

# THREE FRONTS OF INNOVATION FOR GOVERNMENT AND DEFENSE

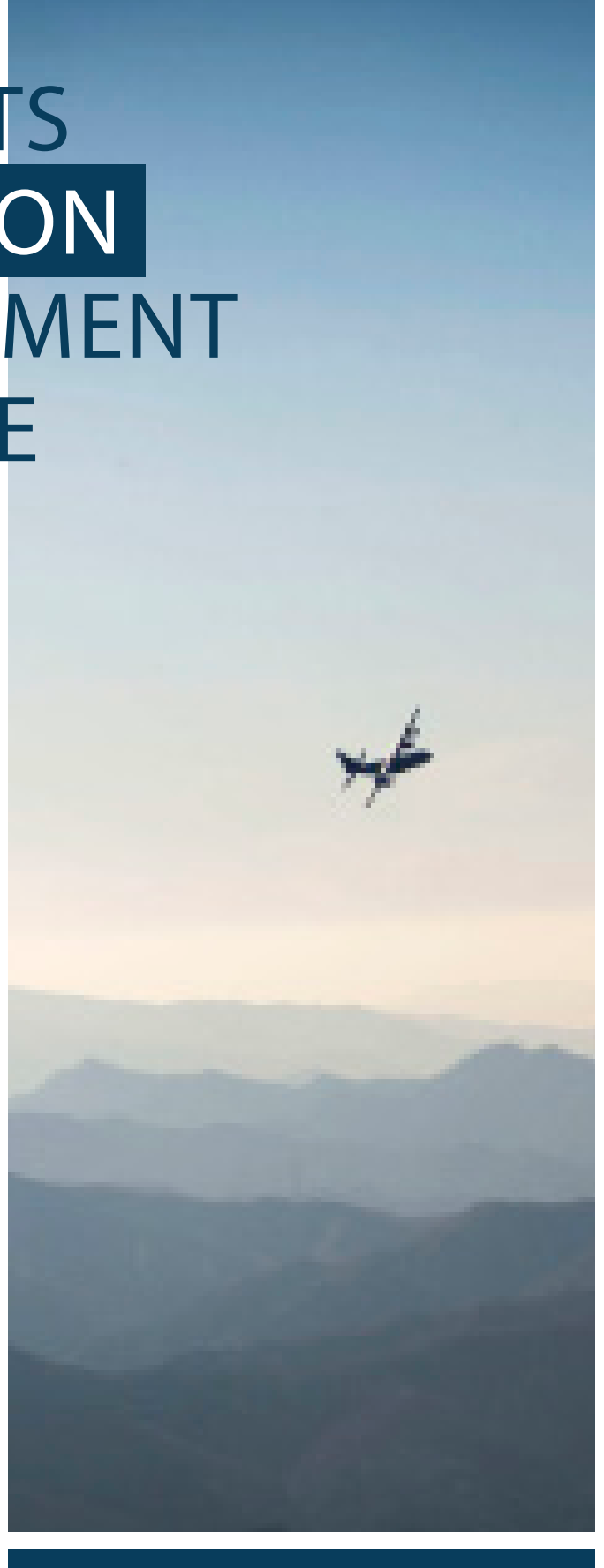
**G**overnment and defense agencies share a critical mission – to protect lives. Whether that’s on the battlefield or across the homeland, it demands failsafe communication. And today, government defense agencies around the globe are pushing communications further to give them every advantage to get the mission done.

For military organizations, it looks like this: military aircraft exchanging data, voice and high-definition ISR video with troops on the ground and at sea. Navy vessels rigged with full broadband capabilities. Land-based vehicles transformed into mobile command units. Soldiers on the ground equipped with total communications access through portable, light-weight, power-efficient terminals. The goal is total situational awareness and coordination at every level of command.

For government agencies, it means secure, reliable and dedicated networks that function independent of core fiber and wireless systems. Networks that ensure diplomatic connectivity, advance public safety and support humanitarian efforts in any location.

Yet, supporting all these applications is more difficult than ever as bandwidth requirements surge, technology budgets fall and end-user specifications grow increasingly sophisticated.

That’s the context in which iDirect has engineered the next-generation of our Evolution® technology. iDirect Evolution sports a new line-up of high-performance remotes designed for the high throughput requirements and the toughest field assignments. Evolution delivers new efficiency advances that can stretch satellite capacity budgets, and features expanded security capabilities that meet most stringent industry and military standards.



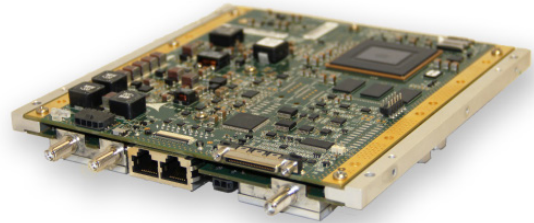
# 1 ON THE PERFORMANCE FRONT



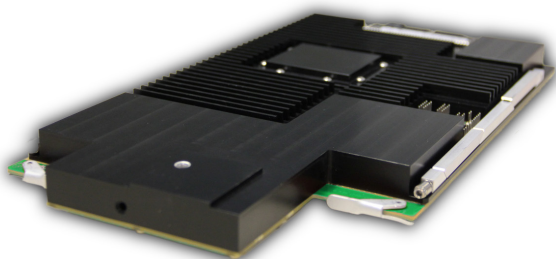
Performance means supporting bandwidth-intensive applications like airborne ISR. But it also means decreasing size, weight and power requirements for man-portable systems.

Addressing both the sets of needs with a single solution, iDirect is unveiling the 9-Series as part of its next-generation remote portfolio. The 9-Series pushes throughput levels to new heights, increases security standards and offers enhanced portability and ease of deployment with significant reductions in size, weight and power.

The 9-Series lineup includes the **iDirect 950mp Integrated Satellite Router Board**. Designed for integration into highly portable Communications on the Move (COTM) solutions, this router is 30% smaller than iDirect's previous man-portable board. It features embedded FIPS 140-2 Level 3 encryption and is designed to operate within all Ku, C, Ka and X band including Wideband Global SATCOM (WGS) frequency ranges, providing flexibility in secure network deployments.

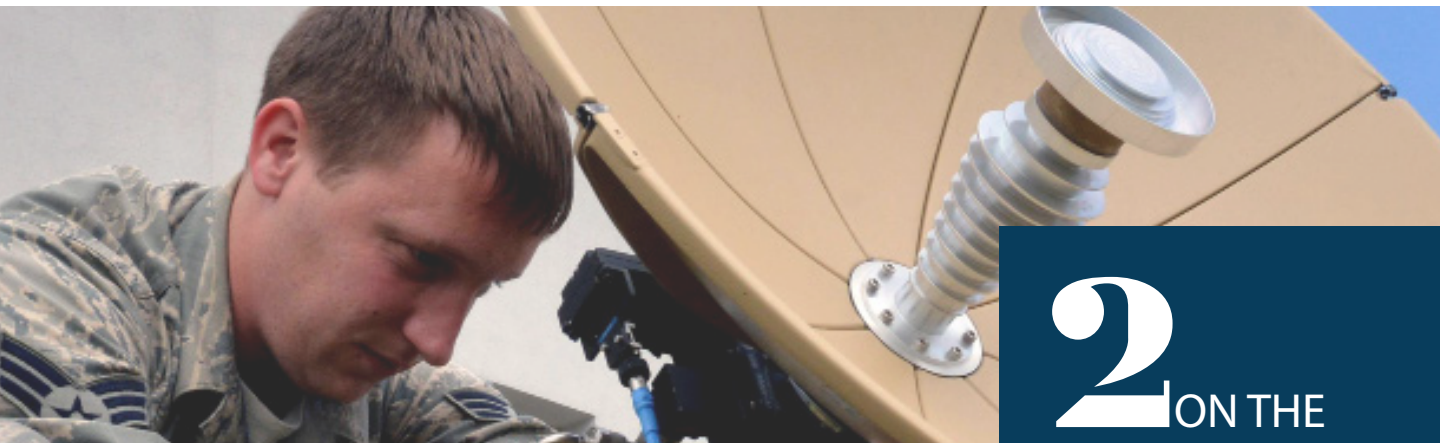


Available in both board level and rack mount options, **iDirect 900/9350 Series Satellite Routers** provide unprecedented performance, dual demodulators (for the U.S. DoD networks utilizing multiprotocol encapsulation (MPE) traffic) and greater efficiency. Service providers can implement the most efficient technology dependent on their network architecture.



The **980 Airborne Integrated Satellite Router Board** is a board level router, designed specifically for operation on military aircraft. Its improved performance, dual demodulators for seamless beam-switching, spread spectrum returns and skew angle compensation support aeronautical operations, enabling the use of ultra-small and phased-array antennas on military aircraft.

iDirect 9800AE and 9800AR Airborne Satellite Routers incorporate the powerful 980 board level router. Available in two form factors, ARINC 600 Enclosure (AE) and 1RU Rack Mount (AR), they are designed to meet the stringent certifications required for installation on aircrafts. With its upgraded performance, security and efficiency features, this series is primed to protect military-grade communications.



## 2 ON THE EFFICIENCY FRONT

Delivering the most effective technology for the government and defense sectors is about more than performance. Given the increase in capacity volume through HTS and WGS, the need to optimize the network remains very critical. iDirect is ensuring that Evolution is DVB-S2X ready. By the time the new satellite capacities become available, operators will be able to take advantage of even more efficiency gains through even higher MODCODs and an easy migration path to the DVB-S2X standard, future proofing their investment in Evolution.

When it comes to deployments in any environment, the platform leverages adaptive carriers with the latest advances in ACM and Adaptive TDMA. This helps to improve efficiency and network availability, as well as adjust optimal operating parameters in real time, given changing link conditions. This conserves bandwidth, helping customers make better use of their existing resource.

Improved roll-off factors, as well as DVB-S2 and TDMA waveform enhancements, such as distributed pilots, are important for satellite service providers to keep costs low without sacrificing quality.

# 3 ON THE SECURITY FRONT

The importance of security for government and defense organizations cannot be overstated. That's what makes it critical to work with a platform that meets the highest military security requirements.

Today, iDirect's Evolution system fulfills TRANSEC and FIPS requirements. And Evolution line cards and remotes support FIPS 140-2 Level 3. Now a new encryption-empowered TRANSEC module supports both two-way TRANSEC and one-way TRANSEC, which secures communications on receive-only terminals.

Evolution's defense integrated router boards are specifically designed for integration into COTM solutions and to meet the operational requirements of the WGS defense satellites and commercial HTS capacities.

## READY FOR ANYTHING

Satellite service providers working with government and defense customers play a critical part in ensuring military and governments are always readily connected via land, air or sea, no matter where the next deployment may be. New Evolution improvements to performance, efficiency and security deliver what it takes today across any front, and provide an easy upgrade path to future capabilities.



[www.idirect.net](http://www.idirect.net)



[www.idirectgov.com](http://www.idirectgov.com)