NETRIX

Wi-Modem G3000

Voice/Fax/Data Gateway for 3G Wireless networks

- *Replaces Land-line & Switched Data Circuits*

- *Fax Calls*

- *Voice Calls*

- *Alarms*

- *Point of Sale*

- *Telemetry*

- *Telemedicine*

- *Internet Browsing*

- *Full Network Management*

NSGDatacom's **Wi-Modem G3000** is a low-cost, high-performance, Voice, Fax and Data gateway for replacing land-lines and circuit switched data circuits using the 3G Wireless M2M Network.

With two Analog Voice ports, one RS232 Data port and one Ethernet port, The **Wi-Modem G3000** can support multiple voice, fax or data calls over a single 3G circuit, connecting standard analog telephones, facsimile machines, or dial data modems, in addition to Internet access for local PC connection.

The unique ability of the **Wi-Modem G3000** to interface with dial-up data modems and fax machines allow it to be used in many applications where standard VoIP equipment fails. Applications for the **Wi-Modem G3000** are numerous and include, Alarm panels, Point of Sale, Fax over IP, Lottery, Elevators, Remote Data Acquisition, Telemetry, Remote Data Control, Air Traffic Control, etc..

The **Wi-Modem G3000** was developed using military grade software systems and is optimized for operation over the 3G wireless network to provide dependable service where other standard IP solutions fail. Additional products in the **Wi-Modem G3000** family provide a combination of interfaces and functions applicable to specific applications and embedded systems, such as automatic wireless backup to terrestrial communications links.

The **Wi-Modem G3000** uses our unique, patented suite of *Netrix* voice and data protocols, which have been developed over many years and widely deployed by the US Military and in Carrier networks world wide . The **Wi-Modem G3000** is fully compatible with the full range of *Netrix* Network Exchange products.

The **Wi-Modem G3000** is programed and managed (in or out of band) by the Netrx Network Management System. The unit can also be operated via a menu-driven interface and industry standard MIBs can be provided for integration with customers' Network Management Systems.

The **Wi-Modem G3000** is a member of the extensive NSGDatacom range of integrated Voice/Data products that scale from point to point, to extensive multinational mesh networks, covering a wide range of Enterprise, Public Sector, Government and Carrier grade network applications.

Communication solutions from

NSGDatacom

extend. evolve. innovate.

NETRIX

Wi-Modem G3000

Product Features

Physical Interfaces

- **Analog Voice./Fax/Data:**
  - Two analog Interfaces
  - Fixed two-wire FXS Loop start
  - Optional one port also soft configur-able for two wire FXO Ground start
  - Signaling types include Wink start, delay start, immediate start, hoot-and-holler and phone
  - Dialing can be either DTMF or pulse
- **LAN Connectivity:**
  - One 10 Base-T Ethernet Interface on RJ45
  - Optional Internal USB interface
- **Serial Interface:**
  - One V.24/RS-232 physical level on DB9 connector
  - Supports Asynchronous data from 1200bps to 115.2Kbps.

Connectivity

- **Voice/Fax/Data modem ports**
  - FXS/FX0
  - H323, SIP, B2BUA, G.711, G.729a, ACELP 5.5/8Kbps voice compression
  - Echo Cancellation
  - Silence Suppression
  - Modem Relay
  - V.22bis, V.32bis, V.42
  - V.27ter, V.29
  - Group III fax
  - DTMF or Pulse (10 or 20 pps)
  - TIP/RING Reversal
- **IP**
  - TCP, UDP/RTP Data Transport
  - RTP Packet Optimization
  - VoIPZIP ™ up t o 6 channels
  - VoIP Gateway
  - IP Static Routing
  - Dial-Up and DLCI IP configuration
  - DHCP Client
  - Telnet (Client or Server)
  - RIP configuration
  - TCP Port configuration
  - TCP Broadcast
- **DATA**
  - RS232 (V.24) Asynchronous Data
  - Triple X PAD Port Configuration
  - Local Console Port can be used as the Trunk (Asynch PPP) or as a local Data Port

Management

- NMS Manageable via SNMP
- Configuration, Monitoring and trou-bleshooting over public or private IP networks
- Menu Driven Console Interface
- Remote or Local Access
- Compatible with NetrixView Network Management System

System Features

- Central time keeping system
- Closed User Groups
- Date, Time processing
- Alarms
- Password Security for MMI
- User Friendly Man/Machine interface

Reporting Features

- Alarm Reports
- CDR call logging

Modem Settings

- Answer Wait Time 1-30 sec in 1 sec increments
- Modem Relay
- V.22bis, V.32bis, V.42
- V.27ter, V.29
- Group III fax
- DTMF or Pulse (10 or 20 pps)

Security

- IP Authentication
- Call setup authentication
- Unit Authentication
- MMI User Passwords
- Optional Encryption

Administrative Options

- DTR/DCD Handshake
- Network User ID (NUI)
- Logon with NUI Required
- TCP Configuration

Networking

- Fully Compatible with the Netrix Ex-change line of Products for Point to Point and Mesh Network Configura-tions.
- Provides Gateway functions between Private, PTSN and SIP Networks

3G Wireless

3G IP Wireless networks using internal Novatel E396 Embedded Wire-less module (see Novatel data sheet for specifications).

Typical Applications

- PSTN bypass for Handsets, Fax Machines and Dial Modems
- Adding Voice over IP capability for standard handsets
- Mobile PBX extension for direct office communications
- Ademco protocol (DTMF based) Alarm Panels
- Emergency Services
- Public Utility (eg. SCADA)
- Point of Sale (eg. temporary kiosks)
- Lottery
- Telemedicine
- Construction
- Telemetry and remote control
- Tone based Signaling and Control
- IP based Fax
- Mobile PBX Extensions
- Automated backup/replacement for Landline services

Electrical Specifications

- **Power:**
  - 5V DC External Power Supply , 10 Watt max
  - Input 100/250 VAC @ 50/60 Hz
- **Connectors:**
  - DB-9 male RS232 Data port
  - 2 x RJ11 Analog Voice/Fax/Modem ports
  - RJ45 Ethernet port
- **Data Rates:**
  - Asynchronous: 50 bps to 38.4 Kbps
  - Async PPP: 1200 bps to 115.2 Kbps

Physical

- **Size:**
  - Desktop: 1.25" H x 5.5" W x 3.75" D
- **Environment:**
  - Operating Temperature: 0º to 40º C (32º to 104º F)
  - Storage Temperature: -20º to 70º C (-4º to 158º F)
  - Humidity: 95% non-condensing

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Specifications subject to change without notice