

BIG PAYOFFS FOR YOUR CUSTOMERS

Your business customers can now support the mission-critical communications they need for their daily operations. In a single, turnkey solution you'll provide them with fast, reliable, cost-effective, broadband IP connections for LAN-to-LAN connectivity and Internet access, no matter where they're located. Configurable service levels are available to support a variety of applications including:

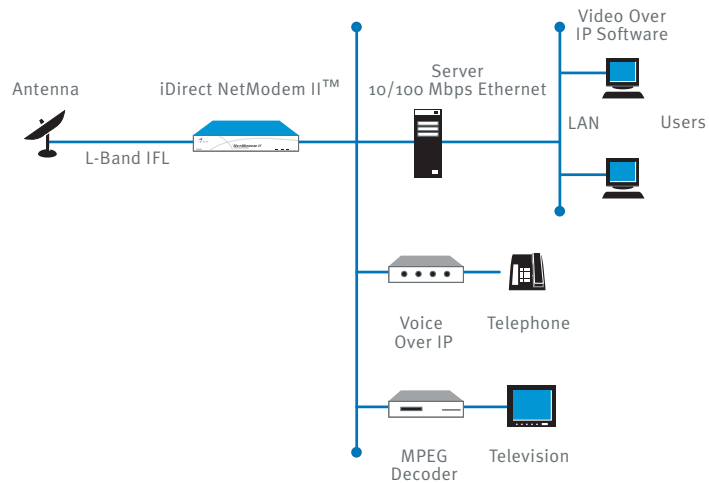
- ✦ Corporate intranets/extranets
- ✦ E-mail
- ✦ E-procurement
- ✦ Multicasting
- ✦ Corporate databases and distributed applications
- ✦ VPN
- ✦ Voice over IP (VoIP)
- ✦ Large file transfer, including image transfers
- ✦ Web research
- ✦ Distance learning

Businesses also benefit from the ability to standardize their broadband communications systems on a single technology platform, greatly reducing both the direct and indirect costs associated with the deployment and maintenance of a network.

SUPERIOR TECHNOLOGY BUILT RIGHT IN

The iDirect NetModem II Broadband Router is a compact, set-top terminal that routes IP traffic over satellite networks.

SAMPLE CUSTOMER SITE CONFIGURATION



The NetModem II integrates all the hardware and software needed to deliver bi-directional broadband connectivity, easily and efficiently, while enabling the highest data rates available in the industry today — throughput speeds up to 9.1 Mbps.

Highly scalable for both inbound and outbound data rates, the system can meet the needs of potential customers, regardless of their current or future bandwidth requirements. Its multiple innovations let you realize more revenue opportunities through more efficient bandwidth usage, increased reliability and enhanced performance — all while lowering service costs on a per-customer basis.

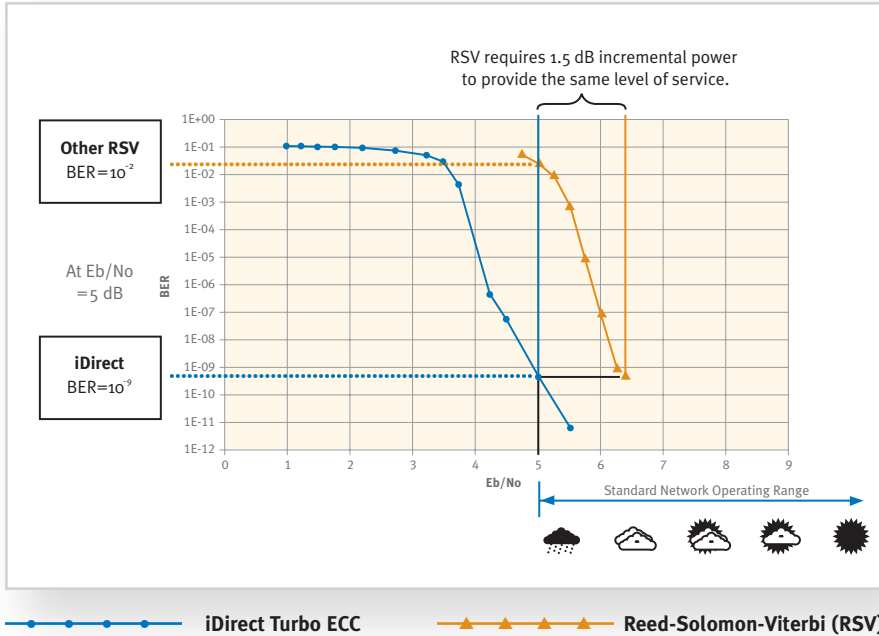
Innovative TDM/TDMA techniques
iDirect has developed an entirely new way to increase the utilization of traditional Time Division Multiplexing

(TDM) and Time Division Multiple Access (TDMA) architecture. Our superior TDM/TDMA implementation techniques maximize the amount of bandwidth that can be utilized and shared among end users.

Downstream. iDirect's superior TDM technology enables simultaneous transmission to all remotes over a single broadband link. The technology sequences, addresses and transmits data packets in the most optimal way, thereby allowing maximization of satellite capacity.

Upstream. To transmit data from the remote sites, iDirect utilizes advanced TDMA techniques. TDMA provides simultaneous high-speed access to a shared upstream channel using dynamically assigned time slots.





iDirect Turbo ECC vs. RSV downstream BER performance

The chart above illustrates the significant increase in power savings delivered by iDirect Turbo ECC versus legacy Digital Video Broadcasting (DVB) using Reed-Solomon-Viterbi. The iDirect solution delivers even greater gains, of more than 3 dB, when compared against other error correction techniques. The improved coding gain allows for a reduction in equipment and service costs.

Turbo Product Codes — Taking error correction to a whole new level

iDirect's advanced Turbo Error Correction Coding (ECC) guarantees fiber-quality bit error rates for complete accuracy and reliability. Unlike single-pass coding technology, with a hard-decision output that other error-correction technologies use, iDirect's Turbo ECC is an iterative decoding process. Each pass of the data through the decoder improves the reliability of the error correction. Realized coding gains allow for improvements in quality, data throughput and bandwidth utilization.

TCP Acceleration — Reducing delays

iDirect's unique TCP acceleration protocol mitigates the latency of TCP traffic over satellite communications. This

satellite link protocol overcomes slow start and throughput issues associated with traditional TCP over satellite systems, making it cost-effective and efficient to conduct TCP/IP communications via satellite networks.

IDIRECT MAKES IT EASY TO SUCCEED

iDirect not only offers the industry's most technologically advanced IP broadband solution, we also make it extremely simple for you to install and service the technology.

This integrated, easy-to-use remote solution enables you to bring your customers online quickly. Everything you need is included — the set-top box,

antenna, block upconverter and cabling. The NetModem II solution also utilizes an L-band interfacility link that requires fewer physical resources and allows for lower cost equipment.

All that is required of your customer is electricity for the indoor unit and rooftop access for the antenna. The iDirect solution is so advanced that remote sites do not even require an exterior electrical power supply. Installations generally take less than four hours. To integrate the system with the customer's LAN, you simply need a standard Ethernet 10/100 Mbps LAN interface.

Provisioning of service is easy, too. You can choose one of several service levels offered by iDirect and its many network operator partners. Once service is activated, it is proactively monitored 24/7 to provide your customers with rapid fault resolution and maximum service uptime.

EXTENSIVE PARTNERSHIP SUPPORT

iDirect offers a premier, full-scale partnership program unlike anything else in the satellite industry. We have a deep commitment to helping you create a sustainable business model by providing products and services that add value — every step of the way. Whether you're generating new opportunities, installing a customer site or resolving a technical issue — iDirect is always there with tools and resources to help ensure your success.

high speed
anywhere

TECHNICAL SPECIFICATIONS FOR THE NETMODEM II

NETWORK CONFIGURATION

Network Topology	Star TDM/TDMA
Maximum Data Transfer Rate (QPSK)	Downstream: 11.5 Mbps Upstream: 5.75 Mbps
FEC	TPC .793 or TPC .66
LAN Protocols Supported	IP Routing, UDP, TCP Acceleration, ICMP, ARP, RIP Ver2

OUTDOOR UNIT

Antenna Size	Ku-Band: 0.8 m, 1.2 m, 1.8 m & 2.4 m C-Band: 1.8 m & 2.4 m
LNB	DRO
Block UpConverter (BUC)	1/2, 2, 4 W

INDOOR UNIT

Size	W 14.25" x D 11" x H 2.25" (W 36.2 cm x D 27.9 cm x H 5.7 cm)
Weight	8 lbs (3.64 Kg)
Input Voltage	100-120/200-240 V~, 1.4 A, 50-60 Hz (Auto Ranging)



Take advantage
of a world of
opportunities with iDirect.

To discover how you can expand your business as an
iDirect partner, visit us at www.idirect.net
or call us today.