Radio, Public Safety, Automotive Radar, and Oil & Gas).



Powerfilm™ Surface Mount Resistive Products

- Flange Attenuators
- Chip Attenuators
- Flange Terminations
- Chip Terminations
- Flange Resistors
- Chip Resistors

RF & Microwave Filters

- Lumped Element, Cavity, Tubular, Ceramic, Suspended Substrate, Waveguide
- Duplexers, Diplexers, Triplexers, Multiplexers
- Switched Filter Banks
- Bandpass, Lowpass, Highpass, Band Reject

Passive & Active RF/Microwave Components Attenuators

- Attenuators
- Digital Programmable Attenuators
- Terminations and Loads
- DC Blocks
- Power Dividers and Splitters
- Bias Tees
- Gain Equalizers
- Adapters and Connector Systems – Planar Blindmate®
- Delay Lines
- Rotary Joints
- Phase Shifters
- Power Dividers/Couplers
- Mixers
- Switches
- Limiters
- Detectors
- A/D & D/A Converters
- Patch Antennas
- Diodes

Integrated Microwave Assemblies

- Amplifier, Filter, and Frequency Generation-Based Integrated Assemblies
- Up/Down Converters
- IFMs & Discriminators
- Transmit Receive Modules

Subsystem Solutions

- Active Antenna Array Units
- Amplifier Subsystems
- Frequency Generation Subsystems
- Receiver Front Ends
- Attenuator-Based Subsystems
- Switch-Based Subsystems
- Phase Shifter Subsystems

Microelectronics

- PIN Diode Drivers
- Thin Film
- Thin Film Chip Resistors
- Thick Film
- Optoelectronics
- High Temperature Electronics
- SAW Filters
- SAW Oscillators
- SAW Delay Lines
- Multi-Chip Modules (MCMs) & Hybrid Microcircuits
- Substrate Printing
- A/D & D/A Converters
- High Power DC/DC Converters
- PCBa, Box Manufacture and Assembly

Amplifiers

- High Power Amps
- High Linearity Amps
- Low Phase Noise Amps
- Low Noise Amplifiers
- Filtered GPS LNAs
- Automatic Gain Control Amps
- Drivers & Gain Blocks

Frequency Sources

- Phase Locked Oscillators (PLO)
- Dielectric/Coaxial Resonator Oscillators (DRO/CRO)
- Voltage Controlled Oscillators (VCO)
- Frequency Multipliers
- Surface Mount Synthesizers
- Master Reference Oscillators
- Synthesizers

Power Distribution & Conversion

- Switched Power Distribution Units
- Intelligent Power Distribution Units
- Tactical Power Supplies
- Power Entry and Export Panels



Electromagnetic Integrated Solutions

Applications include: Industrial, Medical, Alternative Energy, Transportation, Commercial & Military Aircraft, Communication, and Defense.

Coaxial Filters & Interconnects

- Surface Mount Filters
- Resin & Hermetically Sealed Filters
- High Current/High Voltage Filters
- Miniature and Large Diameter Solder-in and Press-in Filters
- Filtered Arrays
- D-Sub Filtered Connectors

Magnetics

- Current Transformers
- Power Inductors/Chokes
- Switch Mode Power Supply Inductors
- Lighting Chokes & Inductor/Filters
- Toroidal Power Transformers
- Laminate Power Transformers
- Modem & Module Transformers
- Air Coils





Secure Systems & Information Assurance Solutions

Power Filters

- Commercial Power Filters
- Military/Aerospace Power Filters
- Power Entry Modules
- Feed-Through Filters
- EMP/HEMP Filters

Specialty Connectors

- Circular Connectors
- Mini-MIL Connectors
- Audio Connectors
- Rapid Mate Connectors
- Value-Added Terminations
- Specialty Unfiltered Connectors
- Transient Suppression Connectors
- Black Nickel Zinc Connectors

Ceramic Capacitors

- Switch Mode Power Supply Capacitors
- Tubular Capacitors
- Discoidal Capacitors

Applications include: Defense, Government & Civilian Agencies, Industrial, and Commercial.

EMCON®/SST™ TEMPEST Products

- Workstations
- Monitors
- Thin Clients
- Zero Clients
- Rugged Laptops
- Video Teleconferencing
- Phones
- Enclosures
- Switches
- Printers
- Scanners
- Other accessories

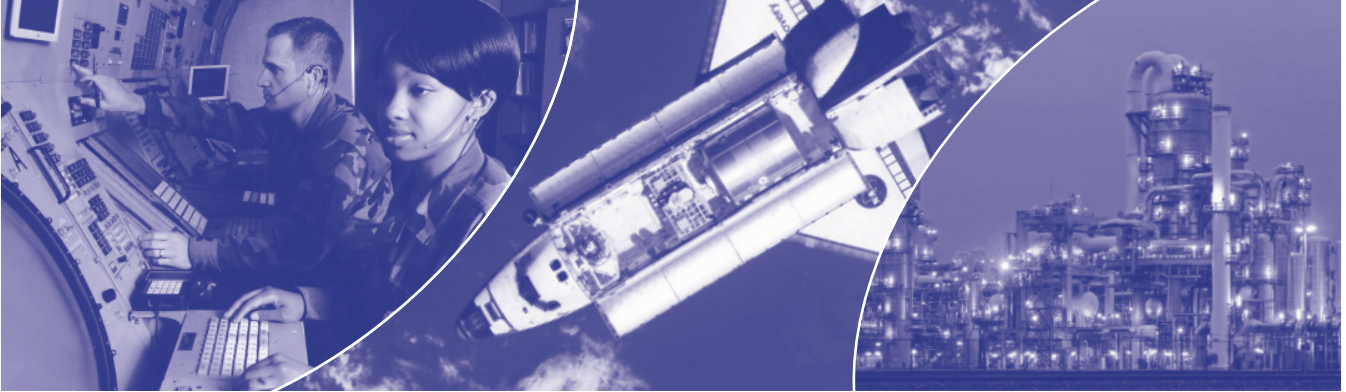
ION Networks Products

- Privileged User Access: Remote device administration software, PRIISMS, and appliances
- CAC and Personal Identity Verification (PIV) access and authentication
- USB and device security solutions

Build-to-Print & Custom Solutions

API Technologies is a fully integrated “one-stop shop” for engineering and manufacturing of OEM, box builds, build to print, and custom solutions. In addition to designing your customer solution, API is also able to repair hardware and equipment that is no longer supported by the OEM, extending the life of many older, otherwise obsolete designs.

Markets & Applications



Government & Defense

API provides rugged, reliable, and efficient subsystems, assemblies, and components for use in the most mission critical defense and military applications, supporting government programs throughout the world. With diverse program experience and preferred supplier status with some of the industry's top prime contractors, our precision-engineered MIL-grade products are ideal for applications where uncompromised reliability and uninterrupted performance is required.

Applications:

- Electronic Warfare
- Ground, Air, Naval, & Satellite Communications
- Broadband Jamming
- Radar, ELINT, & SIGINT
- Missile Defense
- Military Aircraft
- C4ISR

Space

Designed to withstand the most extreme environmental conditions, API's portfolio of space products includes hybrids, multi-chip modules and diodes, integrated assemblies, and a variety of components including amplifiers, VCOs, filters, mixers, attenuators, and terminations screened to meet customer and application-specific requirements. API has a rich heritage of supplying products for space programs, dating back to 1976.

Applications:

- LEO, MEO, & GEO Satellite Payloads
- Satellite Ground Communications
- Launch & Re-Entry Vehicles
- Scientific Missions
- Deep Space Exploration

Commercial & Industrial

API provides high performance filter products, and high reliability attenuators and terminations to fulfill the most challenging wireless, telecom, and test and instrumentation applications. Specializing in meeting the highest performance requirements, API brings industry expertise in rugged and harsh environments by providing high temperature electronics and electronic assemblies designed for commercial aerospace, oil & gas, medical, and industrial applications.

Applications:

- Commercial Avionics
- Wireless Site Development
- Co-Site Interference Mitigation
- Test & Instrumentation
- Oil & Gas
- Industrial
- Healthcare & Medical Devices

Featured Certifications

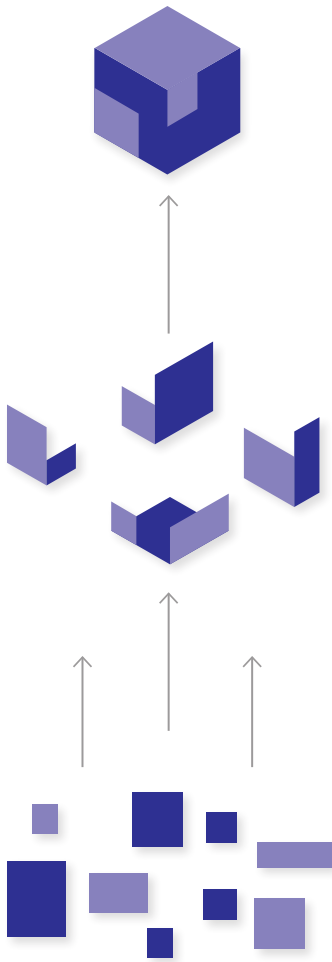
ISO-9000
AS-9100

ISO-13485
MIL-PRF-15733

MIL-PRF-28861
MIL-C-11015

MIL-PRF-49470
MIL-PRF-38534

Class H&K



Value-Added Integration

From components to subsystem solutions

API provides rugged, reliable, and efficient subsystems, assemblies, and components for use in the most mission critical defense and military applications, supporting government programs throughout the world. With diverse program experience and preferred supplier status with some of the industry's top prime contractors, our precision-engineered MIL-grade products are ideal for applications where uncompromised reliability and uninterrupted performance is required.



API Technologies is an innovative designer and manufacturer of high performance systems, subsystems, assemblies and, components for technically demanding RF, microwave, millimeterwave, electromagnetic, power, and security applications. A high reliability technology pioneer with over 70 years of heritage, API's products are used by global defense, industrial, and commercial customers in applications spanning radar, electronic warfare, unmanned systems, missile defense, harsh environments, space, communications, medical, test and instrumentation, and more.

What We Do

Electromagnetic Spectrum Management

Innovative security solutions to protect users from the loss of classified data due to unwanted emanations and conducted emissions. Electromagnetic and filtering solutions to mitigate signal interference in high performance defense and mission critical applications.



RF and Microwave Signal Conditioning & Management

RF, microwave, millimeterwave, and power solutions to enable the wireless link across global defense, commercial, space, and test applications.
