NetXpress™

Digital Audio Transport System for IP and T1/E1 Networks

A New Level of Performance

Intraplex® NetXpress™ takes IP audio transport to a new level of performance and reliability. It provides transport over packet-switched networks for a wide range of real-time audio, voice, video and data applications. As the industry's best platform for professional audio over IP, NetXpress offers system-level resiliency, sophisticated network monitoring and excellent bandwidth management. NetXpress delivers all the quality of Intraplex and all the economy of IP in one solution.

FEATURES

- **Professional audio transport over 10/100Base-T networks**
  NetXpress is designed for professional applications such as contribution and distribution circuits, studio-to-studio, STL/TSL links, remote pickup, program and spot delivery, confidence monitoring of remote sites and emergency backup of program feeds.
- **Transport multiple services in one or more streams**
  NetXpress accepts a variety of existing Intraplex plug-in modules for audio, voice, data and video transport. Audio codec modules supported include linear uncompressed, Enhanced apt-X®, MPEG, G.722 and J.41.
- **Smooth migration to packet-switched networks**
  NetXpress allows for easy migration from dedicated circuits to IP-based networks by leveraging existing assets.
- **SynchroCast3™**
  Increase coverage by building simulcast systems with NetXpress over T1/E1 or IP networks.
- **Built-in error correction**
  Built-in forward error correction, packet delay jitter compensation, and low-delay packet processing provide high-quality, robust audio streaming. These features overcome anomalies commonly associated with packet networks.
- **Improve costs globally by using existing communications infrastructures**
  Widely deployed and established LAN/WAN connections offer lower cost and higher-bandwidth alternatives to dedicated full-time links.
- **Create, augment and manage multiple distribution networks**
  NetXpress can accommodate up to 32 simultaneous streams, one-way or duplex, unicast or multicast. Multiple program sharing and distribution across city, regional, national and continental boundaries is achieved through individually controlled and monitored streams. web browser interface and SNMP-based management allow for either centralized or decentralized control.
- **Simultaneous IP and T1/E1 operation**
  NetXpress leverages the use of TDM and IP-based networks in primary and backup modes.

SPECIFICATIONS

Specifications are subject to change without notice.

General	The base system includes the chassis with 1 network interface module (NIM), 1 module interface unit (MIU), and 1 power supply; hot-standby redundant NIM and power supply optional
Module Compatibility	Accepts Intraplex plug-in audio, voice, data and video modules; see individual module specifications for details and applications
Audio Coding Available	Linear uncompressed, Enhanced apt-X®, MPEG layer 2 and layer 3, G.722, J.41
Audio Operating Modes	Stereo, joint stereo, dual mono, mono
Sample Rates Accepted	48, 44.1, 32, 16 ks/s
Audio Input/Output	AES/EBU and analog
Data Support	RS-232, RS-449, V.35, X.21, and more
Ethernet Data Rate	10/100Base-T (10 or 100 Mb/s)
(WAN, LAN and MGMT ports)	Full duplex
	Auto-negotiation with network
Ethernet Connector	Port 1: management LAN, RJ-45
	Port 2: WAN, RJ-45
	Port 3: LAN, RJ-45
T1/E1 Data Rate	T1: 1.544 Mb/s
	E1: 2.048 Mb/s
T1/E1 Connector	2 RJ-45
Payload Bandwidth	4 TDM busses delivering up to 8 Mb (E1 mode) or 6 Mb (T1 mode)
	Packet bus delivering additional bandwidth based on selection of channel access modules
Circuit Connection	Up to 32 streams/connections
	Point-to-point unidirectional
	Point-to-point bidirectional
	Point-to-multipoint unidirectional multicast (IGMP v2)
Network Protocols	IP, TCP, UDP, RTP, DHCP, DNS, HTTP (on port 80), FTP (on port 21), Telnet, NTP, SNMP v1/SNMP v2 (requests on port 161 and traps on port 162), RTCP, ARP, ICMP
Timing	Internal
	External, RS-422 clock input
	Adaptive to incoming program stream
	Timing out, RS-422 clock output
Forward Error Correction (per stream)	High, low, off, user-selectable
Packet Optimization (per stream)	Programmable jitter buffer depth to 128 packets (provides compensation in excess of 1 sec of network jitter)
Quality Of Service (per stream)	Adjustable packet size/rate
	IPv4 type of service tagging
	Differentiated service (DiffServ)
LED Indicators	Normal, major alarm, minor alert, alarm cutoff (ACO), LAN link status, LAN 100 MB, LAN activity, external timing, internal timing, adaptive timing, network status

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Alarm Reporting	Major/minor alarms NO/NC relay contacts SNMP traps, user-configurable Alarm logs Off-site server storage for log files
Network Performance Statistics (Per Stream)	Packet loss, packets received, packets sent, packets dropped, packet count and delay variation
Loopbacks	Received stream loopback, equipment loopback
Remote Management	Web browser user interface SNMP network management interface
Power Requirement	Universal AC 90 to 240 VAC, 50/60 Hz, 48 VDC, 24 VDC
Power Supply	Single or redundant 80 W AC 200 W AC 150 W 48 VDC 150 W 24 VDC DC supplies can use either positive or negative ground reference

Power Supply Alarm	
Contact rating	50 VDC, 100 mA
Power Consumption	15 W or less with no channel modules installed
Environmental	Temperature: 32° to 122° F (0° to 50° C) operating (AC powered) Humidity: 10% to 90%, non-condensing
Physical (H x D x W)	3RU: 5.25 x 14.25 x 19 in. (13.4 x 36.2 x 48.3 cm)
Weight:	11 lbs (5 kg) approximate, w/o channel modules installed; max weight depends on number and type of modules installed
Regulatory Compliance	CE-compliant, FCC Part 15 Class A, UL 1950, RoHS-compliant

ORDERING INFORMATION

Contact your Harris sales representative for information on ordering these products.

HARRIS assuredcommunications®

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