The Skylinx® network connects your locations with voice, fax, dial up data, and high speed data communications. The system uses full mesh switching to minimize transmission delays between all stations. While satellite bandwidth is usually the largest cost component of satellite communication networks, Skylinx is focused on minimizing that expense through a number of features.

**Bandwidth Saving Technology**
Skylinx networks use advanced DAMA technology to assign satellite channels on-demand. With no dedicated links, you use less satellite bandwidth. This reduction, by as much as 80 percent, coupled with lower equipment requirements lowers your network cost dramatically.

In addition, the Skylinx system incorporates high performance voice compression algorithms which provide bandwidth compression as high as 8:1. Users still get excellent voice quality, but call costs are reduced.

**SKYLINX® AT-A-GLANCE**

- Location where economics of terrestrial alternatives won’t work or with geographic barriers to terrestrial
- Mesh connections for bandwidth on demand up to 2 Mbps

**APPLICATIONS**

- Trunking for PSTN telephony
- IP data wide area networking
- Networking of corporate voice/data
- Videoconferencing
- Internet access
- Backhaul for cellular and Wireless Local Loop
- Maritime communications
- Exploration for oil, gas & other natural resources
**Applications**

This telecommunications platform goes beyond typical telephony to support applications such as wireless local loop, videoconferencing, telemedicine, trunking, and distance learning.

Skylinx gives you two options to extend the reach of Internet access or company-wide intranets:

**Variable Bandwidth Services**

Users can select their data throughput rates in conjunction with an optional Fax/Data Relay enhancement to the Skylinx voice channel unit. Skylinx voice channel units may be set to a very low voice compression rate, such as 8 kbps for telephony. Then, when subscribers need higher bandwidth for Internet/intranet access, they simply dial a special prefix notifying Skylinx to automatically increase the satellite link rate for voiceband data throughput up to 28.8 kbps.

**Data Networking and LAN to LAN Interconnectivity**

You can establish on-demand synchronous data connections between your company LANs via satellite using our optional V.25bis protocol feature (compatible with Cisco routers). Skylinx’s circuit switched architecture makes it ideal for LAN to LAN file transfer.

Skylinx is also a powerful system for other data applications, featuring these configurations:

- On-demand low-speed asynchronous voiceband
- On-demand or permanent asynchronous EIA-232/530/V.35
- On-demand or permanent, synchronous EIA-232/530/V.35

**Flexible**

“We selected Skylinx because of the flexibility of the Skylinx DAMA system and its ability to integrate both DAMA and MCPC effectively into a single system, managed from a central location.”

Dr. Boris Antoniuk  
Chairman and Chief Executive Officer  
Teleport-TP, Russia

**Efficient**

“By upgrading our rail communications system we can operate much more efficiently. Now, with our Skylinx network, we’ll have regular, daily information on rail shipments.”

Peter Gibbons  
Deputy Chief Executive  
Transtel, South Africa

The Skylinx Series 8000 Satellite Telecommunications Network overcomes the geographic barriers of terrestrial based networks. It delivers the high speed services that all your users require regardless of distance and only when you need them.
More Skylinx Network Value
In addition to the features you need, Skylinx equipment offers significant cost savings:

- Modular design for minimum equipment requirements
- Software enhancements provide new capabilities with no hardware additions or costs
- Same hardware used at remote and hub sites

Future Growth
ViaSat is the one satellite network provider that is innovative and nimble enough to match the rapid change in your IT requirements. You will get the latest in satellite network technology and telecommunications applications because we continue to reinvest R&D dollars into our products.

System Configuration
ViaSat Mesh DAMA VSAT networks have two major subsystems. The hub services the entire network and provides a central interface for network operation and control. It can include a backup system, either locally or in another location. The hub sets up all communication channels, but network traffic does not need to pass through the hub location.

Remote terminals connect to customer equipment and provide mesh connections within the network, or connection to the public telephone network (PSTN). Many industry standard or country specific signaling protocols may be integrated into the system. The modular terminal contains slots for up to four channel units, and software can be downloaded by satellite for easy system upgrades and expansion.

From simple credit card approvals, to broadband on demand, and from complex telephone or video systems to IP data networks, customers rely on ViaSat’s portfolio of versatile satellite network products. When you partner with us, you will be able to extend the reach of terrestrial services to virtually any location on earth. And in many cases, improve in speed and availability over land-based networks.

Future Growth
“This Skylinx technology will give us a powerful method for providing the expanded application support our customers want and need.”

Sorin Marpozan
Chairman and General Manager
LOGIC Telecom, Romania

Reliable
“Satellite transmissions enable us to negate the impact of our terrain and establish high quality, reliable telecommunications services to our population centers and isolated rural areas.”

Gerea Aopi
Chief Executive Officer
Telikom Papua New Guinea
Series 8000 Network Management System

The network management system is the heart of any DAMA network and the Skylinx Series 8000 Network Management System (NMS) is one of the most field-proven in the industry. The system software has been refined over many networks and thousands of installations, to set up circuits in real time and optimize your satellite resources. The NMS uses a graphical, Windows®-based format to simplify the user interface.

The master station containing the NMS can be located anywhere within reach of the satellite, with a local or remote backup system. The system includes redundant network servers, signaling channel units, and an Administration and Maintenance Terminal (AMT). Even in the event of a problem, all calls in progress are unaffected by any cutover because of the recovery speed built into the system. NMS hardware is the same as at remote stations to minimize costs.

Four major subsystems comprise the complete NMS:

1. **Call Processing** for call setups, billing records, and call management for both data and voice calls
2. **Administration** for configuring your network and implementing a numbering plan for call routing
3. **Monitor and Control** for status monitoring of the system, remotes, and any ancillary equipment
4. **Maintenance** for diagnostics, fault isolation, statistics, automatic circuit testing, and trouble recovery

The Skylinx Series 8000 NMS provides real time management of satellite bandwidth and the Skylinx telecommunications network, setting up circuits on-demand in 2 seconds or less.