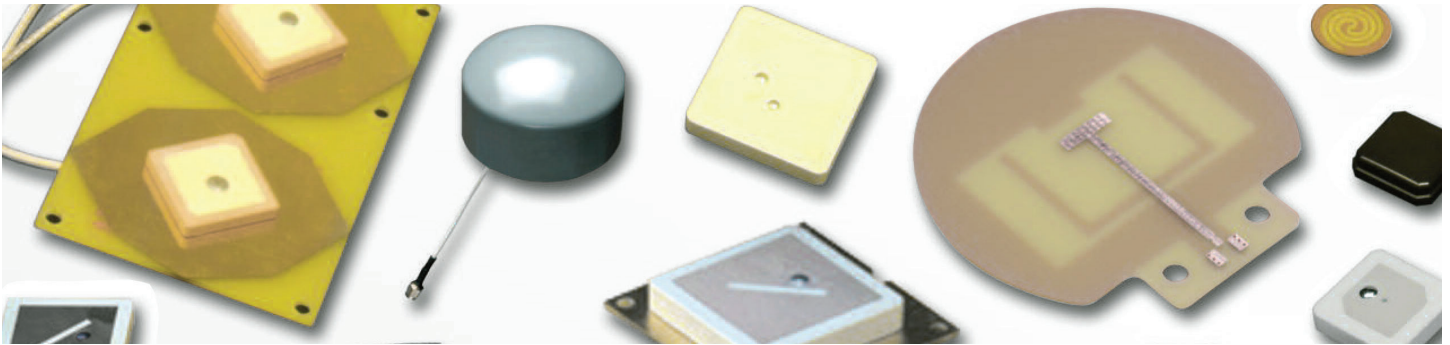


Antennas & Antenna Assemblies

High Frequency, Broad Bandwidth Standard & Custom Antenna & Antenna Assemblies for Critical Data Transmission Applications



Finding the ideal antenna to ensure the wireless reception can be a challenge. API Technologies' designs and manufactures custom application-specific antennas as well as many off-the-shelf catalogue products. Our engineers use sophisticated simulation software and in-house testing to optimize performance and our vertical integration capabilities allows us to use a wide range of materials and deliver production volumes in shorter lead times.

Performance Characteristics

- Frequency Ranges from 150 MHz to 12 GHz
- Small Footprint
- Lightweight
- Rugged
- Low VSWR
- High Efficiency
- High Gain

Available Antenna Types

- Patch
- High-Gain Planar Array
- Passive & Active Assemblies
- Soldier Wearable
- Aperture
- Slots
- Loops/Magnetic Dipole
- Helical-Mono-Filer, Bi-Filer, Quadra Filer
- Custom Network/Balun
- Spiral
- Cavity Backed

Applications

- Satcom (Iridium, Globalstar, Inmarsat)
- Asset Tracking Devices
- Portable Defibrillators & EMS Notification
- Thoroughbred & Sport Dog Racing Monitoring
- Tank Monitoring
- Fish, Golf Range and Directional Finders
- Highway Safety
- Remote Meter Reading
- Down-Hole Drilling
- Machine to Machine Communication
- Weather Recorders/Balloons
- Short Distance Wireless Data Transfers
- Marine/Ocean Buoys
- Surveying Equipment
- Homeland Security
- Marathon /Race Timing Tags

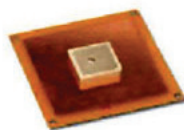
Off-the-Shelf Ceramic Patch Antennas



Features:

- Temperature stable (-40°C to +105°C)
- Low return loss
- Small Footprint
- Low cost
- Uniform dielectric constant
- Offset single-point feeding method
- Custom designs available (900 MHz to 5.8 GHz)
- Silver plated electrode and probe
- Surface mount
- 50 Ohm impedance
- RoHS parts available

Patch Antenna Assemblies – Optimized Designs for Peak Performance



AC Series

Patch Antenna mounted on a ground plane with a connector mounted directly to the PCB. Standard connector is SMA.



AP Series

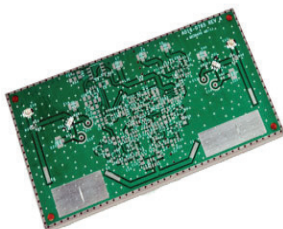
Patch Antenna mounted on a ground plane with a pigtail cable to a connector. Standard designs have 6" (15.2 cm) RG-316 cables, connector varies by application. Alternative lengths and connectors available.



AR Series

Patch Antenna mounted on an optimized ground plane with a pigtail cable to a connector, which is tuned and packaged for the plastic radome that covers the complete assembly. Standard cable is RG-316 to MMCX or SMA connectors, others available.

Antenna Assemblies – Frequency Range: 130 MHz to 15 GHz



Custom integrated antenna assembly solutions for military, Satcom, GPS, and commercial applications covering wide frequency bands: UHF, L-Band, S-Band, C-Band and more.

Capabilities:

- Antenna Arrays
- RFID tag for Down-Hole
- Solider Wearable Antennas
- Low Observable Antennas