



Network Access Products

***Intraplex
Network
Access
Product
Summary***

*Increase the efficiency of integrated digital networks,
reduce ongoing transmission costs, and ensure
delivery of real-time application traffic
including voice, data, program
audio, and video*

next level solutions



Intraplex access products help a wide variety of digital network operators lower recurring transmission costs, while increasing transport reliability for voice, data, audio, and video applications.



**INTRAPLEX
ACCESS SERVER**

INTRAPLEX ACCESS PRODUCTS INCREASE EFFICIENCY WHILE REDUCING ONGOING TRANSMISSION COSTS

Intraplex access products are designed to help network operators reduce transmission costs by providing efficient, reliable, integrated delivery of voice, data, program audio, and video traffic across public and private networks. By enabling combined traffic to share digital transport facilities, Intraplex equipment allows network managers to lower recurring line costs and reduces the need to purchase or lease additional circuits as traffic volume and applications grow.

Intraplex access products, available in both 3RU and 1RU shelves, also incorporate unique transmission techniques that provide enhanced robustness and maximize end-to-end circuit availability for real-time application traffic.

Application and interface modules are available for T1, E1, ISDN, DDS and Nx64 transmission over copper and fiber-based services, as well as licensed microwave, spread spectrum or satellite links. A common architecture allows application modules, network

interface modules, and power supplies to be shared and swapped

between products for additional savings. Users can add optional, integrated cross-connect functionality to support local switching, grooming and path protection, for automated line backup of key circuits. A Windows-based graphical user interface and command line interface simplifies local or remote configuration, system diagnostics and monitoring keeps performance and alarm information.

INTRAPLEX ACCESS SERVER

The Intraplex Access Server allows users to integrate voice, data, audio, and video traffic over T1 and E1 links for increased network efficiency. Enhanced transmission robustness techniques help maximize circuit availability in the access portion of networks. The Access Server includes an integrated Channel Service Unit (CSU) that provides performance monitoring and electrical protection, allowing for direct connection to public networks. Plug-in fiber-optic network interface modules are also available.

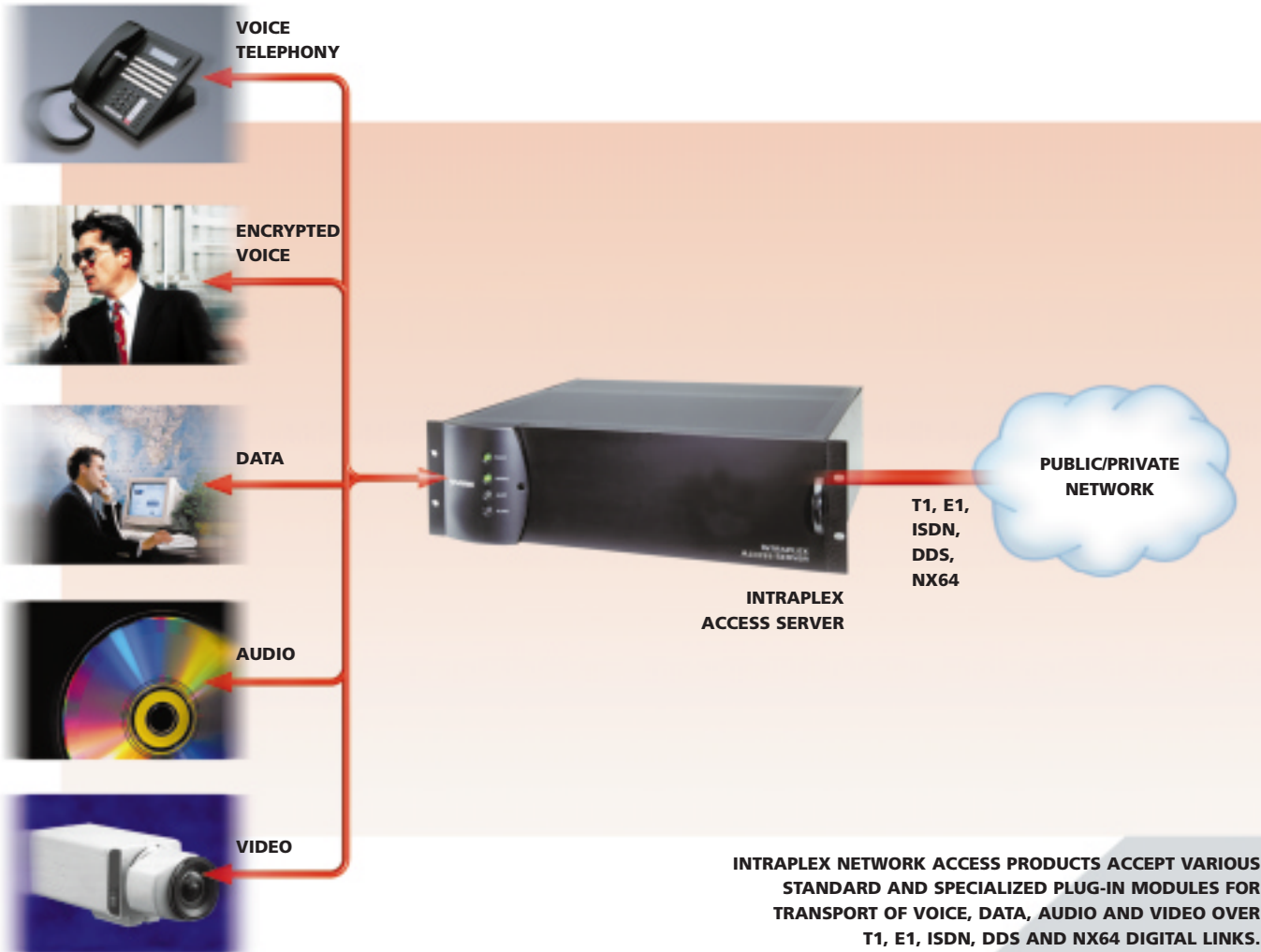
INTRAPLEX CROSSCONNECT SYSTEM AND SERVER

When network fabric grows to include multiple, meshed T1 or E1 lines, Intraplex CrossConnect Systems and CrossConnect Servers manage these lines to ensure the most efficient use of the available transmission capacity and reduce transmission costs. The CrossConnect System and Server give users complete flexibility to combine, interconnect and multicast traffic among up to six T1 or E1 lines. In addition, the CrossConnect

Server accepts plug-in modules for integrated drop and insert of voice, data, program audio, and video services.



**INTRAPLEX
CROSSCONNECT
SERVER**



INTRAPLEX NETWORK ACCESS PRODUCTS ACCEPT VARIOUS STANDARD AND SPECIALIZED PLUG-IN MODULES FOR TRANSPORT OF VOICE, DATA, AUDIO AND VIDEO OVER T1, E1, ISDN, DDS AND NX64 DIGITAL LINKS.

CrossConnect Systems and Servers can instantaneously detect any degradation or failure of a controlled T1/E1 line, seamlessly switching traffic to pre-designated backup facilities, eliminating costly downtime, while protecting critical applications. Automatic protection switching can be initiated based on T1/E1 link performance, local external contact closure inputs or remote ASCII commands.



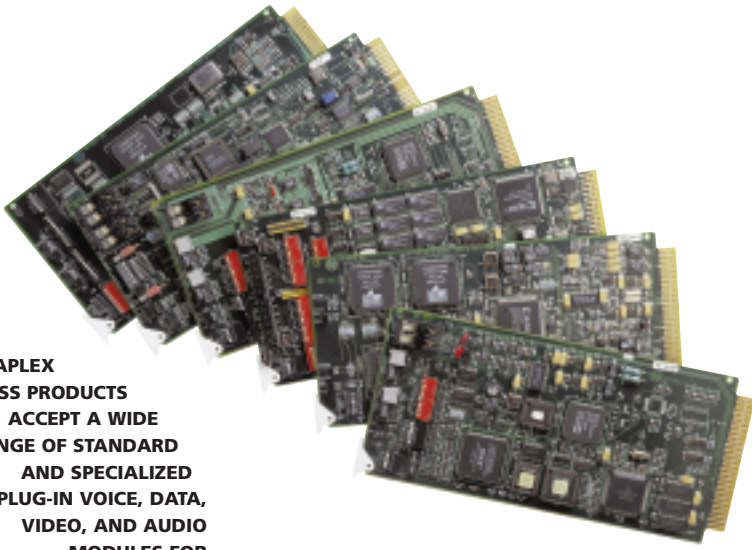
INTRAPLEX INTRALINK™

For lower-bandwidth applications, such as traditional voice frequency service, 10BaseT LAN extensions, synchronous or asynchronous data links, streaming multimedia or remote monitoring, the Intraplex IntraLink ISDN multiplexer provides integrated access for voice, data, and audio over Basic Rate ISDN services. IntraLink may be used with dedicated or dial-up ISDN links, supports up to six BRIs and is ideally suited for backhaul of low-capacity traffic from wireless base stations. IntraLink and ISDN circuits can also be combined to provide a cost-efficient solution for redundancy and network backup.



INTRAPLEX INTRALINK

**INTRAPLEX
ACCESS PRODUCTS
ACCEPT A WIDE
RANGE OF STANDARD
AND SPECIALIZED
PLUG-IN VOICE, DATA,
VIDEO, AND AUDIO
MODULES FOR
CREATING
VIRTUALLY ANY
COMBINATION
OF PAYLOAD
CHANNELS FOR
MOST APPLICATION
REQUIREMENTS.**



VOICE MODULES

Voice modules provide digital transport of telephony, fax and modem circuits. Signaling options include E&M Types I, II, III, V, loop start/ground start, ARD and transmission.

- 2-Wire Foreign Exchange Office (FXO/FXS)
PCM and ADPCM Voice
- 4-Wire E&M PCM and ADPCM Voice
- Wideband 7.5 kHz Voice
- Motorola SECURENET™ Secure Digital Voice

DATA MODULES

Data modules provide digital transport of one-way or full-duplex data circuits, supporting a variety of data rates and formats.

- High-speed synchronous data up to 1.984 Mbps—
10BaseT LAN, V.35, X.21, RS-449, TTL
- 10BaseT Ethernet LAN bridging
- Four port asynchronous data up to 38.4 kbps—
RS-232, RS-449
- Five port synchronous data up to 19.2 kbps—
RS-232
- High-speed synchronous data optionally decoupled from
network timing at any data rate up to 1.984 Mbps

PROGRAM AUDIO MODULES

Program audio modules provide digital transport of up to 20 kHz stereo. They are available with analog or AES/EBU input or output.

- Linear uncompressed 15 kHz stereo audio with
minimum delay
- apt-X100 4:1 compressed audio up to 20 kHz stereo
with low delay
- ITU-T J.41 audio employs 14:11 and 15:11 instantaneous
companding
- Full-duplex codec modules provide MPEG Layer 2 and
Layer 3 (MP3) compressed audio for highest fidelity
stereo audio relative to bandwidth

VIDEO MODULES

Video codec modules support H.261 compliant video transmission in simplex and duplex configurations. Applications include imaging, surveillance, remote monitoring, conferencing and video distribution.

- NTSC and PAL video
- Encoder, decoder and duplex configurations
- 16 kbps—1.984 Mbps

Additional enhanced features of Intraplex access products are available to support low delay, fast synchronization and other robust transmission requirements.

Please call for assistance with network design, planning, application support, and training.