### 

NetVX is an utterly simple and integrated solution that replaces the mishmash of hardwired components that have been necessary to handle today's growing networking requirements.

## FLEXIBILITY

NetVX makes it practical to operate parallel services. Until now, each type of network has required its own complex and costly infrastructure. A single NetVX system can support all your network needs.

# ECONOMY

NetVX allows users to select the most cost-effective network for each application. For example, you can choose an ATM network from 8 a.m. to 5 p.m. for applications requiring high-quality video, and IP (which costs less than ATM) for other applications.

# VERSATILITY

NetVX features a modular architecture that supports the most exacting requirements and a virtually infinite variety of applications.

# SPACE EFFICIENCY

NetVX's extremely small footprint (SRU or 1RU chassis) is ideal for space-constrained facilities. A fully configured SRU system provides functionality that has required up to 14 hardwired components until now.

### C RELIABILITY

NetVX's integrated design significantly streamlines networking operations, reducing errors by eliminating complexity.

# O UPGRADEABILITY

NetVX systems are configured by inserting "function" modules into a chassis, providing a true "plug and play" upgrade path as needs evolve.





#### Support For Any Topology, Local Or Remote

NetVX can be configured to support local, remote, and networked applications, as well as any number of network topologies – bi-directional point-to-point, uni-directional closed ring, bi-directional point-to-point with "Y" connections, and combination point-to-point with closed ring. NetVX's unique CrossConnect structure enables any input to feed any output.



AIRLINX Communications, Inc. Box 253 Greenville, NH 03048 E-mail: sales@airlinx.com Tel: (888) 224-6814 Fax: (603) 878-0530

# NetVX™

Integrated High-Speed Networking Platform

assured communications<sup>™</sup>



# Intelligent Connectivity Solutions



A new technology for a new digital era.



EVENT SUPPORT AND REMOTE NEWS GATHERING



HIGH-PERFORMANCE HD BROADCASTING SOLUTION



**BANDWIDTH EFFICIENCY/MULTICHANNEL OPERATION** 



LOW BIT RATE VIDEO OVER IP



SOFTWARE CONFIGURABLE STUDIO TO TRANSMITTER LINKS

It's survival of the fittest for today's broadcasters. With the development of new protocols, rich media formats and better compression schemes, the communications world is constantly evolving. Being able to adapt to changing networking requirements is critical.

So, how do you survive? Better yet, how do you succeed and prosper? The answer lies in a single robust system that can support all your networking needs - a system that enables you to transport video, audio and data seamlessly and efficiently.

Enter NetVX.

#### FLEXIBLE AND FUNCTIONAL

Built from the ground up, NetVX embraces the expanded capabilities of digital technology. This integrated high-speed connectivity solution can organize and simplify the most complex networking infrastructures for content and service providers.

NetVX allows you to transport across multi-purpose hybrid networks. The fully standards-based NetVX platform handles packet-based architecture, including ATM, IP, as well as microwave and satellite. The new and improved platform is designed to accommodate the latest applications, such as mobile video, entertainment, and IPTV. Additionally, as new hardware is developed, it can easily integrated into the NetVX system.

#### EFFECTIVE AND ECONOMICAL

NetVX's modular, flexible design allows you to replace costly, complex, and overtaxed legacy systems with a network solution in a single box. Since this all-in-one system is expandable, you reap the benefits of resource sharing, content repurposing, and operational efficiencies. NetVX can also save you time, effort, and money by allowing you to consolidate servers across a single network. Once established, the network can be static or dynamically controlled. With NetVX's modularity, you select the most cost-effective and appropriate network configuration for your applications. As an example, you can use ATM networks to transport high-quality video from 8 a.m. to 5 p.m., and use less expensive IP networks for other applications.

#### SCALABLE AND RELIABLE

NetVX uses the latest design technology to achieve lower power consumption, low heat generation and very high MTBF (mean time between failures). When equipped with redundancy, NetVX delivers carrier grade-like reliability.

# ONE BOX DOES IT ALL

#### Modular, Flexible, Upgradeable

In a single versatile platform, NetVX gives you an intelligent networking solution with a modular design. Your system can be configured to support any contribution and/or distribution application. To accommodate your needs, you can select either a 1RU chassis (SYS-300 model) that holds up to 3 modules or a 5RU chassis (SYS-1700) with slots for up to 17 modules (15 application modules). You choose modules for your specific applications and add modules as your needs expand.

Module

SYS-A12

ATM-M11/S11

ENC-S11/S21

ENC-H11

DEC-S11

GBE-C11

TMX-M12/M22

Software

Vidiem Element Manager

Vidiem Service Manager



Model 200, front and back





The NetVX design lends itself to scalability. The SYS-1700 5RU chassis can support up to 15 application modules, so your networking services can grow as your business grows. NetVX provides virtually any combination of encoding, decoding, multiplexing and network interfaces, including redundancy. This all-in-one networking solution eliminates the need for inter-device cabling and proprietary interfaces between application specific devices.

Description

NetVX System Control

ATM Network Interface

(multi- or single-mode)

MPEG-2 SD Encoder

MPEG-2 HD Encoder

MPEG-2 SD Decoder

MPEG-2 Multiplexer/

Demultiplexer with TransRating

Gigabit Ethernet

Content providers can take full advantage of available bandwidth with NetVX's

#### LOW BIT RATE VIDEO OVER IP

When you compare IP traffic costs to traditional transport methods, you can easily see how moving video over IP can result in significant savings. With NetVX, it's possible to move multiple channels of video bi-directionally. You are free to use some channels for program streams while you use other channels as backhaul news feeds or for multi-point network monitoring. The monitoring capabilities provided by NetVX are critical to managing bandwidth, delay, and bit error rates.

#### SOFTWARE CONFIGURABLE STUDIO TO TRANSMITTER LINKS

NetVX and the TRuepoint microwave digital radio provide a cost-effective, configurable studio-to-transmitter link for both analog and digital video transport. The capability supports Part 74 and Part 101 STL applications. HD and SD can be supported on the same link. NetVX's packet architecture provides for transport of one-way and to STL configurations where content or network feeds are collected at the transmitter site and backhauled to the studio. TRuepoint radios provide one-way and bi-directional DS3/E3/OC3 connectivity at both the studio and transmitter sites in the microwave frequency bands from 6 to 38 GHz.

# BUSINESS CONTINUITY / DISASTER RECOVERY

Losing a signal, even for a short while, can be devastating to your business. With NetVX's ability to configure high-speed connections between multiple sites, it is possible to store, forward and distribute assets to sister stations as part of normal operations. In the event of a local failure or an emergency, systems can easily be and streamlines connectivity across facilities, regardless of size and complexity.

#### EVENT SUPPORT AND REMOTE NEWSGATHERING

NetVX allows you to transport remote news feeds and information simply and provide an array of cost-effective communication opportunities.

#### HIGH-PERFORMANCE HD BROADCASTING

With NetVX, operators can encode High Definition (HD) and Standard Definition (SD) programming from a central location. The ENC-H11 High Definition encoder module uses the latest in Very Large Scale Integration (VLSI) technology to bring stunning High Definition video to the NetVX platform. The ENC-H11 is the smallest, versatile encoder is suitable for a variety of video applications, including final emission, contribution, distribution, post-production and surveillance. NetVX HD encoding can also be coupled with NetVX SD encoding to create a superior multi-program encoding solution.

#### BANDWIDTH EFFICIENCY / MULTICHANNEL OPERATION

statistical multiplexer (stat mux). Bandwidth is allocated dynamically and all available packets are filled with data rather than nulls. As a result, higher quality video can be transported using current streams or more streams can be added at current quality levels. Statistical multiplexing allows operators to manage multi-channel operations efficiently by prioritizing and defining logical program groups. NetVX also features high-quality low bandwidth encoding. The newest NetVX encoders provide higher quality images at lower bit rates. And, NetVX's ability to manage all streams within a single interface allows for fast setup and enables operators to have consistent settings across multiple channels.

Remote feeds have always been an effective, yet costly complement to broadcasting. affordably by providing bi-directional communication between multiple sites using IP over ASI (Asynchronous Serial Interface). Several NetVX systems can be placed strategically throughout major venues, studios and transmitter/translator facilities to