



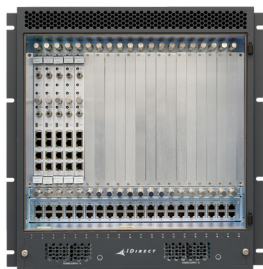
# EVOLUTION DEFENSE PRODUCT PORTFOLIO

**ST Engineering iDirect's product portfolio combines innovative technology and solutions to support all your networking requirements for bandwidth, location, satellite frequency, topology or application.**

Our product lines are high-speed, two-way, IP-based communications system, engineered to the highest military standards. With DVB-S2/ACM and Adaptive TDMA it offers a reliable, efficient solution. ST Engineering iDirect's portfolio consists of universal hubs and line cards that can span networks of up to 5 satellites. Our remote portfolio features rackmount routers, aero solutions and integrated router boards optimized for size, weight and power that can be integrated by our partners into specialized portable and mobile systems. Embedded mobility and security enable secure communication for military applications, in any environment, fixed and mobile.

ST Engineering iDirect enables government and military to deploy secure, high-speed connectivity anywhere, delivering immediate access to mission-critical information.

# Satellite Hubs and Linecards



## Series 15100 Universal Satellite Hub (5IF/20 Slot)

The Series 15100 Universal Satellite Hub is our largest, most flexible satellite hub system enabling unparallel two-way VSAT satellite solutions. The hub houses up to 20 line cards, providing a very modular approach to growth. Operators can start off with just a few remotes in one network and easily scale to several thousand remotes on multiple networks. The Series 15100 brings a new level of scalability designed for growth and performance.

- Supports DVB-S2 TRANSEC for improved security
- 5IF version supports X, Ku, C or Ka-Band on up to 5 satellites
- Enables Virtual Network Operator (VNO) management reducing capital investments and increasing ROI



## Series 11000 Tactical Hub (1IF/2 Slot)

The Series 11000 Tactical Hub is our deployable hub solution optimized around size, weight, power (SWaP) and setup enabling unparalleled two-way, VSAT satellite solutions. The chassis is ideal for military, comms-on-the-pause, first responders, disaster recovery, or other field operations.

- MIL-STD 810G certified for temperature, altitude, humidity and shock and vibration
- 2RU chassis with 1 DLC-R and 1 DLC-T line card embedded
- FIPS 140-2 Level 3 and TRANSEC



## Defense Line Cards

Industrialized for military and government applications, defense line cards feature DVB-S2/ACM on the outbound and Adaptive TDMA on the inbound. The Defense Line Cards (DLCs) are compatible on both the Evolution and Velocity platforms and are FIPS 140-2 Level 3 certified with an onboard TRANSEC module. Models include:

- DLC-R
- DLC-T

# Defense Satellite Routers



9350



9800 AE



9800 AR

## 9-Series Defense Satellite Routers

The 9-Series provide a higher level of IP broadband capability, featuring DVB-S2/ACM, an embedded 8-port GigE switch, and dual demodulators. Service providers can implement the most efficient technology dependent on their network architecture, resulting in a more cost efficient use of extremely small antennas on aircraft, maritime and land-based vehicles for government and military applications. Models include the 9350, 9800 AE and 9800 AR.



950mp



e150



980

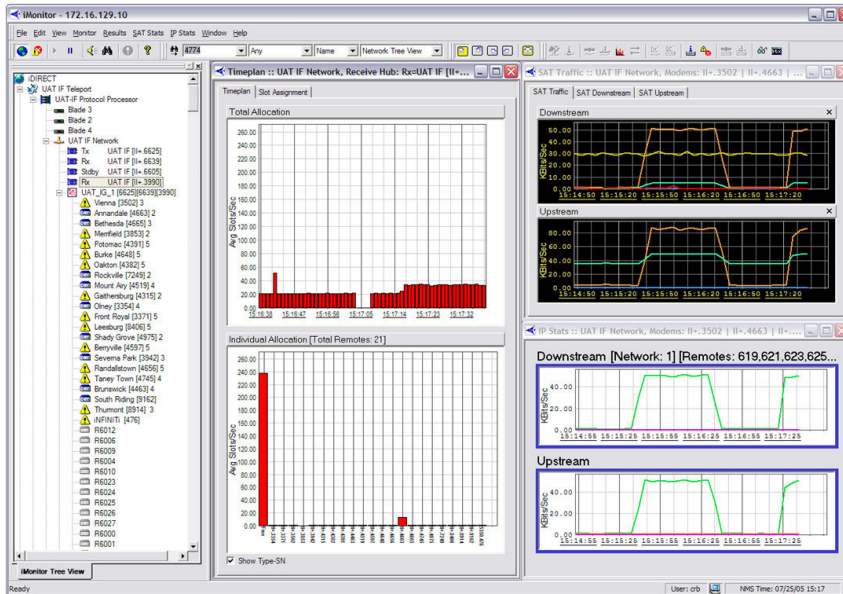
## Defense Integrated Router Boards

The Defense Integrated Router Boards are designed to be easily integrated into portable solutions. Meeting stringent demands for mobility and security, the router boards deliver always-on broadband capabilities that support data, voice, and video connectivity for military and government applications. The routers are TRANSEC, WGS certification-ready, and FIPS 140-2 Level 3 certified. Models include the 900, 950mp and e150. Model 980 is designed for ultra HS-COTM with dual demodulators and extended frequency range.

Features	9350	950mp	980	9800 AE	9800 AR	e150
DVB-S2/ACM	✓	✓	✓	✓	✓	✓
Adaptive TDMA	✓	✓	✓	✓	✓	
Dual Demodulators	✓		✓	✓	✓	
FIPS 140-2 L3 TRANSEC Module	✓	✓	✓	✓	✓	
256-Bit AES Encryption*	✓	✓	✓	✓	✓	✓
TCP and HTTP Acceleration	✓	✓	✓	✓	✓	
Spread Spectrum	✓	✓	✓	✓	✓	✓
WGS Certified	✓	✓	✓	✓	✓	
QoS Prioritization	✓	✓	✓	✓	✓	✓
Embedded Ethernet Switch	✓	✓		✓	✓	
HS-COTM (Airborne)			✓	✓	✓	

\*Applies to iDirect Velocity and is release-dependent.

# Network Management



## iVantage

ST Engineering iDirect's iVantage® Network Management System (NMS) is a complete suite of software-based tools to configure, monitor and control an entire satellite network from single or multiple locations. iVantage® transforms the way complex satellite networks are managed with its intuitive visual interface and built-in intelligence that automatically anticipates potential network outages and provides real-time network performance analytics.

**For more information on our product portfolio,  
please visit [iDirect.net/Products](http://idirect.net/Products)**