

NM-GPRS/GSM

GSM/GPRS Network Module for the NPort 6000 Series



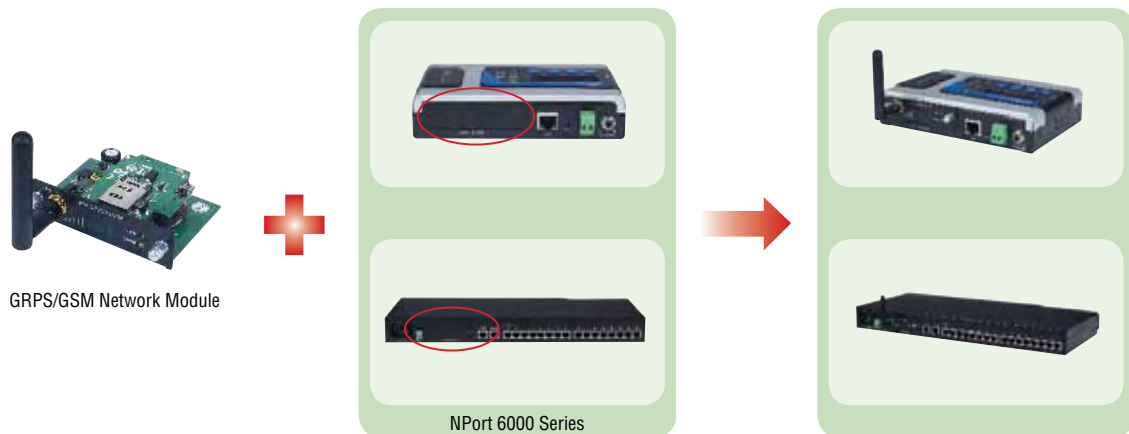
Features

- > Quad-band 900/1800, 850/1900 MHz GSM/GPRS
- > Cellular Status/Signal LED indicator
- > GPRS Class 10
- > CSD data connection
- > Circuit Switch Data mode up to 14,400 bps
- > Short message alert
- > Real COM mode supported



Overview

The NM-GPRS/GSM is a GSM/GPRS network module for the 4-, 8-, 16-, 32-port models of the NPort 6000 series. Use this module to enable the NPort 6000 to transmit data and short message (SMS) alerts over GSM/GPRS mobile networks.



Quad-band GSM/GPRS Communication

Whereas GSM-900 and GSM-1800 are used in most parts of the world, GSM-850 and GSM-1900 are used by operators in the United States, Canada, and many other countries in the Americas.

By using the NM-GPRS/GSM quad-band cellular module, administrators can avoid the trouble of selecting different models for different parts of the world. The NM-GPRS/GSM module's GSM/GPRS band of is configured to 900/1800 MHz by default.

850 MHz	<input checked="" type="checkbox"/>	900 MHz	<input checked="" type="checkbox"/>
1800 MHz	<input checked="" type="checkbox"/>	1900 MHz	<input checked="" type="checkbox"/>

: Real COM Mode Supported

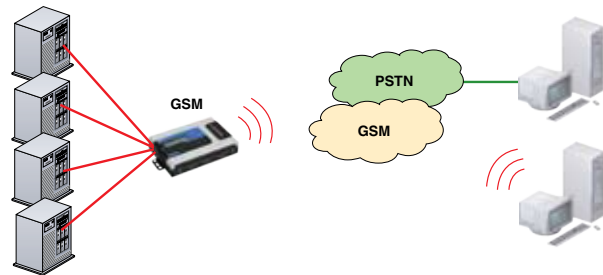
The NPort 6000 supports Real COM drivers for Windows 95, 98, ME, NT, 2000, XP, XP x64, 2003, 2003 x64, Vista, and Vista x64 operating systems, and Real TTY drivers for Linux systems in a GSM/GPRS network environment.

In Real COM mode, the bundled drivers are able to establish a transparent connection between a host and a serial device by mapping the serial port on the NPort 6000 to a local COM/TTY port on the host computer. One of the major conveniences of using Real COM mode is that it allows you to use software that was written for pure serial communication applications.



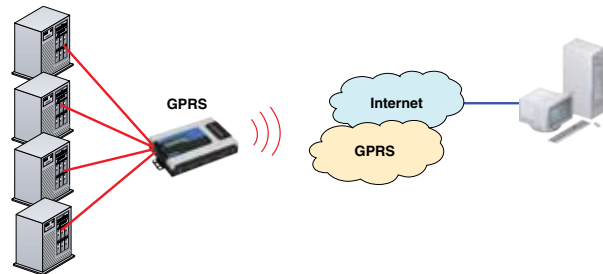
: GSM CSD Data Connection

CSD (Circuit Switched Data) provides direct modem access to remote devices, and system extensions can be used without requiring the installation of cables and data lines. CSD can transmit data at 9.6 to 14.4 Kbit/sec to both the GSM network and the PSTN switching subsystem by direct call. CSD overcomes the limitations of hard wiring and inaccessible terrain for easier, more flexible data collection and monitoring of applications that use NPort 6000 series device servers.



: GPRS IP Connectivity

GPRS is a packet-switched system. A GPRS network can be viewed as a special IP network that offers IP connectivity to IP terminals. Devices without PPP or TCP/IP capability can be easily connected to the IP network and the Internet through GPRS by using the NPort 6000 GSM/GPRS module.

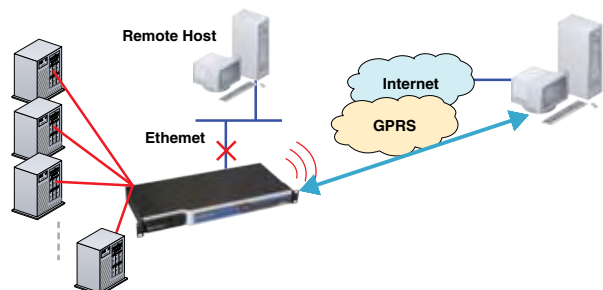
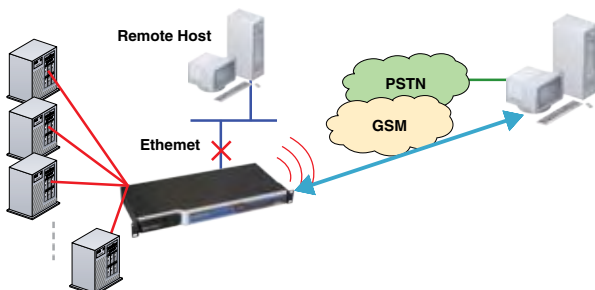


: GSM/GPRS Backup Application

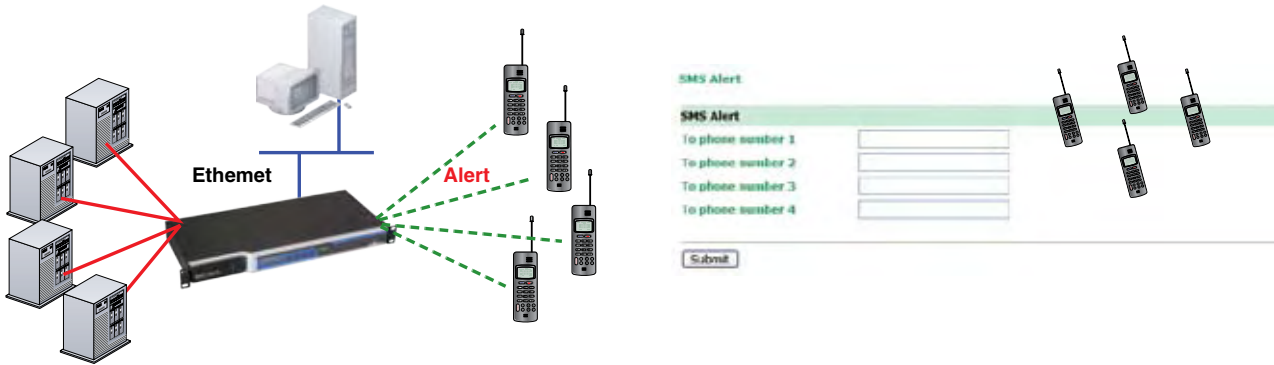
The NM-GPRS/GSM module can be used to provide NPort 6000 device servers with an automatic backup capability.

When the backup function is enabled, the NPort 6000 will check the remote host connection on the Ethernet side after power on. Once a

connection failure has occurred, data from the serial device will be sent out through the GSM/GPRS network. When the remote host on the Ethernet side returns to normal status, data will again be sent through the Ethernet connection. The NPort 6000 backup function makes your data transmission safer and more reliable.



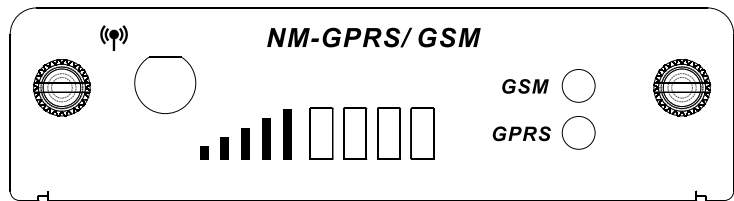
: SMS (Short Message Service) Alerts by Event



The NM-GPRS/GSM module provides the NPort 6000 device server with an SMS Alert function. NPort 6000 device servers support up to 4 phone numbers that can be configured to receive alert messages. As shown in the following table, there are four event categories (System, Network, Configure, Serial Port), and a total of eight different options that can be configured.

System Event	Network Event	Configure Event	Serial Port Event
Cold start	Ethernet Link Down	Console Login authentication failure	DCD Changed
Warm start		Ethernet IP Changed	DSR Changed
		Password changed	

: Appearance



Cellular Status/Signal Strength LED indicator

- **GSM LED** When GSM is connected, the GSM LED will turn ON
- **GPRS LED** When GPRS is connected, the GPRS LED will turn ON
- **Signal Strength LEDs** Signal strength indicated by the number of LEDs that are ON

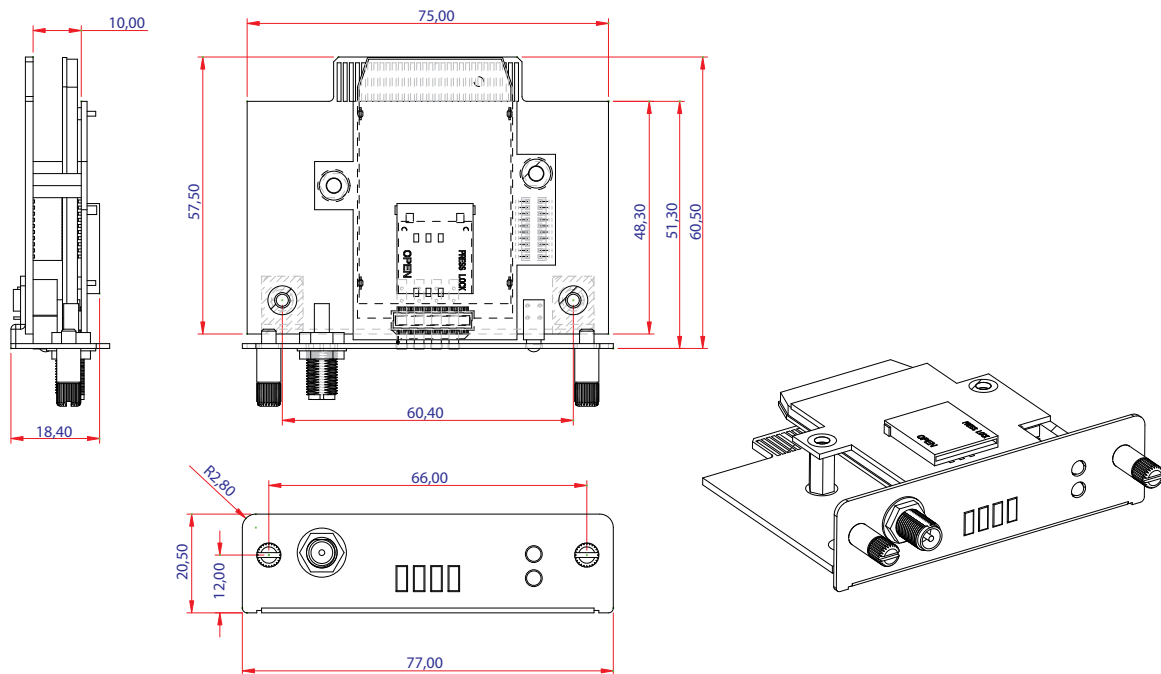
: Ordering Information

NM-GPRS/GSM: GSM/GPRS Network Module for the NPort 6000 series

All items include:

- 1 NM-GPRS/GSM module
- 1 GSM-QB Antenna/SMA(M)

Dimensions (unit = mm)



: Specifications

Network Interface

Standard Compliance: GSM and GPRS

Band Selection: 850/900 MHz and 1800/1900 MHz quad-band

Tx Power: 1 watt GSM1800/1900, 2 watt EGSM 900/GSM 850

GPRS Multi-slot Class: Class 10, Coding Schemes: CS1 to CS4

GPRS Terminal Device Class: Class B

CSD Data Transmission Rate: up to 14,400 bps

SMS: Point-to-point Text/PDU: Mobile Originated (MO) and Mobile Terminated (MT Cell Broadcast: in accordance with GSM 07.05)

SIM Control: 3.3V/1.8V interface

Antenna

SMA female type connector, 50W impedance 1dBm Peak Gain.

Power Requirements

Power Input supports: 12 to 48 VDC

Environmental Requirements

Operating Temperature: 0 to 55°C

Storage Temperature: -40 to 75°C

Humidity: 5 to 95%RH

Regulatory

FCC: Class A

CE: Class A

Reliability

MTBF