

VoLTE Systems Nx2222 Voice Optimized Gateway

Expertise in the optimization and prioritization of Voice

Key Benefits

- Combined Voice, Fax and Wide Area networking on a single integrated platform
- VoIP, SIP, Channelized T1/E1, Analog Voice FXO/FXS/E&M supported out of the box
- Highly optimized and efficient Satellite communications
- Combines standards-based and patented voice compression technologies (Up to 16:1 voice compression)
- Sophisticated prioritisation and QoS processes that ensure voice quality is not degraded when heavy data traffic is also present

The VoLTE Systems Nx2222 platform is the latest in a line of high performance voice and data compression multiplexer routers. Designed as a Voice gateway, for aggregating, optimising and prioritizing conventional leased line, satellite, analog and digital voice, fax and data traffic it also is ideal for the backhauling of traditional, IP or Cellular telephone traffic.

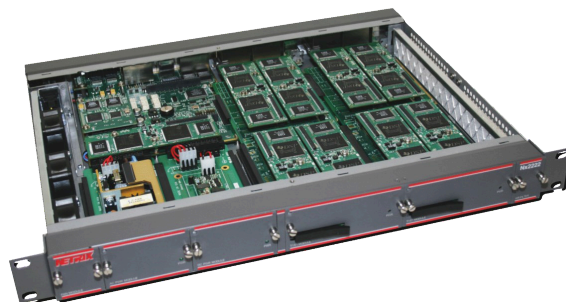
Based on advanced distributed processing technology, the VoLTE Nx2222 takes advantage of the latest generation of hardware and software to provide a highly integrated and scalable platform.

It supports from 2 to 18 T1/E1 circuits of TDM voice or data traffic, or over 540 PSTN voice, facsimile or fractional data channels which are accommodated in a single 1U high chassis.

The Nx2222 comes with hot swappable line cards, redundancy power supplies, distributed processing and remote management support. The Nx2222 is designed for interfacing traditional voice traffic to IP based services, either as a SIP gateway or by providing a 'transparent' TDM over IP connection.

The Nx2222 contains a DS0 digital cross connect, an IP router with gateway functions, Ethernet ports and high speed serial ports supported by the broad and extensively deployed VoLTE suite of protocol optimization, switching and voice compression algorithms. VoLTE voice compression supports standard VoIP with SIP as well as alternative low-rate, toll-quality compression used by the US military to achieve up to 16:1 bandwidth compression. Even on cellular traffic with pre-compressed voice, additional gains of 2:1 can be achieved.

The Nx2222 is remotely configurable using the GUI management system and is packed with advanced features such as T1/E1 failure detection with Automatic Fail-over to an IP backup link, transparent TDM operation over IP with embedded clock recovery, and IP packet shaping. In satellite applications the Nx2222 supports both IP and serial connections for seamless use in SCPC and DAMA systems.



VoLTE Systems has partnered with major satellite vendors to optimize bandwidth usage. Currently installed in many countries, Nx2200 series products have provided reliable communications for critical US Carrier and Military voice and data services for over 10 years. Other widely deployed applications include call center, banking, transaction processing, air traffic control and service providers world-wide.

Specifications

Physical Interfaces

- T1/E1 (0 - 18 ports)
- ANSI T1.403, ITU G.703, ITU G.704, ITU G826, TR 62411, TR 54016
- Framing: D4, ESF, or G.70x
- Line Coding: AMI, B8ZS, HDB3
- Physical: 4x RJ-48c
- Selection by module for T1 or E1. Short or long haul, APS 1:1 and 1+1 functionality with revertive and non-revertive mod
- BERT and loopback diagnostics, software enabled per line or per timeslot

High Speed Serial Interface (1 – 2 ports)

- EIA-232, EIA-442/449, EIA-530, ITU X.21, ITU V.35
- Physical: Micro DB26
- Handles Nx56/64kbps data rates up to 2.048 Mbps

Analog voice ports (2 – 28 ports)

- FXS fixed (RJ11)
- Optional FXS/FXO/E&M software configurable (RJ45)
- 2 PSTN lifeline connections

ALARM port

- Relay contacts power fail output alarm
- 7 contact input sensors
- Optional 3 contact outputs (replaces 6 contact inputs)

Switched Ethernet (4 – 8 ports)

- ANSI T1.617/IEEE 802.3, 802.1p/Q
- Physical: 4 – 8 x RJ-45
- Power over Ethernet (optional)
- Autosensing 10/100 Mbps Switched Ethernet autosensing

- DI/DIX (auto-polarity)
- Optional 10/100/1000 Mbps Gig Ethernet ports (up to 4 port)
- Software configurable switching characteristics, QoS and ToS characteristics

General

Physical

- Size: 16.6"W x 9"D x 1.75"H (IU height) (419.1 mm x 228.6 mm x 44.45 mm)
- All physical interfaces are on one side to ease cable management in tight confines

Power

- 30 watts maximum draw
- +/- 20vDC to +/- 65vDC, 1.5 amps max
- +/- 90vAC to +/- 265 vAC, 50-60 Hz, 0.030 amps max
- Optional PSU redundancy (with load sharing)
- Optional 110vAC/220vAC external converter

Console Port

- RS-232
- Physical: RJ-45
- Autosensing Async serial at data rates from 2.4 kbps to 230 kbps, serial settings 8N1 or 7E2, autosensing DTE or DCE mode (auto-polarity)

MTBF

- >65,000 hours @ +45C

Environmental

- Temperature: Operating - 4° to +149°F (-20° to +65°C)

- Humidity: 0-95% non-condensing

Safety

- FCC 47 CFR part 68,
- IC CS-03,
- IEC 950,
- EN 60950,
- ANSI/UL 60950-1-2002,
- CAN/CSA-C22.2 No. 50950-1-03,
- Telecordia GR-63,
- Telecordia GR-1089

Other

- Telecordia GR-1244,
- Telecordia GR-3108 (OSP, 07-2004)

Optional Accessories

- Console Port Adaptor
 - DB-9 to RJ-45 converter
 - Allows the operator to use a standard Ethernet cable to connect to the console port
- Rack Mounts
 - Mounting ears for 19" or 23" open frame telco racks or enclosed equipment cabinets
 - Front mount, center mount and rear mount options available. Kit includes mounting ears, screws, and instructions
- Cable support bar
- Wall Mounts
 - Mounting brackets for perpendicular or parallel wall mount. Kit includes mounting ears, screws, and instructions

Management

- SNMP, SNMPv2, Telnet CLI, SSH CLI, serial CLI, Web browser (HTML, SHTML)

* Maximum port configurations and loading are dependant on application
Specifications subject to change



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