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Leveraging the Benefits of Satellite

Satellite communications has emerged as an integral part of global IP networks. Customers demand enterprise-class, high speed, secure IP voice, video and data applications wherever they are. Terrestrial and wireless networks are inherently limited in their ability to provide this degree of connectivity.

Satellite communications provide a multitude of benefits:

Anytime, anywhere accessibility; satellite technology is immune to the challenges posed by difficult terrain, remote locations, harsh weather and terrestrial obstacles. It can provide a terrestrial-grade experience for voice, video and data.

High reliability, providing constant connectivity even when terrestrial networks fail. Enterprises can maintain business continuity with built-in redundancy and automatic backup service.

Extremely secure. With encryption technology satellite can provide an even more secure connection than terrestrial networks.

Cost effective. Satellite allows service providers to maintain low operating expenses, all while overcoming a lack of existing infrastructure.

iDirect provides the industry-leading satellite communications technology and platform that enable IP applications to run reliably and efficiently over satellite.

iDirect: Dedicated to Partner Success

For the past 15 years, iDirect has realized the value of satellite connectivity and its power to drive communications advances across a broad range of industries and geographies.

Our partner network of more than 300 service providers and network operators relies on iDirect's advanced technology to manage increasingly complex deployments, adapt quickly to new requirements, stay poised for growth, optimize operations and increase customer satisfaction.

Since all iDirect products are sold exclusively through our partner network, we never compete with partners. Our success is directly tied to our partners' success.

Today, the adoption of iDirect technology has grown rapidly throughout the world, enabling constant communication for voice, video and data applications in any environment.

- 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 internet connectivity at sea or in the air that improves operations and crew welfare

An iDirect high-speed IP-based satellite communications network can operate completely independent of terrestrial infrastructures, or integrate seamlessly into the terrestrial network, creating a truly seamless global IP network.

Key Facts and Figures

- First to bring business quality IP applications to TDMA VSAT market
- More than 350 employees in offices worldwide. 24x7x365 Global Technical Services consistently exceed industry averages, with ratings >93% for customer satisfaction.
- 47% hub market share. Ranked by COMSYS as the world's second largest VSAT systems manufacturer.
- Creator of the industry's first native IP satellite router
- The iDirect universal hub, the 20-slot 51F, was the first of its kind to point to five different satellites and combine multiple topologies in a single hub.
- First to offer Virtual Network Operator status allowing for multi-tiered service offerings
- First to develop full automatic beam switching (ABS) for mobility markets
- First to develop the OpenAMIP protocol currently being adopted as industry standard to improve integration between stabilized antennas and satellite routers
- First to receive FIPS 140-2 Certification 2004 from the National Institute of Standards and Technology (NIST)
- First satellite company to be awarded the coveted TL 9000 quality management system certification for excellence in hardware quality and customer service
- More than 24,000 iDirect Evolution® remotes are running in over 250 different Evolution networks around the world
- Recipient of numerous industry and technology leadership awards including Teleport Technology of the Year (World Teleport Association), Product Innovation Award (Frost & Sullivan), and Market Leadership Award for dominant market presence and growth in the Middle East and Africa (MEA) (Frost & Sullivan)

"iDirect's cost-effective and innovative hub solutions coupled with high levels of functionality and ease of use has made it almost a de facto standard within many of the most valuable vertical markets."

— Simon Bull
Senior Analyst, COMSYS

- As part of Singapore Technologies and VT Systems, iDirect benefits from expansive technology capabilities, leadership across multiple vertical industries and access to global resources.
- Strategic acquisitions and partnerships build on iDirect strength. Acquisition of Parallel in 2009 extended network management dominance with the SatManage solution. Partnerships with Ericsson, Sea Tel®, Intellian®, Jotron and Uplogix expand value-added services and secure leadership positions in key vertical markets.

The iDirect Intelligent Platform™

iDirect delivers an intelligent and dynamic portfolio of solutions to meet the rising connectivity needs of diverse markets and increasingly demanding applications.

The iDirect Intelligent Platform™ integrates advanced features and technology into iDirect's portfolio of universal hubs, routers and network management software to enable any IP application to run reliably and efficiently over satellite. This single platform, built with fully integrated IP routing technology, provides the agility to meet precise business needs regardless of bandwidth requirements, application, satellite band or topology.

With this proven platform at the core, the iDirect Evolution® product series has rapidly become the gold standard in performance, efficiency and value.

The iDirect Evolution® platform is distinguished by its superior flexibility: partners can choose to operate DVB-S2 with Adaptive Coding and Modulation (ACM) on the outbound or iDirect's iNFINITI-based TDM. The inbound technology is iDirect's patented Deterministic TDMA, allowing customers to intelligently share network capacity across multiple locations while allocating bandwidth in real time and on demand.

Today the iDirect platform unifies both iNFINITI and Evolution product series integrating many advanced features through our iDX software, best complementing and supporting the growth strategies of our iDirect partners.

Building on the legacy of ground-breaking bandwidth efficiencies begun by the iNFINITI product series, iDirect partners are leveraging Evolution to build next generation satellite networks that bring even greater bandwidth efficiency gains and lower operating costs.

Every technology advancement is made with one goal in mind: enabling our partners to introduce the most innovative, differentiated services to their customers and capture the satellite industry's most promising market opportunities.

iDirect Intelligent Platform: Advanced Features and Technologies Meet Complex Customer Requirements

iDS/iDX Software

iDirect software integrates advanced features throughout the entire iDirect product portfolio.

- Advanced IP Routing
- Adaptive Coding and Modulation
- Security
- DVB-S2/ACM
- Automatic Beam Switching
- Group QoS
- Spread Spectrum
- MF D-TDMA

Network Management System

iVantage and SatManage offer a complete suite of highly intuitive software-based tools for configuration, monitoring, control and automation of satellite networks from one location.



Hub Series

A range of universal satellite hubs and line cards provides network operators with greater flexibility to deliver the highest-level connectivity regardless of application, bandwidth, satellite or network topology.



Remote Router Series

A series of routers designed to suit the needs of any size organization as a "single box" all-in-one solution.



**One Platform,
Endless IP Applications**



Product Portfolio

iDS/iDX Software Suite

iDirect's software is the core component of iDirect products and solutions, delivering the latest technology innovation and features across the Intelligent Platform.

- **IP Advanced routing** protocols such as VLAN Tags allow the iDirect platform to seamlessly integrate into core MPLS networks.
- **Intelligent bandwidth sharing** of network capacity across multiple locations, allocating bandwidth in real time and on demand. iDirect's dynamic capacity allocation allows service providers to economically service sites with varying traffic requirements and realize significant bandwidth savings.
- **Sophisticated Quality of Service (QoS) and Group QoS** features allow service providers to meet demand for customized service level agreements that are tailored to end user applications such as VoIP, data sharing and video conferencing.
- **Adaptive Coding and Modulation (ACM)** allows service providers to better utilize network bandwidth resources and realize immediate bandwidth savings while increasing service availability for their end customers.
- **Security in all environments.** iDirect provides two-way encryption that meets military and commercial needs. AES encryption and military-grade TRANSEC and FIPS 140-2 compliance provide higher levels of security for mission-critical government applications.
- **Automatic beam switching and spread spectrum features** ensure seamless connectivity on even the smallest antenna system. Vessels, yachts, aircrafts or land vehicles can travel between multiple beams and networks.

Network Management Software




As applications have grown increasingly complex, so have the network management challenges behind them. Network operators need greater levels of visibility and operational control to streamline NOC operations, increase network performance and ultimately offer customers a higher level of service and responsiveness.

iVantage™ software along with SatManage provide a complete suite of highly intuitive software- and web-based tools to configure, monitor, control, and automate a satellite network.

iDirect's SatManage suite of Web-based software tools integrate, monitor and automate hybrid networks and NOC-based applications, transforming how they manage complex customer deployments, resulting in stronger network performance, faster response times, significantly lower operating costs, and greater customer satisfaction.

Hub Series

iDirect's satellite hubs provide the core infrastructure for IP VSAT networks, matching the quality and performance of broadband terrestrial networks. Customers can operate a shared bandwidth platform spanning multiple satellites, transponders, and topologies.

Series 15100 Universal Satellite Hub	
<ul style="list-style-type: none">- House up to 20 iFINITI® or Evolution® line cards- Rack-mountable, fully redundant hub- Connects up to 5 different satellites- Supports star, mesh and SCPC topologies	
Series 12000 Universal Satellite Hub	
<ul style="list-style-type: none">- Compact, connects up to 4 different satellites- Supports star, mesh and SCPC topologies	
Line Cards	
<ul style="list-style-type: none">- Features DVB-S2/ACM and /or iFINITI TDM on the outbound and D-TDMA on the inbound- Available in combinations of demodulator and modulator versions- Supports networks that scale up to thousands of sites	

"iDirect's focus has always been on the development of its platform's abilities to support sophisticated customer applications whilst allowing networks to be operated as efficiently and reliably as possible. It constantly expands the boundaries of the technology, empowering its service provider customers to maximize their margins and grow their businesses."

— Simon Bull
Senior Analyst, COMSYS

Remote Satellite Router Series

iDirect offers a full line of iNFINITI and Evolution compact satellite routers to meet the needs of any organization. The iDirect router is a “single box” solution that includes a satellite modem, IP router, optional encryption, TCP optimizer, and Quality of Service prioritization.

Evolution X3	
<ul style="list-style-type: none"> • DVB-S2 with Adaptive Coding and Modulation (ACM) • Low cost of entry 	
Evolution X5	
<ul style="list-style-type: none"> • Operates in either DVB-S2/ACM or iNFINITI TDM mode on then outbound • Operates in D-TDMA with either Turbo Product Coding (TPC) or advanced 2D 16-State coding on the inbound 	
Evolution 8000	
<ul style="list-style-type: none"> • Features the DVB-S2/ACM • Delivers maximum efficiency and flexibility while meeting rigorous mobility and security requirements 	
iNFINITI 3000	
<ul style="list-style-type: none"> • Optimized for remote Internet access • Ideal for small to medium enterprise customers 	
iNFINITI 5000	
<ul style="list-style-type: none"> • Designed for medium to large enterprises for advanced interoperability with existing infrastructure 	
iNFINITI 7000	
<ul style="list-style-type: none"> • Designed for military and international Government applications • Supports military-grade security with TRANSEC and FIPS-2 	

The iDirect Advantage Checklist

iDirect's unique strengths give our partners the greatest edge in bringing next generation services to market.

- **We aggressively push the limits of efficiency, flexibility and scalability to lower TCO.** Technologies such as DVB-S2 with Adaptive Coding and Modulation (ACM) built into the iDirect platform means service providers can better utilize their network bandwidth resources and realize immediate bandwidth savings. And iDirect's universal satellite hub enables network operators to deliver the highest quality connectivity regardless of bandwidth requirement, location, business application, satellite band or network topology.
- **Quality, enterprise-class end user experience.** Our native IP design and advanced IP routing technology allow the iDirect platform to integrate seamlessly with terrestrial networks. The result: our partners can design networks that provide the ultimate end user experience.
- **Continuous technology innovation.** Our innovation strategy is focused on delivering the economies that drive partner success. Priorities are based on a deeper understanding and insight into end user applications, and the everyday challenges our partners face. We continue to enter new markets with an aggressive, agile technology and business plan committed to the success of our partners.
- **'Whole product solutions' approach.** To further differentiate and add value to our partners' services, we continually feed emerging VSAT applications and focus on the vertical markets with the most well-defined opportunities for partner growth. Development strategies are designed accordingly to deliver the entire solution.
- **High level of partner engagement.** Strong collaboration at all levels within our partners' organization ensure a deep, well-rounded understanding of their customers' needs. Joint business planning and co-marketing opportunities further solidify our commitment to every partner's success.

iDirect provides partners with a highly scalable way to enter, serve and expand nearly any market. For example, iDirect's virtual network operator (VNO) program enables low cost entry into the VSAT service that scales with demand. Established hub network operators find that iDirect's constant focus on efficiency, flexibility and scalability provides the basis for long-term growth.

Whether it's providing core IP applications to the enterprise or specialized services to any number of diverse vertical industries, iDirect technology allows service providers to run their entire business operations more efficiently, no matter what types of customers, industries or applications they need to support.

Our approach is designed to meet continually evolving customer requirements, while protecting and growing each partner's investment in iDirect technologies.

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Advancing a Connected World