Space Solutions

APITech designs and manufactures RF, microwave and hybrid components, microwave semiconductors, and microelectronic assemblies for space systems, satellites, launch vehicles, and associated support networks. With a rich space heritage dating back to 1976, APITech has proven experience participating in space programs, including deep space and scientific missions and several satellite communications projects.

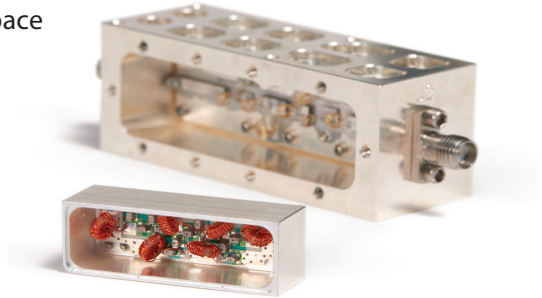
Many standard RF components can be qualified to space, meaning customers have access to space-approved standard designs as well as custom, radiation-hardened solutions designed to withstand the most extreme environments.

With space manufacturing centers of excellence in the US and UK, API offers a wide range of specialized space and hi-reliability certifications and testing capabilities. These facilities offer a wide range of in-house mechanical and environmental screening and auto-electrical testing for element evaluation as well as completed product qualification.

Space Filters, Diplexers, Multiplexers

APITech is a leader in the design and production of customer-driven, custom filtering solutions, filter components, and multifunction filter-based assemblies for use in defense and commercial satellite payloads.

- Designed to meet the harshest of spacecraft launch vehicle profiles and operational spacecraft operating environments
- Product solutions engineered for use in space exploration, DOD, commercial, LEO, MEO, GEO, and deep space



Microelectronic Hybrids & MCMs

Utilizing technologies like RF, microwave, mmW, mixed signal and power, and optoelectronics, APITech develops custom microelectronic solutions, hybrid components, microcircuits, multi-chip modules, and microelectronic assemblies for defense, space systems, satellites, and avionics.

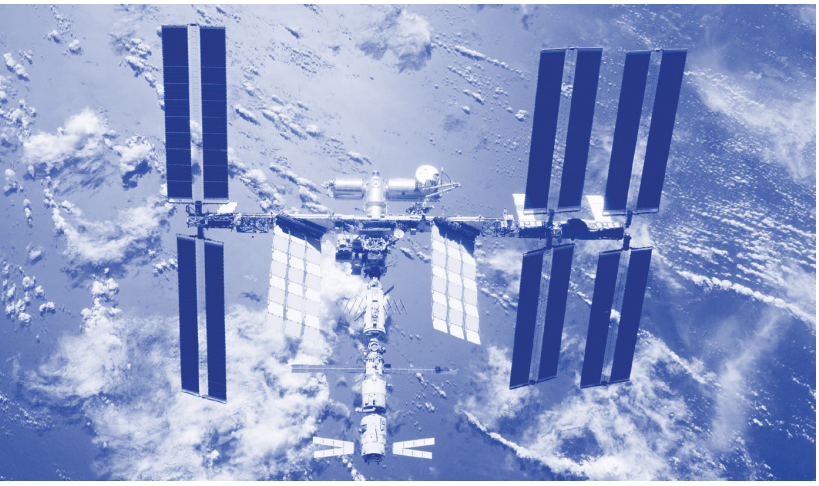
- Expertise in hybrid engineering and thermal design
- State-of-the-art manufacturing processes and testing capabilities

SAW Products

Using the latest methods in SAW technology, APITech designs and manufactures high performance SAW filters and oscillators for high-reliability space applications.

- Space-qualified voltage-controlled SAW oscillators (VCSOs) offered standard or modified to customer requirements
- Produced in a MIL-PRF-38534 Class H & K facility
- Rigorous pre-seal and post-seal electrical testing for critical parameters

Space Solutions



RF, Microwave Components Qualified to Space

APITech's space-qualified RF components are designed and manufactured to withstand harsh environments, offering high performance and reliability in mission-critical applications.

- High-reliability portfolio includes mixers, waveguide and coaxial limiters, couplers, low phase noise amplifiers, and high linearity amplifiers

Space Diodes

APITech's line of Pin, Lim, Step Recovery and Tuning Varactor microwave diodes for space have decades-long heritage and history of the most robust and reliable on the market.

- Tested to MIL-STD-750 , MIL-STD-202 and ESA 5010 (ESA QPL Listed; detail specifications ready written and available)
- UK-designed and manufactured in a Class H & K facility and ITAR Free

Fixed Coaxial Attenuators

APITech fixed attenuators are designed with industry-leading features, making them virtually impervious to extreme shock, vibration and thermal extremes.

- Proprietary spring-loaded grounding and launch mechanisms
- No solder joints used
- Injection-molded connectors for consistency, reliability, and superior EMI performance
- Broadest, high-rel attenuator product line offered, covering 2 to 25 watts and frequencies up to 40 GHz

Surface Mount Attenuators, Terminations and Resistors

Powerfilm surface-mount products by APITech are uniquely suited for space applications where size and weight come at high premium.

- Manufacturing, test, and inspection processes designed for manufacturability and maintained at the highest levels of quality
- Powerfilm attenuators, terminations, and resistors screened at space-level requirements available as surface-mount chips and flange assemblies

Testing

- Environmental to IECQ, MIL-STD-883 and MIL-STD-202
- Up-screening of selected passive component and active die lots
- Completed product qualification
- ISO 17025 accredited facility

Space Solutions

Program Heritage

Deep Space

APITech's space-qualified RF components are designed and manufactured to withstand harsh environments, offering high performance and reliability in mission-critical applications.

- Galileo
- Cassini
- USERS (2 sats)
- Selene & Okina
- Mars Phoenix
- Lunar Reconnaissance Orbiter
- OCO
- LCROSS
- Mars Science Lab
- ISS Kibo EF
- Mars Curiosity Rover

Scientific Missions

- SAOCOM
- Hershel Plank
- AMS-02
- Aquarius (SAC-D)
- Lisa Pathfinder
- Juno
- Grail (2 sats)
- EnMap
- Vegetation
- Cassini
- Meteosat

Launch & Reentry Vehicles

- Taurus
- Minuteman
- H-II

Deep Space

APITech's space-qualified RF components are designed and manufactured to withstand harsh environments, offering high performance and reliability in mission-critical applications.

- GPS-2F
- Prima
- O3B
- Immarsat
- Intelsat
- Sirius Radio
- Direct TV
- Optus 10
- Amazonas 3
- Thor 7
- MUOS
- Military Classified
- Hot Bird
- MARECS
- Olympus
- SkyNet
- Eutelsat
- Koreasat

Certifications

- MIL-PRF-38534 Class K
- MIL-PRF-38534 Class H
- AS9100
- ISO9001
- IPC-610 Class 3
- J-STD 001
- MIL STD 883
- ESA/SCC 5010- Microwave Diodes QPL