InterSKY 4G
Two-way broadband satellite communications system
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Shiron SatCom two-way broadband satellite communications system, InterSKY, is an efficient multi service platform, supporting wide ranging IP applications in even the remotest locations. Providing future-proof transparent IP connectivity, InterSKY allows service providers and enterprises to offer all communications applications while significantly reducing total cost of ownership.

InterSKY’s field-proven DVB-S2 implementation and Dynamic BM-FDMA technology, in combination with Advanced Bidirectional ACM (patent pending) with QPSK/8PSK/16APSK/32APSK DVB-S2 forward link and 8PSK return link, provides 30%-50% greater space segment efficiency, along with high-quality connectivity and differentiated offering:

- Best bit/Hz ratio result in minimal CAPEX+OPEX factor
- True Broadband Multi service capabilities (Voice, Video, Data) with minimum jitter & delay
- Guaranteed service delivery, availability and reliability with minimum resources usage
- Scalable & robust platform, supporting from tens to ten thousands of terminals
- Weather proof solution, enabling service even in Ku rainy regions

InterSKY’s Bidirectional ACM technology provides highest availability at all times with minimum satellite resources and guarantees the best link budget at all locations with individual dynamic selection of MODCOD per VSAT according to its local weather conditions and satellite footprint strength.

Recognizing the importance of simplified network management and control tools, Shiron Satcom’s NMS solution is designed to provide network operators with optimal management flexibility as well as delivering a birds-eye view of overall network and specific element status. Shiron’s “Design & Deploy” tools are specifically tailored to assist network owners with network designing wide configuration changes, and quick deployment of changes to the required network elements.

InterSKY 4G/ Broadband Service Providers

InterSKY delivers terrestrial quality high speed satellite Internet access anywhere. Supported bandwidth and link quality are aimed at corporate mission-critical Internet connectivity, regional ISP’s, cybercafes and rural telecenters.

These can either be in the same location or distributed over wireless communications such as Wi-MAX and WiFi.

InterSKY 4G/ Rural

Currently, most people and businesses residing in rural areas have very limited or no access to modern communication. While rural communication needs are similar to those of urban locations, starting with basic voice communication and ending with broadband data traffic, the nature of remote locations, terrain & environment challenges and coverage demands, making terrestrial infrastructure into a non cost effective solution to deliver connectivity.

With this in mind, InterSKY™ satellite communications platform for rural areas provides an ideal solution for customers seeking a cost-effective, flexible & reliable solution to provide for their communications needs now and in the future, by offering a winning mix of capabilities:

- Designed to support IP applications while optimizing the required bandwidth
- InterSKY™ BM-FDMA technology allows for inherent low delay and low jitter
- End-to-End implementation of QoS ensures service delivery and highest service quality
- Designed to provide outstanding service in all weather conditions through InterSKY advanced bi-directional ACM technology
- Supporting POTS (voice, fax, dial-up data) and broadband
- Support for multiple IP protocols, such as SIP, H.323 and T.38, codecs such as G.711, G.729 and G.723 are all compatible with the InterSKY™ system
- Support for simultaneous voice and data transfer
Large parts of the world are without access to cellular communications. Bringing this service to these areas – and to a potential customer base of millions – represents a great window of opportunity. Satellites, which overcome geographic constraints and bypass costly deployment of cellular systems in remote areas, are an obvious answer. However, the heavy concentration of users to certain hours makes SCPC and other dedicated satellite links expensive in backhauling cellular traffic. InterSKY™ eliminates this problem, allowing carriers to share network capacity across multiple locations. At the same time, this reduces bandwidth costs and expands coverage to regions where service was previously unprofitable.

**Shiron’s broadband satellite solution offers cellular providers the following advantages:**

**Cellular coverage extension without boundaries of distance, geographic barriers or terrestrial infrastructure**

- High performance broadband IP connectivity
- True protocol transparency
- Unparalleled quality of voice
- Jitter and delay-free service

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**InterSKY 4G/ Enterprise**

As “the network is the business”, connectivity from remote branches to corporate headquarters is vital. Offering pure end-to-end IP networking capabilities, InterSKY enables Intranet applications along with the corporate connection to its Internet Service Provider. For any type of business, InterSKY™ provides fast reliable broadband communications that exceed the capability of terrestrial systems. Providing pure end-to-end IP networking capabilities, InterSky enables Intranet applications along with the corporate connection to its Internet service provider.

**Shiron’s broadband satellite solution offers the following advantages for corporate use:**

- VPN secured connection
- SAP and Citrix applications for high performance
- Intranet VOIP network includes all remote offices and branches
- High performance broadband IP connectivity
- True protocol transparency
- Unparalleled quality of voice
InterSKY 4G/ Trunking

Satellite IP trunking applications provide high speed internet connectivity to remote service providers or companies. Some applications are temporary by nature, such as disaster recovery applications, and some are permanent, commonly used to provide internet access to local ISP offering services in their regional markets. Point-to-point links are also as a backup to fiber of other infrastructure between continents.

InterSKY™ platform is ideal for this type of application, since it is a true IP based platform, capable of delivering high volume IP traffic, while keeping service quality to a maximum regardless of environmental conditions and lowering CAPEX and OPEX expenses.

Some of the key advantages of InterSKY™ for Trunking applications are:
- True IP based platform, specifically designed to transport IP information
- Highly efficient, resulting in optimal use of costly spectral bandwidth and low OPEX expense
- WeatherProof service delivery by utilizing the advanced bi-directional ACM technology
- Carrier grade service management & monitor solution

InterSKY 4G/ Mobile SATCOM

COTM is a growing niche which brings a whole range of opportunities as well as technological challenges for both commercial and military markets; be it trains, ships, land vehicles or other the mission critical applications in the military and governmental domain, the requirements are similar: reliability, robustness & scalability, security, speed, immunity, and of course, remaining cost effective.

With InterSKY technology, COTM requirements are met well; being IP agnostic while offering weather and interference proof solutions fully support the applicative requirements for mobility based applications. InterSKY’s power VS bandwidth management capabilities support the usage of small antennas.

Key advantages provided by InterSKY are:
- Efficiency – BM-FDMA access scheme offers superb efficiency with jitter & delay free operation
- Reliability – Full end-to-end service delivery mechanism (Qos, Priorities, SLM etc.)
- Management – InterSKY NMS allows for easy management and configuration of all mobility related setup, making sure your application operates at maximum efficiency and availability
- Immunity – InterSKY brings inherent immunity into any mobility application, ranging from MAC layer security to frequency hopping