

## iDirect Satellite Routers



Advancing a Connected World

The **iDirect Intelligent Platform™** integrates advanced technology into iDirect's product portfolio and management software to address the growing complexity of deploying and managing global IP networks. iDirect offers a powerful range of universal satellite hubs, versatile satellite routers, and a series of application-specific, network products such as accelerators and optimization solutions.

The iDirect portfolio of **satellite routers** provide connectivity to a shared bandwidth platform spanning multiple satellites. iDirect offers a full line of compact satellite routers that integrate a satellite modem and IP router with TCP optimization over satellite, QoS prioritization and compression into an easily <u>deployed, reliab</u>le one-box design.

iDirect's family of routers consists of iNFINITI® TDM and Evolution® DVB-S2 models, as well as the iConnex family of router boards that can be easily integrated into third-party solutions.

## **Evolution® Satellite Routers**

iDirect's Evolution routers support DVB-S2 with Adaptive Coding and Modulation (ACM), a bandwidth-efficient technology for networks with larger outbound capacity requirements. iDirect's DVB-S2 was designed and developed around IP and uses extremely efficient encapsulation techniques that deliver speeds up to 140 Mbps.



#### **Evolution® X3 Satellite Router**

With DVB-S2 and ACM on the outbound and deterministic TDMA on the return, the Evolution X3 maximizes the efficiency of satellite capacity to enable new opportunities for star topology networking. The Evolution X3 is supporting a wide range of carrier IP data rates, FEC codes and modulation types.

- Star topology
- Optional 256-bit AES encryption



#### **Evolution® X5 Satellite Router**

The Evolution X5 features dual-mode operation of DVB-S2/ACM or iNFINITI TDM on the outbound, supporting speeds up to 140 Mbps.

Designed specifically to support business-critical applications, the Evolution X5 is a next-generation satellite router ideally suited for broadband applications such as enterprise connectivity, cellular backhaul, maritime, and other mobile applications.

- Star and future support for SCPC- return upstream channels
- Deterministic MF-TDMA return channel with 2D 16-State FEC on the inbound
- Optional 256-bit AES encryption and Spread Spectrum waveform technology supports very small antennas

#### Evolution<sup>®</sup> 8000 Series Satellite Router

The Evolution 8000 Series provides a new level of IP broadband capability, supporting both the DVB-S2/ACM and the iNFINITI® outbound technologies. 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.

- Star, mesh, and SCPC topologies
- Integrated Spread Spectrum waveform technology supports very small antennas
- Unique FIPS 140-2 certified, TRANSEC security with 256-bit AES encryption
- Supports WGS IF ranges: 950-2000 MHz



### iNFINITI® Satellite Routers

iDirect's iNFINITI routers support a unique IP-based TDM/D-TDMA satellite transmission technology that enables customers to intelligently share network capacity across multiple locations, allocating bandwidth in real time and on demand.

# ------

#### iNFINITI® 3000 Satellite Router

The iNFINITI 3000 Series is designed as an easy-to-deploy solution that can support IP data rates up to 18 Mbps outbound and up to 5 Mbps inbound. The routers also come as a narrow-band model capable of delivering the same inbound IP data rates, but limited on the upstream to 200 kbps.

- Star topology
- Advanced QoS prioritization



#### iNFINITI® 5000 Satellite Router

The iNFINITI 5000 Series is designed to support critical business applications for medium to large enterprises that require maximum flexibility, higher traffic and advanced interoperability with their existing infrastructure. The routers can support IP data rates up to 20 Mbps outbound and up to 6.5 Mbps inbound.

- Star, mesh and SCPC topologies
- Optional 256-bit AES encryption
- Advanced QoS prioritization



#### iNFINITI® 7000 Satellite Router

The iNFINITI 7000 Series meets the requirements of the military and government with a secure, high performance broadband connectivity with speeds up to 20 Mbps on the outbound and up to 6.5 Mbps on the inbound.

- Star, mesh and SCPC topologies
- Unique FIPS 140-2 certified, TRANSEC security with 256-bit AES encryption
- Advanced QoS prioritization

## iConnex Satellite Router Board

The iConnex Satellite Router Boards are compact, lightweight router boards designed to be integrated into third-party solutions to support VSAT communications. The iConnex Series supports the same functionality and performance as the stand-alone routers. iConnex board features include:

- Optional 256-bit AES encryption
- Built-in TCP and HTTP acceleration
- Advanced QoS prioritization
- Built-in 8-port Ethernet switch
- Higher processing power to support more concurrent TCP sessions
- Interface for GPS input or Antenna Control Signaling



#### iNFINITI® iConnex Satellite Router Boards

The iNFINITI Series Satellite Router boards are designed to be integrated into solutions that support critical business applications for medium to large enterprises that require maximum flexibility, higher traffic and advanced interoperability with existing infrastructure. Available in the following models:

- iConnex 300
- iConnex 500
- iConnex 700



#### **Evolution® iConnex Satellite Router Boards**

The Evolution Series Satellite Router boards are designed to be easily integrated into portable solutions. To meet the most rigorous demands for mobility and security, Evolution iConnex boards deliver always-on broadband capabilities into smaller form factors that support data, voice, and video connectivity in highly mobile military and government applications. Available in the following models:

- iConnex e800
- iConnex e850mp

#### **About iDirect**

iDirect, a world leader in satellite-based IP communications technology, transforms the way the world gets and stays connected. Our satellite-based IP communications technology enables constant communication for voice, video and data applications in diverse and challenging environments. These include:

- Supporting critical IP applications across the enterprise from VoIP and VPN, to streaming media
- Expanding cellular networks deep into rural and remote areas
- Providing back-up networks during network failure to assure business continuity
- Keeping emergency response teams in touch and in control
- Providing reliable, high-speed mobile broadband connectivity at sea or in the air that improves operations and crew welfare

We invite you to learn more about our product family at: idirect.net/Products

#### iDirect

13865 Sunrise Valley Drive Suite 100 Herndon, VA 20171 +1 703.648.8000 +1 866.345.0983 www.idirect.net

Advancing a Connected World

