

Cellular Wireless for Embedded Dial Modems

- Replaces existing Dial-up Connections with wireless
- Works with embedded or stand-alone modems
- Uses low cost cellular wireless data services
- Simple Plug-and-Play installation
- Approved for POS, alarm, medical and many other applications

NSGDatacom's *Wi-Modem* is a low-cost, high-performance, Wireless Data gateway for dial-up systems with embedded analog modems such as Point Of Sale, telemetry, remote medical monitoring terminals and more. *Wi-Modem* accepts the analog telephone cable from a standard dial modem, interprets the dial string and connects to the host using a cellular wireless connection. The need for a physical telephone line connection is therefore completely eliminated, and is replaced with a substantially more economical cellular data service.

The **Wi-Modem** can be pre-programed prior to deployment and requires no further configuration by the customer prior to use. In use, the user simply connects the existing telephone cord from the terminal device to the **Wi-Modem**, connects the power supply and uses the terminal as normal. Should the **Wi-Modem** ever need reconfiguring it may be securely accessed and remotely managed by the provider using NSGDatacom's Network Management System.

The **Wi-Modem** is the latest in a long line of specialized voice and data gateway devices developed by NSGDatacom Inc. The **Wi-Modem** uses our unique, patented suite of *Netrix* data protocols, which have been developed over many years and are widely deployed in military, financial, medical and other mission critical networks world wide.

Several models of **Wi-Modem** are available with integrated wireless modems for use on either CDMA and GSM wireless networks. The unit is also optionally available with a standard Ethernet interface for use with standard Internet connections such as Cable, Satellite or DSL modems.

The **Wi-Modem** 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.



Wi-Modem

Product Features

Physical Interfaces

- Analog:
 - One analog Telephone Interfaces on RJ11 (Optional 2nd port).
 - · Fixed two-wire FXS Loop start
 - Signaling types include Wink start, delay start, immediate start, hootand-holler and phone
 - · Dialing can be either DTMF or pulse
- LAN Connectivity:
 - Optional 10 Base-T Ethernet Interface on RJ45
 - · Internal USB interface
- Serial Interface:
 - Internal V.24/RS-232 physical level Optional external DB9 connector
 - Supports Asynchronous data from 1200bps to 115.2Kbps.

Connectivity

- Data Modem Ports
 - FXS
 - 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
- 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 (Async PPP) or as a local Data Port

Wireless

 Integrated Wireless modem supports all GSM or CDMA Wireless Cellular data networks

Voice

Optional Voice port with voice compression (VoIP)

Management

- NMS Manageable via SNMP
- Configuration, Monitoring and troubleshooting over public or private IP networks
- Menu Driven Console Interface
- · Remote or Local Access
- Compatible with NSG 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 Exchange line of Products for Point to Point and Mesh Network Configurations.
- Can also provide Gateway functions between Private, PTSN and SIP Networks

Operation

- IP Wireless
- Cellular Data (Supports multiple hops)
- IP Satellite
- Terrestrial IP
- · Private or Public Networks

Electrical Specifications

• Power:

- External Power Block 5V DC, 10 Watt max, Medically Approved PSU.
- Input 100/250 VAC @ 50/60 Hz

Connectors:

- DC Power
- RJ11 Analog Voice/Fax/Modem ports
- Optional DB-9 male RS232 Data port
- 10Base-T 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: 0° to 40° C (32° to 104° F)
- Storage Temperature: -20° to 70° C (-4° to 158° F)
- · Humidity: 95% non-condensing



NSGDatacom

www.nsgdata.com

5112 Pegasus Ct, Suite X Frederick, MD 2170, USA Phone: +(1) 301 662 5926 Fax: +(1) 301 694 6279 The Brackens, London Road Ascot, Berkshire SL5 8BE, UK Phone: +(44) 1344 893 000 Fax: +(44) 1344 891 990

3859 Centerview Drive, Suite 500

+(1) 703 793 2001

Chantilly, VA, 20151-3232 USA

Phone: +(1) 703 793 2000