



Nx2222 RAS

IP Connectivity for Remote Access Services



Example Applications :-

- **Utility Meter Management**
- **Alarm Response / ARC**
- **CPE Management / NOC**
- **EPOS / Lottery / Transactions**
- **Telemedicine**
- **SCADA / Command and**

Extensive features include:-

- **Up to 60 ISDN/PSTN Modem Channels**
- **Expandable Modular Design**
- **Gateway functionality with SIP Compliance for Voice and Fax over IP**
- **Onboard Analogue Voice Channels for Management or long line extensions.**
- **Standards Compliance ensures Superior Interoperability**

The Nx2222 **RAS** is the latest in a line of Netrix brand high performance voice and data routers designed for aggregating and optimizing PSTN based data links. Designed as a fully featured Telecom switching platform, the Nx2222 platform reduces network costs by providing connectivity for Dial Modems, Fax, and a wide range of other legacy Digital and Analogue voice-based services over IP.

Based on proven technology, the Nx2222 takes advantage of the latest generation hardware and advanced software to provide a highly integrated and scalable design housed in a 1U chassis. The platform can be easily upgraded with software packs to provide additional customer specific functionality, to extend the life of existing legacy equipment and generate a rapid ROI.

Software features include modules that eliminate obsolete and expensive modem banks. Inbound calling and outbound dialing are both supported and the unit provides transparent IP backhaul for modem connections where PSTN connections are no longer supported or are too expensive. The Nx2222 **RAS** is specifically designed as a replacement for currently unsupported RAS devices such as the Cisco AS5350XM and AS5400XM Universal Gateway.

Up to 2 E1/T1 circuits can be configured per base unit. Modem RAS functions are provided using a software-based virtual modem capability on each of the individual digital channels. A wide range of dial-modem 'V' specifications are covered, including many older connectivity options such as split speed and reversed 1200/75 V.23 which are not supported by many conventional hardware based 'chip' solutions.

Connectivity on the IP side is typically via TCP/IP to a local server device.

NSG products including the Nx2222 are designed for longevity. Unlike LAN based IT technology which typically has a 3 year to end of life window, NSG products are true WAN communications devices designed with the expectation that customers require 10 years or more of provision, use and support.

With power redundancy and remote management support, the Nx2222 **RAS** is designed with traditional communications technology in mind where real time connections constitute a mission critical environment. The Nx2222 **RAS** provides vital connectivity of legacy communications over modern IP infrastructures without affecting widely deployed equipment or existing communications interfaces.



Communication solutions from

NSGDatacom

extend. evolve. innovate.



Nx2222 RAS

Product Features

Specifications

Modem Support

- **T1/E1 or Analog**
 - V.21 @ 300; V.23 @ 600
 - V.23 @ 1200;
 - V.22 @ 1200; V.22 @ 2400
 - V.32 @ 4800; V.32 @ 7200
 - V.32 @ 9600; V.32 @ 12,000;
 - V.32 @ 14,400.
 - V.23 Direction 75 TX, 1200 RX
1200 TX, 75 RX.
 - V.42 Error Correction
 - V.110 Option
 - AT Command Set

Specifications

Physical Interfaces

- **T1/E1 (0 - 2 ports)**
 - ANSI T1.403, ITU G.703, ITU G.704, ITU G826, TR 62411, TR 54016, ISDN PRI.
 - 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 port)**
 - 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 to 28 optional ports)**
 - FXS fixed (RJ11)
 - Optional FXS/FXO software configurable (RJ45)

- **Switched Ethernet 2 + ports)**
 - ANSI T1.617/IEEE 802.3, 802.1p/Q
 - Physical: 2 – 6 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
 - 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
 - Optional Rack Mount ears are included in accessory kit.
 - Optional desk top rubber feet are included in accessory kit.
- **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
- **MTBF**
 - >65,000 hours @ +45C

- **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)
 - Console cable provided in accessory kit
- **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
 - CE
 - RoHS
- **Other**
 - Telecordia GR-1244,
 - Telecordia GR-3108 (OSP, 07-2004)

Management

- SNMP, SNMPv2, Telnet CLI, SSH CLI, serial CLI, NMS

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