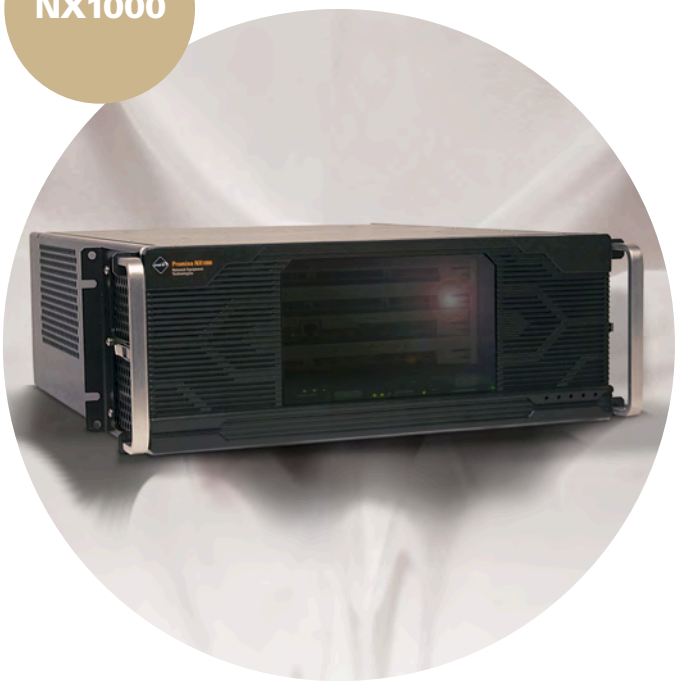
NX1000



Network Equipment Technologies

NX1000: IP Access Switch

- Bridges the gap from TDM to IP
- Offers standards-based transport protocols
- Combines rugged design with scalability
- Maintains low cost of ownership

DATASHEET: NX1000

NET is a pioneer in providing platforms that aggregate multiple traffic types onto a single transport network. The Promina 800 Series has provided reliable, resilient transport of voice, video and data applications over traditional TDM-based or ATM-based networks for over 20 years. With the introduction of the new IP transport module, the Promina 800 Series converges legacy applications and services onto an IP-based backbone network.

The NX1000 is the latest development in multiservice access platforms purpose-built to provide a bridge between the Promina network and an IP/MPLS backbone. The NX1000 provides full Promina interworking in a rugged, compact chassis and offers a flexible, cost-effective IP access solution that facilitates migration of Promina networks to IP.

NX1000 – BRIDGING TDM AND IP

The NX1000 provides the technology and features required to bridge the gap created by an enterprise's need to build out a cost-effective IP/MPLS backbone and their desire to maintain legacy applications and services that are still in use. The NX1000 offers complete interoperability with Promina 800 Series equipment and takes advantage of the NET IP transport architecture to reliably transport circuit-based services across the next generation of IP networks. The NX1000 leverages the Promina 800 Series technology, supporting features that allow the NX1000 to actively participate in a Promina network. Customers realize transparent interoperability with their existing networks and services.

STANDARDS-BASED TRANSPORT PROTOCOLS

Pseudo-wire protocols provide the technology solution to connect traditional voice, video and data services over IP/Ethernet/MPLS networks to remote Promina equipment or to connect to routers or other switches in the IP network. Structure-Agnostic TDM over Packet (SAToP) in combination with the optional serial interface card offers the ability to transport serial data stream traffic across the packet network to a compatible Promina interface, another NX1000, or a host such as a router or other switch. Circuit emulation service over a packet-switched network (CESoPSN) complements SAToP. The IP transport module integral to the NX1000 uses CESoPSN to configure multiple transport data streams to different Promina nodes across the packet switched network and provide a seamless Promina-like networking capability.

COMBINES RUGGED, COMPACT DESIGN WITH SCALABILITY

The NX1000 offers even more - a new Linux-based architecture with integrated on-board data storage, on-board IP transport interfaces, and on-board high-speed data interfaces. The design supports adaptive timing across the IP transport to a remotely deployed NX1000; an optional rubidium stratum clock module extends network clocking capabilities if needed. The design considers the requirements of mobile applications; the platform is rugged, compact and lightweight with a fully loaded system weighing less than 40 lbs. Redundant, hot-swappable power supplies and redundant, hot-swappable fans ensure reliability and serviceability. The system draws just 75W of power. To provide additional capacity two NX1000 chassis can be stacked, doubling the bandwidth, doubling the interface capacity and adding redundant processors.

MAINTAINS LOW COST OF OWNERSHIP

A single NX1000 chassis contains four expansion slots supporting the same feature modules that are used in the Promina 800 Series low speed shelves, leveraging spares already stocked for existing Promina nodes. Customers can leverage Promina networking expertise within their network operations organizations since training requirements are greatly reduced with the commonalities between the two systems. The NX1000 and the Promina 800 Series share a common CLI and there is a single set of manuals and documentation. The NX1000 system can be managed by NET's network management system, netMS.

The NX1000 combines state-of-the-art networking features with cost effectiveness and takes an intelligent approach to IP access, providing outstanding reliability and high service availability. The NX1000 joins other NET products that are field-proven to have the guaranteed performance, reliability, resiliency and security demanded by mission-critical networks.

TECHNICAL SPECIFICATIONS:

System Features:

- Stacking architecture – up to 2 chassis
- Optional rubidium clock
- Integrated 40 Mbps IP trunk
- Integrated high-speed serial data ports
- Optional 4 port high-speed serial expansion card
- Remote SW/FW code download
- Redundant power and cooling
- Total slots per chassis: 5
- Promina-compatible feature card slots: 4
- Mounting options: transit case, rack mount

Interfaces:

- T1/E1
- EIA-530, EIA-422
- 10/100 Ethernet

IP Features:

- SAToP
- CESoPSN
- Ethernet bridging
- IPv4 and IPv6 addressing
- Traffic management and QoS:
  - Precedent setting with configurable TOS byte or DSCP
  - TDM traffic has highest priority (EF)
  - Packet resequencing and packet loss detection
  - User-configurable jitter buffer per stream

Capacity:

- Digital voice: 120 E1/96 T1 calls per NVX (Up to 4 NVX per chassis)
- Analog voice interfaces: 16
- Data interfaces: 24
- Bandwidth per chassis: (256 Mbps stacked)

Management and Security Features:

- SNMPv1, SNMPv3
- Optional Telnet/FTP, SSH/SFTP
- Menu-driven CLI
- netMS (network management for all NET platforms)

Dimensions and Weights:

Height in/cm	7.00/17.78 (4RU)
Width in/cm	17.25/43.82
Depth in/cm	20.50/52.07 without cable management assembly 24.75/62.87 with cable management assembly
Weight lb/kg	31.00/14.06 full configuration with two AC power supplies

Environmental and Electrical Specifications:

Nominal Input Voltages	100 to 240 V AC
Operational Frequency Range	47 to 63 Hz (AC)
System Operating Conditions	Temperature: 5 to 40°C at -200 to 5,000 ft. 5 to 25°C above 5,000 ft. Humidity: 95% at 50°C
Storage Conditions	Temperature: 0 to 70°C Humidity: 8 to 95% relative humidity Altitude: -200 to 40,000 ft. above sea level Altitude vs. Temperature: • Sea level—70°C maximum • 40,000 ft. above sea level—25°C maximum
Acoustical Noise Level	Should not exceed 70 dB-A at 20°C
Cooling	Internal forced convection
Regulatory Standards (Meets or Exceeds)	UL 60950, IEC950, CSA-22.2 No. 950 FCC Part 15, Class A CFR, EN60950/CISPR 22
Input Power and Power Connectors:	
AC Power Connector	IEC 320 (AC)
Input Current	4 A maximum for 115 V AC or 2 A maximum for 230 V AC (per AC power supply)
Maximum Input Power, BTU/Hr	600 W, 730 BTU/Hr, 2047 BTU/Hr (total)

WEBSITE: Please visit our website at www.net.com for information on how to contact us, place an order or get more information on NET solutions.

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