SIERRA WIRELESS
HEART OF THE WIRELESS MACHINE™

Sierra Wireless AirPath™ 300 for Visor™ Handheld

User Guide

2130060 Rev 1.1
May 2001

AirPath™ 300 for Visor™ Handheld

User Guide

2130060 Rev 1.1

Important Notice

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sierra Wireless modem are used in a normal manner with a well-constructed network, the Sierra Wireless modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Sierra Wireless, Inc., accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless modem, or for failure of the Sierra Wireless modem to transmit or receive such data.

Safety and Hazards

WARNING

The FCC has developed guidelines to reduce any possible hazard due to exposure of the human body to electromagnetic radiation (i.e. to radio waves). In accordance with these guidelines, the antenna should be positioned at a distance greater than 9 cm (3.6") from users and bystanders (3 cm (1.2") from hands, wrists, feet, and ankles) when the modem is transmitting.

Do not operate the Sierra Wireless modem in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, near life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the Sierra Wireless modem **MUST BE TURNED OFF**. The Sierra Wireless modem can transmit signals that could interfere with this equipment.

Do not operate the Sierra Wireless modem in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless modem **MUST BE TURNED OFF**. When operating, the Sierra Wireless modem can transmit signals that could interfere with various onboard systems.

The driver or operator of any vehicle should not operate the Sierra Wireless modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offense.

Patents

Portions of this product are covered by some or all of the following US patents: 5515013, 5617106, 5629960, 5682602, 5748449, 5845216, 5847553, 5878234, 5890057, 5929815, 6169884, 6191741, 6199168, D367062 , D372248, D372701, D416857, and other patents pending.

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Regulatory Information

The equipment certifications appropriate to your device are marked on the device and the accompanying product specific information. Where appropriate, the use of the equipment is subject to the following conditions:

CAUTION

Unauthorized modifications or changes not expressly approved by Sierra Wireless, Inc. could void compliance with regulatory rules, and thereby your authority to use this equipment.

WARNING (EMI) - United States FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in an appropriate installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is 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 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/TV technician for help*

WARNING – FCC RF Exposure Guidelines

The FCC has developed guidelines to reduce any possible hazard due to exposure of the human body to electromagnetic radiation (i.e. to radio waves). In accordance with these guidelines, the antenna should be positioned at a distance greater than 9 cm (3.6") from users and bystanders (3 cm (1.2") from hands, wrists, feet, and ankles) when the modem is transmitting.

FCC approval number: N7NACRD2.

WARNING (EMI) – Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference causing equipment standard entitled 'Digital Apparatus', ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: 'Appareils Numériques', NMB-003 édictée par le ministre des Communications.

CSA approval number: 205977.

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If you have purchased this product under a United States Government contract, it shall be subject to restrictions as set forth in subparagraph (c)(1)(ii) of Defense Federal Acquisitions Regulations (DFARs) Section 252.227-7013 for Department of Defense contracts, and as set forth in Federal Acquisitions Regulations (FARs) Section 52.227-19 for civilian agency contracts or any successor regulations. If further government regulations apply, it is your responsibility to ensure compliance with such regulations.

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1. About this Guide

This guide describes how to configure and use the Sierra Wireless AirPath™ 300 wireless modem for Handspring™ Visor™ handhelds.

1.1. AirPath 300 Checklist

Each AirPath 300 package should include the following parts:

Table 1-1: Package Checklist

Sierra Wireless Part No.	Description
1200218	AirPath 300 CDPD wireless modem
6000103	Antenna
1200229	External DC adapter
1200227	AirPath 300 CD (may not be included)
2130060	Sierra Wireless AirPath 300 for Visor User Guide (this document)

1.2. References

For up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases, see our web site: www.sierrawireless.com.

For background information on the nature of wireless communications consult your cellular service provider and/or their Internet site. All major service providers provide web-based information on CDPD.

The Sierra Wireless web site at www.sierrawireless.com includes a document library in the Support and Downloads section. This library includes useful documents such as:

- CDPD Primer, 2130006
- Glossary of Terms and Acronyms, 2110032
- Problem Report Sheet, 2110125

1.3. Currency

This document may be revised from time to time as new firmware and software are made available. Please check our web site frequently for revisions. The revision of this User Guide is:

Rev 1.1 May 2, 2001

This document is current with the following AirPath 300 software and firmware revisions:

Revision **1.0**. To determine your software and firmware revisions:

1. From your handheld's HOME screen, tap **Watcher**.
2. Tap the **Menu** button (in the lower left corner of the screen).
   A drop-down menu will appear.
3. Tap **Commands > About**.
   The About screen displays the firmware and software versions.
4. Tap **OK** to close the About screen.

If your modem software or firmware is an earlier version, you should upgrade the software or firmware (see the section "Upgrading the AirPath 300 Firmware and Software" on page 20.

1.4. Definitions

Table 1-2: Definitions

CDPD	Cellular Digital Packet Data – Wireless radio frequency (RF) packet switched data communication services.
DNS	Domain Name Server – Internet server that supplies the mapping of domain names to IP addresses.
EID	Equipment Identifier – A unique 48-bit identifier given to each CDPD subscriber unit.

HotSync	The synchronizing process of sending information between the handheld and a host PC for the purpose of installation or upgrading.
IP	Internet Protocol – The basic Internet transport mechanism.
NEI	Network Entity Identifier – The official name for the IP address of a CDPD device. A 32-bit device identifier containing the Internet Network Identifier and the Internet Host Identifier.
POP3	Post Office Protocol, version 3 – A protocol, by which a client machine can retrieve mail from a mail server.
RSSI	Received Signal Strength Indicator – a measure of the intensity of the radio signal.
SMTP	Simple Mail Transfer Protocol – A server-to-server protocol for delivering electronic mail.The standard protocol used on the Internet; also used on other TCP/IP networks.
SPNI	Service Provider Network Identifier – A unique numeric code used to identify the CDPD service provider.

For more definitions, see the Glossary of Terms and Acronyms (document #2110032) available from the Sierra Wireless website.

1.5. Conventions Used in this Reference

WARNING

Notes in this form denote a physical hazard. The warning calls attention to a procedure or practice, which, if not performed correctly, could result in personal injury.

CAUTION

Notes in this form highlight a procedure or practice which, if not performed correctly, could result in loss of data or damage to equipment. This is also used to highlight issues related to regulatory limitations.

NOTE

This form of note draws attention to procedures or practices which, if not performed correctly, could result in failure of a process or improper configuration. These are typically pre-requisites to other operations.

2. System Overview

The Sierra Wireless AirPath 300 is a CDPD radio modem, in the form of a Springboard™ module, that you insert in the Springboard expansion slot of a Visor, Visor Deluxe, Prism, Platinum, or Edge handheld device.

The AirPath 300 keeps you connected to the wireless network. You can receive and send email, browse the Internet, and use other applications wirelessly.

The AirPath 300 consists of a CDPD radio modem, a rechargeable battery, and embedded firmware. The battery is not user-replaceable.

2.1. Required Hardware and Software

To use your AirPath 300, you will need:

- A HandspringVisor, Visor Deluxe, Prism, Platinum, or Edge handheld computer
- An account with a CDPD network service provider in your area

3. Getting Started

Before you use the Sierra Wireless AirPath 300, you must:

1. Charge the battery for at least four hours
2. Attach the antenna
3. Insert the AirPath 300 into the handheld device
4. Configure the AirPath 300 with your CDPD account

The following sections describe these tasks in detail.

3.1. Charging the Battery

NOTE

Before you use the AirPath 300 for the first time, you must charge the battery for ***at least 4 hours****.*

Use only the provided DC power adapter to charge the AirPath 300.

To charge the battery of the AirPath 300, connect the plug of the DC power adapter (provided with the AirPath 300) into the connector on the top left corner of the AirPath 300 (near the AirPath 300 logo).

You can continue to use the AirPath 300 during battery charging with the DC adapter.

When the battery is being charged, the Power LED flashes red. When the battery is fully charged, the LED is solid red.

3.1.1. Charging Through the Handheld

CAUTION

DO NOT attempt to operate the AirPath modem when trickle charging ***both*** *devices via the Visor cradle or optional Travel Charger. This can reduce the AirPath module's battery life.*

An optional Travel Charger can be used to charge the battery in Visor Prism and Edge handhelds. When this cable is used, some power is also provided to the AirPath 300 module. This

is sufficient to provide a trickle charge to the AirPath module battery but is not enough to simultaneously power the radio/modem for normal use. To use the AirPath module while trickle charging the handheld, the AirPath 300 DC adapter must also be used.

Handheld devices without their own rechargeable battery may also be able to use the Travel Charger to deliver power to the AirPath module. Not taking power to charge a handheld battery, these models can provide sufficient power to support normal use of the AirPath 300 while trickle charging. If you are unsure of the capability of your particular handheld you should always use the AirPath DC adapter to charge the module.

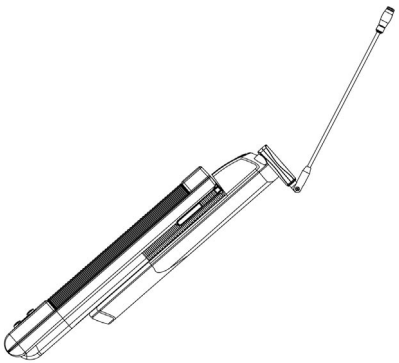
3.2. Attaching the Antenna

Attach the antenna to the connector in the top right corner of the AirPath 300 (above the LEDs). The antenna simply presses into place.

The antenna should bend easily at the hinge. **Do not forcefully bend the antenna.**

3.2.1. Recommended Antenna Position

Due to the radio frequency interference inherent in all electronic computing devices, the strength of the signal can be affected by the orientation of the antenna. For best results, the antenna should be aligned with the elbow hinge rotated toward the back of the handheld (away from the screen) and the antenna pointing upward, as shown.



3.3. Inserting the AirPath 300

You do not have to turn the handheld device off before you insert the AirPath 300.

Insert the AirPath 300 into the Springboard expansion slot of your handheld device until the connectors are secure. Do not use excessive force, since this may damage the connector pins.

If the handheld device was off, it will automatically turn on. The Service Connection Progress screen opens to indicate the handheld is connecting with the AirPath 300 module.

The applications for browsing the Web and checking your email are then automatically loaded from the AirPath 300 onto the handheld device[1].

3.3.1. Turning the Unit On and Off

The AirPath 300 does not have an on/off switch.

The AirPath 300 automatically turns **on** when:

- You insert it into the handheld device (if the handheld is off, it will turn on automatically)
- You start Watcher or another application that requires Internet or email access
- You insert the DC adapter, or in some cases, the handheld's Travel Charger. See section 3.1.1.

The AirPath 300 automatically turns **off** when:

- You tap the Shutdown button in the Watcher application to deregister from the network and turn off the AirPath module

CAUTION

Removing the AirPath module without first using the Shutdown option in Watcher is strongly discouraged. This can cause disruption because the AirPath adapter will not have deregistered from the network.

[1] The applications are removed from the handheld device when you remove the AirPath 300.

- You exit your web browser or e-mail application (power off is delayed by a duration you configure in the Network Preferences of the handheld)
- You turn off the handheld device (the AirPath 300 turns off after approximately 10 seconds)
- You remove the AirPath module from the handheld device (the AirPath 300 turns off after approximately 10 seconds)

NOTE

The handheld will reset when the AirPath 300 module is removed.

To preserve battery life, remove the AirPath adapter from the handheld if you will not need network access for an extended period.

3.4. Configuring the AirPath 300

The first time you insert the AirPath 300 into your handheld, the AirPath Configuration program will automatically launch. This program controls the modem's connection to the Wireless IP (CDPD) network.

1. Contact the Wireless IP network provider you wish to use, and state that you wish to activate an account for your CDPD modem.
   The Wireless IP service provider will ask you for the EID of the modem. The EID is displayed in the top portion of the AirPath Configuration screen, and also on the label of the AirPath 300 module, in the format 00-A0-xx-xx-xx-xx.
   The service provider will give you values for an NEI (IP address), DNS, SPNI, and side preference. Write this information down. (After you have finished configuring your AirPath 300, you should keep this information in a safe yet accessible place).
2. In the AirPath Configuration screen, enter the NEI, DNS, SPNI, and side preference.
   The SPNI entry can have zero, one, or more SPNI values, separated by commas. The AirPath 300 will accept service only from a provider on the list. If the

list is empty, then service will be accepted from any provider.

3. Tap Save.
4. In the Update AirPath Configuration confirmation screen, tap Save.

3.5. Connecting to the Wireless IP Network

After you have configured your AirPath 300, you can connect to the Wireless IP network anytime, simply by inserting your AirPath 300 into the handheld's Springboard expansion slot. When you start a network application (or Watcher) the module will automatically register on the network.

When the OnAir LED is on steady, you are registered on the network and can then use the handheld's web applications for browsing the Web or checking your email.

4. Using the Modem

When you insert the Sierra Wireless AirPath 300, the Service Connection Progress screen displays the connection status.

Once the connection is “Established”, you can start Watcher or the network application of your choice. The LED indicators show the status of your connection (as described in Table 4-1 below).

Watcher provides a display of the battery and signal strength (RSSI) indications. When the connection status is “Registered” (OnAir LED on steady) you can use your handheld for email and Internet applications.

4.1. Reading the LED Indicators

Three light emitting diodes (LEDs) are located on the top right corner of the AirPath 300. The LEDs reflect the status of the wireless modem. They are labelled **OnAir**, **Data**, and **Power**.

Table 4-1: LED Status

LED	Color	State	When
OnAir	Green	Blink and pause of equal duration	The AirPath 300 is acquiring a CDPD signal.
		Quick blink, and a long pause	The AirPath 300 is registered, but is scanning for a channel.
		On steady (not blinking)	The AirPath 300 is successfully registered with the CDPD network and has a channel.
		Off	The AirPath 300 has not acquired a signal (a usable signal was not found)
Data	Green	Blinking	The AirPath 300 is receiving or transmitting data.

LED	Color	State	When
Power	Red	Blink and a long pause	The AirPath 300 is running from battery power, and the battery has adequate charge.
		Double blink, then long pause	The AirPath 300 is running from battery power, and the battery is low.
		Blink and pause of equal duration	The AirPath 300 is running from power provided by the adapter, and the battery is charging. **NOTE:** If trickle charging through the handheld, the LED will blink, but the modem is not running. Using the DC adapter is strongly recommended.
		On steady (not blinking)	The AirPath 300 is running from power provided by the adapter, and the battery is fully charged.
		Off	The AirPath is off, or has shut down due to low battery level.

Note that "battery" refers to the battery of the AirPath 300, and not the handheld.

4.2. Displaying the AirPath Watcher Screen

The Watcher screen displays:

- Battery status
- Signal strength (RSSI)
- Channel number
- Status of the connection

From this screen, you can also bring up the AirPath Configuration screen (for more information, see section 4.8).

To display the Watcher screen: from your handheld's HOME screen, tap **Watcher**.

4.3. Checking the Battery Status

The status of the AirPath 300's battery is displayed in the top right corner of the Watcher screen.

The Power LED gives a general indication of the battery status (see the table in section 4.1).

4.4. Checking the Signal Strength

To use wireless services, you require a sufficiently strong radio signal.

If the signal is too weak, you may not be able to register on the CDPD network and use the wireless services. If the signal becomes too weak while you are registered, you may loose your connection to the network.

You can view the signal strength (the RSSI), in dBm, in the Watcher screen.

Table 4-2: Signal Strength

Signal	Quality
-74 or greater	Excellent
-75 to –90	Adequate
-91 and less	Poor. Try the suggestions on page 23 for "Modem fails to lock onto a CDPD channel".

NOTE

See section 3.2.1 on page 8 for the recommended antenna alignment for best reception.

4.5. Checking the Status of the Connection

The OnAir LED reflects the status of the connection (see the table in section 4.1).

The Watcher screen also displays a Status message. See Table 4-3 below for descriptions.

Table 4-3: Interpreting the "Status" Message

"Status" message	How to interpret / suggestions
Awaiting confirmation	This step is the equivalent of "logging-on" to a network. The CDPD network checks the AirPath 300's credentials to ensure the device is authorized for network service.
Establishing data link	This is the first step in establishing a connection on the CDPD network. It involves "handshaking", where both ends of the data link agree on the protocols to be used.
Initializing encryption	This is the second step in establishing a connection on the CDPD network. All network traffic is encrypted for security reasons. This step involves the transmission of an encryption key that is used by both ends of the data link to encrypt and decipher the data.
Registered	The registration was successful. Your device is ready to receive and send email, browse the Internet, and use other applications wirelessly.
Inter-area transfer	CDPD service areas are divided into geographic zones called "cells". Each cell has its own cellular base station. This message occurs when travelling from one cell to another and it indicates that you are being "handed off" to a different cell.

"Status" message	How to interpret / suggestions
Unable to start data link	Failure to establish a connection at the most basic level. 1. Remove the AirPath 300 from the handheld device. 2. Reset the handheld device. 3. Reinsert the AirPath 300.
No response from network	The CDPD network did not respond to registration attempts. Contact your CDPD service provider.
Denied	Registration was rejected by the network; no reason was given. Contact your CDPD service provider.
Denied: Insufficient credentials	The modem is not authorized to use this NEI. • Check that the correct NEI is being used. • Confirm with your CDPD service provider that your account is activated. They may need to reset your modem's credentials.
Denied: Network not capable	The NEI you are using is not valid for this network. Your modem may be attempting to register on another carrier's channel. Contact your CDPD service provider.
Denied: Not authorized	Failed to authorize the AirPath 300 on the CDPD network. One of the following may be true: • The NEI is not recognized • The credentials are not valid • A data corruption occurred in transmission • Other reasons • Confirm with your CDPD service provider that your account is activated. They may need to reset your modem's credentials.

"Status" message	How to interpret / suggestions
Denied: Unsupported credentials	The modem is not authorized to use this NEI. • Check that the correct NEI is being used. • Contact your CDPD service provider to reset the modem's credentials.
Usage limits exceeded	The network has failed to authorize the AirPath 300 because your account limits your use of network services. Your service provider sets this limit.
No encryption key received	Failure in the transmission of the encryption key. • If you are inside a building or near a structure that may be blocking the signal, change the position or location of your handheld device. • Make sure that the antenna is properly connected to the wireless modem. • Try reorienting the antenna. The signal strength is usually optimal when the antenna is parallel to the modem. • Check that you are in the CDPD coverage area. • Verify that the correct channel side is set as the preference.

4.6. Removing the AirPath Module

Before you remove the AirPath 300 from the handheld device, you should tap the Shutdown button in Watcher. This will deregister from the network and turn off the AirPath 300.

You do not have to power off the handheld or close any specific applications. Provided the AirPath 300 Power LED is off, it is safe to remove the module.

NOTE

When you remove the AirPath 300 the handheld will reset.

When the AirPath module is removed, the power indicator will go on for approximately 10 seconds; this is normal.

To preserve battery life, remove the AirPath from the handheld if you will not need network access for an extended period.

4.7. Synchronizing your Handheld Device

If you are using a HotSync cradle to synchronize your handheld device, you must remove the AirPath 300 from the handheld before you insert the handheld into the cradle (for information on removing the AirPath 300, see section 4.6).

If you are using a USB Travel cable to synchronize your handheld device, you do not need to remove the AirPath 300 from the handheld.

If you are using a Visor Prism or Edge, and a Travel Charger (can be purchased separately) to synchronize your handheld device, you do not need to remove the AirPath 300 from the handheld. See section 3.1.1 on page 7 for important information on charging and using the AirPath with the Travel Charger.

4.8. Running the AirPath Configuration Program

The first time you use the AirPath 300, the AirPath Configuration program will automatically launch. You can use it to configure your account (for more information, see section 3.4).

The only time you would need to manually run the program is if one of the following is true:

- You need to change your account parameters
- You want to find out the parameters (for example, technical support requests the information)

To manually run the program:

1. From your handheld's HOME screen, tap **Watcher**. The Watcher screen appears.
2. Tap **Configure**.

4.9. Upgrading the AirPath 300 Firmware and Software

New versions of the AirPath 300 firmware and software may be released periodically. To take advantage of new features of the AirPath 300 modem, you may need to download, from the Sierra Wireless website (www.sierrawireless.com), new versions of the firmware.

Instructions to perform the upgrade will be provided on the web site along with the upgrade file(s).

5. Care & Maintenance

As with any electronic device, the Sierra Wireless AirPath 300 must be handled with care to ensure reliable operation. Follow these guidelines in using and storing the AirPath 300:

- Do not apply adhesive labels to the AirPath 300. This may cause the AirPath 300 to become jammed inside the handheld device.
- When you are adjusting the antenna, the antenna should bend easily at the hinge. Do not forcefully bend the antenna.
- When storing or transporting the AirPath 300, remove the antenna and store it in a compartment where it cannot be crushed or broken.
- The AirPath 300 should fit easily into the handheld's Springboard expansion slot. Forcing the AirPath 300 into the slot may damage the connector pins.
- Protect the AirPath 300 from liquids, dust, and excessive heat.
- When not inserted in your handheld device, store the AirPath 300 in a safe place.

6. Troubleshooting

If you cannot resolve a problem after reading this section, please contact your carrier, service provider, or the reseller from whom you purchased the AirPath 300.

Besides consulting the following table, check the Status message in the Watcher screen (see the table in section 4.5).

Table 6-1: Troubleshooting

Problem Description	Suggestions
All the LEDs on the AirPath 300 are not lit.	Recharge the battery. See section 3.1.
The handheld device "hangs".	1. Remove the AirPath 300 from the handheld device. 2. Reset the handheld device. 3. Reinsert the AirPath 300.
Unable to register on the CDPD network.	Check that the Connection type on your handheld is set to SLIP (from the Home screen, tap Prefs > Network > Details > Connection type). Check that the correct NEI is being used. Confirm with your CDPD service provider that your account is activated. They may need to reset your modem's credentials.
Modem fails to lock onto a CDPD channel (Watcher keeps scanning for a channel).	If you are inside a building or near a structure that may be blocking the signal, change the position or location of your handheld device. Make sure that the antenna is properly connected to the wireless modem. Try reorienting the antenna. The signal strength is usually optimal when the antenna is parallel to the modem. Check that you are in the CDPD coverage area. Verify that the correct channel side is set as the preference.

Problem Description	Suggestions
You can receive email, but cannot send.	Check the settings of the POP3 and SMTP server in your e-mail application. If you are accessing a corporate e-mail server, ensure that your NEI has permission to access the SMTP mail server. Check that your service provider allows relay access.
Some of the values are not displayed in the AirPath Configuration screen.	1. Remove the AirPath 300 from the handheld device. 2. Reset the handheld device. 3. Reinsert the AirPath 300. 4. Check the values in the AirPath Configuration screen.
Slow response from the CDPD network.	The CDPD network may be congested with heavy use. Retry your connection later.

7. Specifications

7.1. Dimensions

Table 7-1: Dimensions

Length (without antenna)	4.53” (115 mm)
Length (external to the handheld device)	0.67” (17 mm)
Length (external with antenna)	0.90” (23mm)
Width	2.6” (66mm)
Depth (external to the handheld device)	0.375” (9.5mm)
Weight	4.0oz (113g)

7.2. Cellular Specifications

Table 7-2: Cellular Specifications

CDPD, Release 1.1

Transmission speed	19.2 kbps full duplex
Transmit frequency	824 to 849 MHz
Receive frequency	869 to 894 MHz
Channel Spacing	30 kHz
Frequency Stability	2.5 ppm
Power Output	600 mW

7.3. Power Consumption

Table 7-3: Power Consumption

Sleep Typical	10 mA
Transmit Typical	600 mA, Max 750 mA
Receive Typical	180 mA
Operating Voltage	5 VDC

7.4. Power Supply

The AirPath 300 uses a rechargeable lithium ion battery. The battery is charged through an external DC adapter. The battery is not user replaceable.

Table 7-4: Lithium Ion Battery

Voltage	3.8 V
Battery Capacity	700 mAH

WARNING – Contents of Battery are Explosive When Heated and Corrosive

Use only the supplied charger to charge the battery.

Do not drill the battery.

Do not short the terminals.

Do not subject the battery to water or fire.

Do not subject the battery to temperatures exceeding 60°C.

Do not crush or drop the battery.

Do not solder the battery.

Do not attempt to modify the battery.

Do not put in an oven, microwave oven, or pressure container.

7.5. Environmental Specifications

Table 7-5: Environmental Specifications

Operating Temperature	0°C to +55°C
Long-term Storage Temperature	-20°C to +40°C

7.6. Antenna

WARNING

The FCC has developed guidelines to reduce any possible hazard due to exposure of the human body to electromagnetic radiation (i.e. to radio waves). In accordance with these guidelines, the antenna should be positioned at a distance greater than 9 cm (3.6") from users and bystanders (3 cm (1.2") from hands, wrists, feet, and ankles) when the modem is transmitting.

7.7. Supported Protocols

Supported protocols:

- TCP/IP
- UDP
- PPP
- SLIP.

7.8. Developer Information

A Software Developer's Kit can be downloaded from the Developer's Central area of Sierra Wireless' web site, at www.sierrawireless.com/developers/default.asp.

8. Warranty

Warranty coverage is offered by the seller of the AirPath 300 module. Consult the appropriate section below based on where you purchased your unit.

8.1. From a Reseller or Service Provider

If you purchased your AirPath 300 module from a reseller or service provider:

To register your warranty, and for warranty information and warranty service, contact your service provider or the reseller from whom you purchased the AirPath 300.

8.2. From Sierra Wireless, Inc.

If you purchased your AirPath 300 directly from Sierra Wireless, Inc.:

Sierra Wireless, Inc. warrants the AirPath 300 against all defects in materials and workmanship for a period of one year from the date of purchase.

The sole responsibility of Sierra Wireless, Inc. under this warranty is limited to either repair or, at the option of Sierra Wireless, Inc., replacement of the AirPath 300. There are no expressed or implied warranties, including those of fitness for a particular purpose or merchantability, which extend beyond the face hereof.

Sierra Wireless, Inc. is not liable for any incidental or consequential damages arising from the use, misuse, or installation of the AirPath 300.

This warranty does not apply if the serial number label has been removed, or if the AirPath 300 has been subjected to physical abuse, improper installation, or modification.

8.2.1. Warranty Registration

Please register your warranty through the Sierra Wireless website at www.sierrawireless.com.

8.2.2. Obtaining Service

In the event of equipment malfunction, Sierra Wireless, Inc., or one of its authorized agents should perform all repairs. It is the responsibility of users requiring service to report the need for service to Sierra Wireless, Inc. or to one of its authorized agents.

For warranty service or out-of-warranty repair:

1. Contact Sierra Wireless Technical Support (see www.sierrawireless.com) to determine the nature of the problem. If return of the product is required they will help you with the rest of this process.
2. Obtain a Return Material Authorization (RMA) number from Sierra Wireless Technical Support.
3. Print and fill out a Problem Report Sheet (PDF and Microsoft Word versions are available from the web site (www.sierrawireless.com/SupportDownload/GeneralDocumentation/ProblemReportSheet.html). Remember: the more detailed your description of the problem, the faster your modem can be diagnosed and repaired.
4. Return the equipment, with the Problem Report Sheet enclosed, shipping pre-paid, to the address specified by the Customer Service Representative.

9. Technical Support

For technical support, contact your carrier, service provider, or the reseller from whom you purchased the AirPath 300.

If you purchased your AirPath 300 directly from Sierra Wireless, consult our web site (www.sierrawireless.com) for support and contact information.

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