

Overview

The GPRS modem option is part of the Niagara^{AX} portfolio of hardware, software and tools designed for remote monitoring and control applications enabling end-to-end automation and device-to-enterprise integration.

The GPRS Modem (EC-NPB-GPRS) modem card allows EC-BOS^{AX} controllers to communicate via cellular communications where connectivity to an Internet Service Provider (ISP) is either unavailable or not desired. The connection is established via standard GPRS cellular connectivity available from select local cellular service providers.

Delivered with a small dual-band antenna, the EC-NPB-GPRS option card may be installed in any EC-BOS-2^{AX} or EC-BOS-6^{AX} platform running Niagara^{AX} 3.4 or higher. Additionally, the GPRS Modem allows these Niagara^{AX} EC-BOS^{AX} controllers to integrate with other system components via VPN (Virtual Private Network) technologies enabling system expansion combining LAN/WAN connectivity with cellular connectivity.

Applications

The EC-NPB-GPRS is intended for applications where a connection to the customer's WAN/LAN/VPN is not available. Utilizing cellular technology, the Niagara enabled EC-BOS^{AX} can be connected to the end-user's network with one of two (2) Virtual Private Network (VPN) techniques. See the "Connectivity Options" below for details. This connection method provides the option to offer connectivity to customers who in the past have not had a method for a single stand-alone EC-BOS^{AX} to communicate with the Internet or a customer's in-house WAN/LAN/VPN.

Features & Benefits

- Provides remote access to EC-BOS^{AX} via cellular technology where ISP connectivity is not available or not desired.
- Portable industry standard SIM (Subscriber Identity Module)
- Modular - fits into either expansion slot of a standard EC-BOS-2^{AX} or EC-BOS-6^{AX}
- Re-locatable antenna
- Fast growing, cost effective Cellular Provider
- Utilizes IP Security Protocol (IPSec)
- Wireless device/system access from anywhere; Provides "take with" service tool
- Reduced installation cost and enables low cost system monitoring, configuring & troubleshooting
- Enables system expansion to areas where cabling not practical or cost effective
- Provides system security & data integrity that can be easily configured or re-configured to a Subscriber
- Reduces service costs and widely available
- Space saving footprint
- Maintains EC-BOS^{AX}'s standard communications options
- Provides high likelihood of signal reception wherever EC-BOS^{AX} is located
- Assures system can reach most anywhere
- Provides high data throughput and reliable communications

Product Warranty & Total Quality Commitment

All Distech Controls product lines are built to meet rigorous quality standards and carry a two-year warranty. Distech Controls is an ISO 9001 registered company. Distech Controls' products provide both the contractor and the end user with the flexibility of using "best-of-breed" products in system design.

Available Models



EC-NPB-GPRS

GPRS Modem Option

Modem option card including the standard antenna which mounts directly to the side of the option card. No SIM provided with this option. For use when service provider other than Wyless is required. Cellular service provider must be negotiated by the installer.

EC-NPB-GPRS-W

GPRS Modem Option w/ SIM

Modem option card including the standard antenna which mounts directly to the side of the option card and a SIM for use with Wyless cellular as the service provider.

Related Products



EC-GPRS-CBL-EXT

2m Antenna Extension Cable

Optional two (2) meter extension cable with mounting bracket to extend the antenna connection to a more remote location. Typically utilized to re-locate the antenna outside of a metal enclosure.

EC-GPRS-SIM-W

Replacement SIM

Replacement SIM for using the modem with Wyless as the service provider.

For more information on these or other Distech Controls products please refer to our web site at www.distech-controls.com or contact sales@distech-controls.com.

System Requirements

Any EC-BOS-2^{AX} or EC-BOS-6^{AX} platform running NiagaraAX 3.4 or higher software may be configured with a GPRS modem. The GPRS modem has two mandatory elements; a modem option card that connects to the EC-BOS-2^{AX} or EC-BOS-6^{AX} device and a SIM (Subscriber Identity Module). These have been conveniently packaged as one ordering identity (EC-NPB-GPRS-W). The modem card is mounted in one of the expansion slots of an EC-BOS-2^{AX} or EC-BOS-6^{AX} controller leaving the other slot and the communication ports available for additional interfaces. The SIM is a removable smart card commonly used in a variety of devices (mobile phones, computers, PDAs, etc). These cards securely store the service-subscriber information used to identify a cellular service subscriber and can be removed allowing users to change devices and maintain service (from a business perspective this means you can have a number of cellular equipped EC-BOS^{AX}s on any number of projects and subscribe to a relatively few cellular service subscriptions – just bring the SIM to the project in need, plug it in and communications can be enabled – the SIM is really the device you pay the subscription for).

The GPRS modem has a self contained antenna as well as an optional extension cable to move the antenna to a more receptive location if needed. Also can be used to locate the antenna outside of metal enclosure in applications where EC-BOS^{AX} is located inside enclosure.

Cellular service from a local wireless cellular provider is a requirement for each activated SIM. As of October, 2008, the only provider of such service is Wyless, working in conjunction with T-Mobile. You will need to contact Wyless directly to subscribe to the service and for SIM activation. Details are contained in the FAQ section of this announcement. Favorable set-up, activation and monthly service rates have been negotiated.

As a note of interest, Wyless is the provider of the managed wireless data network and is one of the largest providers worldwide. More info can be found at www.wyless.com

Product Specifications

General

- Quad-Band GSM (850/900/1800/1900 MHz)
- Utilizes an industry standard Siemens TC63 cellular communications module
- GPRS Multi-Slot Class 12
- GPRS Release 99

Output Power:

- Class 4 (2W) for EGSM850
- Class 4 (2W) for EGSM900
- Class 1 (1W) for EGSM1800
- Class 1 (1W) for EGSM1900

Specifications for GPRS data Transmission

- GPRS class 12: max. 86 Kbps (DL & UL)
- Mobile station class B
- PBCCH support
- Coding schemes CS 1-4

Cellular Service Provider:

- Wyless Group (www.wyless.com)

Typical Connection Speeds:

- Download Speed: 30-60 Kbps
- Upload Speed: 10-15 Kbps

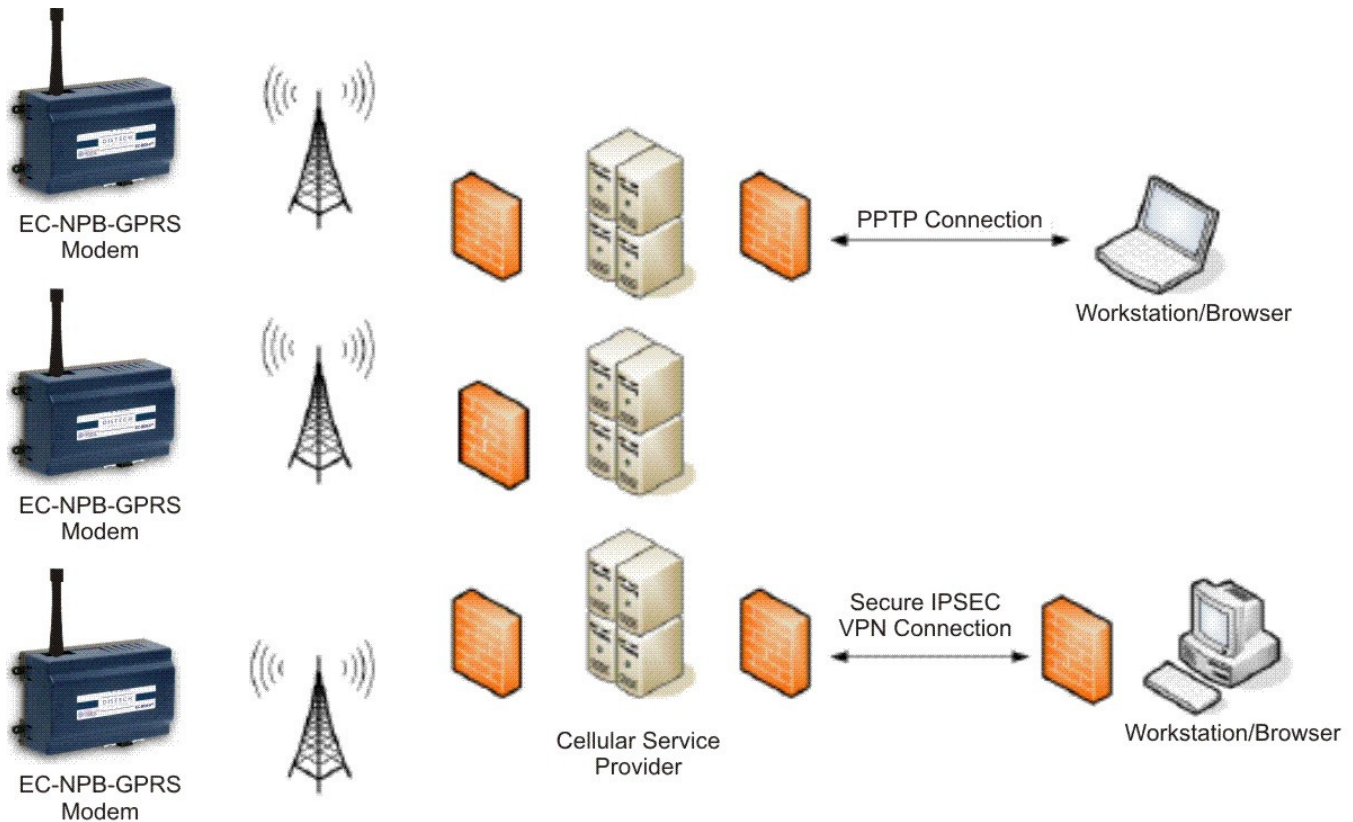
Internet Services

- TCP
- UDP
- HTTP
- FTP
- SMTP
- POP3

Agency Approvals

- R&TTE
- FCC
- UL
- IC
- GCF
- PTCRB
- CE

Typical Architecture



The above architecture is shown as an example only.

Specifications subject to change without notice.

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EC-NPB-GPRS

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