# **FCC NOTICE**

## FEDERAL COMMUNICATIONS COMMISSION NOTICE (FCC--UNITED STATES)

Electronic devices, including computers and wireless modems, generate RF energy incidental to their intended function and are therefore subject to FCC rules and regulations.

This equipment has been tested to, and found to be within the acceptable limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protections against harmful interference when the equipment is operated in a residential environment. This equipment generates radio frequency energy and is designed for use in accordance with the manufacturer's user manual. However, there is no guarantee that interference will not occur in any particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

In order to comply with FCC RF Exposure requirements, this device must be installed so that a minimum separation distance of 20 cm (approximately 7.9 in.) is maintained between the antenna and all persons during ordinary operating conditions contingent upon the following:

- 1. The laptop or PC is placed on a desktop, table, or flat surface.
- 2. The device is placed on a flat surface.

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE E725 MODEM IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT VERIZON WIRELESS TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

**FCC CAUTION:** Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

**MODIFICATIONS:** The FCC requires that you be notified that any changes or modifications made to this device that are not expressly approved by Novatel Wireless, Inc. may void your authority to operate this equipment.







# NetVanta 3G CDMA Network Interface Module

P/N 1700801G1



### **SPECIFICATIONS**

Wireless Technologies 1xRTT

1xEV-DO Rev 0

1xEV-DO Rev A

Frequency Bands Band Class 0 (Cellular 800 MHz)

Band Class 1 (PCS 1.9 GHz)

Compliance FCC Part 15 Class A

FCC Parts 2, 22, 24 UL/CUL 60950-1 RSS 102

IC ES-003 RSS 129/133 RSS 132/133

Physical Dimensions: 2.75-inch W x 4.25-inch D

Operating Temperature: 0°C to 50°C Storage Temperature: -20°C to 70°C Relative Humidity: Up to 95 percent,

noncondensing



NetVanta modules should be installed only in NetVanta Series products. Applicable NetVanta Series products for the 3G CDMA NIM are the NetVanta 1335, 3200 (Third Generation), 3305, 3430, 3448, and 4305.

This device has been designed to operate with the antennas listed below, and having a maximum gain of 2 dB. Antennas not included in this list or having a gain greater than 2 dB are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.



Proper antennas are:

Pulse/Larson Dipole Antenna Part Number: SPDA24850/1900

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

### INSTALLATION INSTRUCTIONS

- 1. Remove power from base unit.
- Slide the option module into the option slot until the module is firmly seated against the chassis.
- 3. Secure the pins at both edges of the module.
- 4. Place either of the two antennas directly onto the antenna port labeled **ANT1** on the rear panel.
- Using the thumb screws only, carefully thread the antenna onto the connector until it is secure.
- Repeat Step 5 with the second antenna, attaching it to the ANT2 port.
- 7. Position antennas in a "V" shape at a 90° angle to each other.
- Restore power to the base unit.

#### **3G CDMA NIM LED DESCRIPTIONS**

LED Label	LED Color	Indication
www	Off	3G modem is not powered.
	Green (Solid)	3G modem is powered, associated, and authenticated, but not transmitting or
		receiving.
	Green (slow flash)	3G modem is powered and searching, but
		not associated or authenticated.
	Green (intermittent	
	flash)	
		minimum rate, 20 Hz maximum rate).
RSSI	Off	No service or no signal detected.
(Received Signal Strength Indication)	Red (solid)	Low signal strength.
	Amber (solid)	Medium signal strength.
	Green (solid)	High signal strength.
1xRTT	Off	No 1xRTT service is available.
	Green (solid)	1xRTT service is available.
EVDO	Off	No 1xEV-DO service is available.
	Green (solid)	1xEV-DO service is available.
Signal Strength Indication)	Off Red (solid) Amber (solid) Green (solid) Off Green (solid) Off	3G modem activity proportional to transmitting/receiving speed (3 Hz minimum rate, 20 Hz maximum rate). No service or no signal detected. Low signal strength. Medium signal strength. High signal strength. No 1xRTT service is available. 1xRTT service is available. No 1xEV-DO service is available.



Important: For additional details on product features, specifications, installation, and safety, refer to the appropriate hardware installation guide on the AOS Documentation CD shipped with the base unit and available online at www.adtran.com.



# NetVanta 3G CDMA Network Interface Module

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## GETTING A CELLULAR ACCOUNT

Before you attempt to connect the 3G CDMA NIM to the cellular network, make sure you have subscribed to an appropriate CDMA service plan with your wireless service provider. The Electronic Serial Number (ESN) might be needed for this process. The ESN can be obtained from the label on the 3G modem or by using the **show interface cellular hardware** command at the CLI prompt. Refer to the NetVanta base unit quick start guide for instructions on accessing the AOS CLI.

### GETTING STARTED

Once you have subscribed to a CDMA service plan, you must activate the 3G CDMA NIM. Two activation and configuration methods are available for your NetVanta 3G CDMA NIM:

- Web-based graphical user interface (GUI)
- AOS command line interface (CLI)

The GUI lets you configure the unit's settings and provides online guidance and explanations for each setting. However, using the AOS CLI may be necessary for more advanced configurations.

### Access the GUI

You can access the GUI from any Web browser on your network by following these steps:

- Connect the base unit to your PC using the Ethemet ports on the front
  of the unit.
- Set your PC to a fixed IP address of 10.10.10.2. If you cannot change the PC's IP address, you will need to change the unit's IP address using the CLI.
- Enter the unit's IP address in your browser address line. The default IP address is 10.10.10.1.
- You will then be prompted for the user name and password (the default settings are admin and password).
- The initial GUI screen appears.

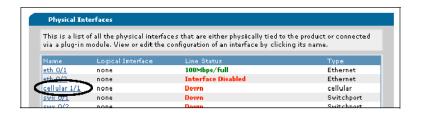
### ACTIVATING THE 3G CDMA NIM VIA THE GUI

To activate the 3G CDMA NIM and cellular interface, follow these steps:

Select Physical Interfaces from the System menu.



2. Select the Cellular interface to modify from the menu.



3. Select Activate in the Maintenance dialogue box.



 After activation, enter a **Description** of the Cellular interface (optional), check the **Enable** box, and select **Apply**.



After enabling the Cellular interface, the demand routing interface must be configured before the 3G CDMA NIM can access the network.



For complete configuration information of the 3G NIM, cellular interface, and demand routing interface for network access, refer to the **3G CDM4 NIM/Cellular Interface** configuration guide available at www.adtran.com.



Refer to the quick start guide shipped with your NetVanta base unit for instructions on accessing the CLI, configuring the base unit's IP address, and enabling Telnet access.