NETRIX

Network Exchange 2201

- **1 digital (T1/E1) or 4 analog voice interfaces**
  - **1 Ethernet**
  - **4 optional serial interfaces**

- **Award-winning voice clarity over IP and Frame Relay**

- **Extensive voice feature set**

- **Advanced Quality of Service mechanisms**

- **H.323 v2 compliance**

- **Standards compliance ensures superior interoperability**

- **Soft configurable voice ports**

- **Optional WAN support via Frame Relay over high-speed serial interfaces**

Voice and Data Gateway

NSGDatacom's Network Exchange (Nx) 2201 is an Internet Telephony platform that delivers the benefits of voice, fax and wide area networking together with multi-protocol data support to enterprises and service providers alike. It offers a unique combination of switched compressed voice and data support in a single platform. As a stand-alone voice and data switch, or in conjunction with other NSGDatacom products, it gives your network unparalleled flexibility, scalability and efficiency.

The Nx2201 delivers high-quality, low-bandwidth compressed voice with connectivity for both analog and digital interfaces (T1/E1, PRI and BRI) over IP or Frame Relay, allowing enterprise and service providers to choose the most cost-effective transport for their voice and data traffic.

The Nx2201 allows calls to be switched from any port to any port across a public, private or hybrid network, whether Frame Relay or IP. The Nx2201's sophisticated traffic management capabilities achieve exceptional bandwidth efficiency without sacrificing quality or functionality. It is also able to "gateway" between the various voice over technologies switching voice calls from any port to any port over any protocol. In addition to voice support, the ability to detect fax modem tones at any stage of the call and on any port, and then carry that traffic across the network further enhances the Nx2201's flexibility.

The product delivers an industry-leading 10 voice/fax over IP calls over a single 64 Kbps link, and over 12 calls via Frame Relay. "Call flows" allows optimized line utilization for multiple calls to a single destination, thus reducing the overhead associated with Voice over IP and allowing bandwidth to be more efficiently used.

Delivering quality of service for all network calls, NSGDatacom's multi-class networking prioritizes calls on an individual basis, ensuring voice quality with sacrificing data performance.

The Nx2201 looks at the available bandwidth and traffic types present on a connection and shapes the traffic appropriately. Additionally, the Nx2201 supports the use of the Type of Service (TOS) bits or the Differentiated Services (DiffServ) octet within an IP packet, ensuring voice traffic is given priority across an IP network on a hop-by-hop basis.

Additional flexibility is offered by bandwidth-on-demand, provided automatically via ISDN or other dial services, depending upon traffic, network conditions or time of day.

Communication solutions from

NSGDatacom

extend. evolve. innovate.

NETRIX

Network Exchange 2201

Product Features

Connectivity

- Voice/Fax
  - FXS/FXO/E&M
  - H.323 v2, H225.0 v2, Q.931, H.245 v4, RTP/RTCP, ETSI ISDN, NI 1/2, ISDN Cept, G.703, G.704, G.711, G.729a, G.732 @ 2.048 Mbps, AT&T DSX-1, D4, ESF, AMI, B8ZS, TDHS, CELP 4.8/7.4 kbps, ACELP 5.5/8.0 kbps
  - V.27 ter, V.29, Group III
- IP
  - VoIP, RIPv1/2, OSPF, static routing, SNMP
- Frame Relay
  - Frame Relay NNI, UNI, FRF4/ITU Q.933, Frame Relay Annex D, Annex G, LMI, Full FECN-BECN-DE
  - Switching and encapsulation
  - PVCs and SVCs
  - FRAD
- ISDN
  - Voice and Data
  - PRI and BRI S/T
- X.25 (1988ITU)
  - PAD and switch support
  - X.3/X.28/X.28/X.121
- X.75 (1988 ITU)
- SNA
  - SDLC/QLLC Master & Slave PU
  - PU/LU logical switching
  - SNA (RFC1490), HDLC/SDLC FRAD, SNA/SDLC, QLLC
- SFTM

Management

- Graphical User Interface (GUI) hosted by Microsoft Windows™ PC or Sun SPARC™ workstation
- Configuring, monitoring and troubleshooting over public, private or hybrid networks
- Distributed management of existing equipment via Simple Network Management Protocol (SNMP)

Communication Cards

Two card slots (plus NIC):

- Slot 1 (Select one):
  - XP4 4-port serial card
  - XP4-3 4-port serial card
  - XDV SDI 4-port High-speed serial card
- Slot 2 (Select one):
  - XV-A 4-port Analog Voice card
    - 2-wire FXO loop/ground start
    - 4-wire E&M Type I, II and V
  - XV-T T1 card
    - ISDN PRI
  - XV-E E1 card
    - ISDN PRI
  - XDV BRI 4-port ISDN BRI card
- Also includes Ethernet NIC
  - 10/100Base-T

Physical Interfaces

- XP4 Card (4-ports)
  - RS232
- XP4-3 Card (4-ports)
  - V.35
  - X.21
- XDV-SDI Card (4-ports)
  - Software configurable RS 530—X.21
- XV-A Card (4 ports)
  - RJ-45
- XV-T T1 Card
  - 100 Ohm DB 15 (includes RJ adaptor)
- XV-E E1 Card
  - 120 Ohm DB 15 (includes RJ adaptor)
- XDV BRI Card (4-port)
  - ISDN S/T data
  - Software configurable for N12, Euro, Austel, and NTT Switch

Scalability & Flexibility

- Up to 4 serial data/trunk ports at speeds to 2.048 Mbps
- Up to 30 digital voice channels
- 4 analog voice ports
- 1 LAN (10/100Base-T) port
- Multiple units can be "clustered" to provide well over 2,000 simultaneous voice calls and extend reliability through distributed processing

General

Physical

Size:	3.5" H x 19" W x 16.7" D 8.89 x 48.26 x 42.42 cm
Weight:	18.5 lbs (8.39 kg)
Power:	100-240 VAC, 50-60 Hz 200 Watts 8 Amps @ 115 VAC 4 Amps @ 230 VAC
Heat:	1,365 BTU/hr

Environmental

Temperature:
Operating: 0º to 50º C (32º to 122º F)
Storage: -5º to 70º C (23º to 158º F)

Humidity:
Operating: 10% to 90%
Storage: 5% to 95%

MTBF: >65,000 hours @ 30º C (86º F)

Card Slots: 1 PCI bus card slot for NIC
2 ISA bus card slots

Approvals:
Safety: UL, CSA, IEC 950, EN 60950 (73/23/EEC), CE Mark
Telecom: 91/263/EEC, EMC: FCC Part 15 Class A, VCCI Class 1
Immunity: 89/336/EEC

NSGDatacom

www.nsgdata.com

Specifications subject to change without notice