



NOT A VSAT, BUT A TRULY NEW WAY TO NETWORK BY SATELLITE THAT REACHES SUBSCRIBERS ANYWHERE — AT THE RIGHT PRICE.

SurfBeam is a new standards based, satellite system that enables you to offer broadband Internet access to your current markets, and reach new customers beyond. It starts with the proven economics of cable modem systems and adds the wide, immediate coverage of satellite. Along with your existing customer base, distribution channels and support capabilities you'll have a platform for rapid penetration into the broadband access market. You can pick and choose the best customers, without the cost or delays in building terrestrial connections to reach them.

This product is a totally new kind of satellite-based system for broadband networking, not like modified VSAT systems that have failed to prove themselves among consumers. This new technology can drop monthly service cost¹ down to \$39 on broad beam satellites and below \$20 on spot beam satellites, while providing an excellent user experience that scales to millions of subscribers.

SurfBeam Applications

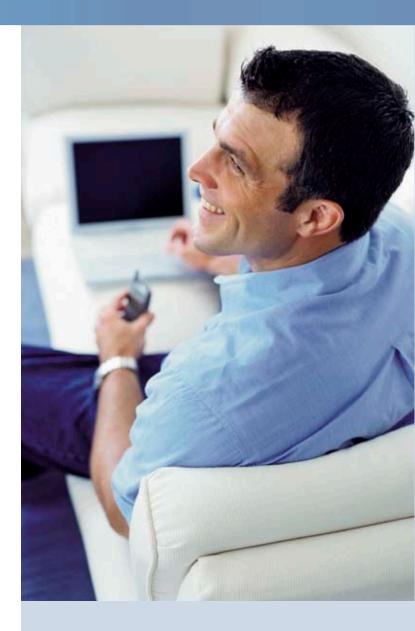
Internet access

Voice-over-IP

MPEG video over IP

High bandwidth FTP

IP Multicast



DOCSIS™ 1.1 Standard Based

Subscriber terminals based on high volume cable modem chipset standard

Mature infrastructure products available

Low-cost SMTS with satellite physical layer

Off-the-shelf BSS and OSS equipment

SYSTEM DESCRIPTION

Subscriber Terminal

Components include an Outdoor Unit (ODU) similar to a DTH satellite television dish, but with transmit capabilities, and an Indoor Unit (IDU) comparable in size and function to a desktop ADSL or cable modem. The ODU includes a compact satellite reflector and feed, transmit and receive electronics, and an associated mounting kit to affix the unit to the customer's home.

The IDU is just 23 by 23 by 3.8 cm (9 by 9 by 1.5 inches) with a sleek design to fit with other modern personal computing and telecommunications equipment, and interfaces to the customer's computer or home network via a standard Ethernet connection. The IDU may be oriented on the customer's desktop either horizontally or vertically to preserve desk space. Two cables connect the indoor and outdoor units.



Low cost broadband satellite modem

Always on high-speed connections

Dynamic multi-rate forward link provides high availability without throughput loss

Rate adaptable MF-TDMA return link

Built-in data security

Sophisticated QoS

10/100 Mbps Ethernet

Remote management and control

No PC software required



