



RoamAbout™

ENJOY THE FREEDOM OF WIRELESS NETWORKING

802.11a PC Card Installation and Specifications

ENTERASYS.COM

903xxxx

ENTERASYS
NETWORKS™

Notice

Enterasys Networks reserves the right to make changes in specifications and other information contained in this document and its web site without prior notice. The reader should in all cases consult Enterasys Networks to determine whether any such changes have been made.

The hardware, firmware, or software described in this document is subject to change without notice.

IN NO EVENT SHALL ENTERASYS NETWORKS BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING BUT NOT LIMITED TO LOST PROFITS) ARISING OUT OF OR RELATED TO THIS DOCUMENT, WEB SITE, OR THE INFORMATION CONTAINED IN THEM, EVEN IF ENTERASYS NETWORKS HAS BEEN ADVISED OF, KNEW OF, OR SHOULD HAVE KNOWN OF, THE POSSIBILITY OF SUCH DAMAGES.

© 2003 Enterasys Networks™ All rights reserved.

Enterasys Networks, Inc.
35 Industrial Way
Rochester, NH 03867

Order Number: 903xxxx-xx DRAFT
February 2003

Web Site: www.enterasys.com/products/wireless

ENTERASYS, ENTERASYS NETWORKS, NETSIGHT, ROAMABOUT, and any logos associated therewith, are trademarks of Enterasys Networks, Inc. in the United States and other countries.

Microsoft, Windows, and Windows NT are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.

PC Card is a trademark of PCMCIA in the United States and other countries.

All other trademarks and registered trademarks are the property of their respective holders.

Regulatory Information



CAUTION: Changes or modifications made to this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Exposure to Radio Frequency Radiation.

The radiated output power of the IEEE 802.11 RoamAbout PC Card is far below the FCC radio frequency exposure limits. Nevertheless, the RoamAbout PC Card shall be used in such a manner that the potential for human contact during normal operation is minimized. When using this device in combination with RoamAbout Outdoor Antenna products, a certain separation distance between antenna and nearby persons has to be kept to ensure RF exposure compliance. Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

Interference Statement.

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 a residential installation.

This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. 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 distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.

Enterasys Networks is not responsible for any radio or television interference caused by unauthorized modification of the devices included in this kit, or the substitution or attachment of connecting cables and equipment other than specified by Enterasys Networks. The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

For country-specific approvals, please consult the *Radio Certification Information* document included in this kit. Visit the RoamAbout Wireless web site for updated country approvals.

Canada - Industry Canada (IC).

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

cet appareil de la class B respecte toutes les exigences du Reglement sur le materiel brouiller du Canada

Product Safety.

USA	UL 1950, UL Listed
Canada	CUL 1950

Technical Specifications.

Mechanical Specifications

Dimensions: (LxWxH)	114.55 x 54 x 9.65 mm (4.51 x 2.26 x .38 in)
------------------------	---

Weight	62.4 grams (2.2 oz)
--------	---------------------

Radio Characteristics

Receiver Sensitivity dBm	See Table 1.
-----------------------------	--------------

Output Power	13 dBm
--------------	--------

Standards	IEEE 802.11a, WiFi Certified
-----------	------------------------------

PC Card Power Characteristics

Receive Mode	430 mA
--------------	--------

Transmit Mode	540 mA
---------------	--------

Power Supply	3.3 V
--------------	-------

Temperature and Humidity

Operation	-20 ^o to 50 ^o C (-4 ^o F to 122 ^o F)
-----------	---

Storage	-30 ^o to 66 ^o C (-22 ^o to 150.8 ^o F)
---------	--

Humidity	Maximum 95%, no condensation allowed.
----------	---------------------------------------

Compatibility

Operating System	Microsoft Windows 98, Me, 2000, XP and windows NT (with the RoamAbout driver)
---------------------	--

PC Card	<ul style="list-style-type: none">• All RoamAbout 802.11 PC Cards• Hot Swapping supported
---------	--

Getting Help

For additional support related to this device or document, contact Enterasys Networks using one of the following methods:

World Wide Web: www.enterasys.com/products/wireless

Phone: North America: (603) 332-9400
Europe: 353 61 701 910
Asia: +800 8827-2878

Internet mail: support@enterasys.com

To send comments or suggestions concerning this document, contact the Enterasys Networks Technical Writing Department via the following e-mail address: **TechWriting@enterasys.com**

Make sure you include the document Order Number in the e-mail message.

Before calling Enterasys Networks, please have the following information ready:

- Your Enterasys Networks service contract number
- A description of the problem
- A description of any action(s) already taken to resolve the problem
- The serial and revision numbers of all involved Enterasys Networks products in the network
- A description of your network environment (for example, layout, cable type)
- Network load and frame size at the time of trouble (if known)
- The device history (for example, have you returned the device before, is this a recurring problem)
- Any previous Return Material Authorization (RMA) numbers

RoamAbout 802.11a PC Card

This document provides the regulatory information, system requirements, and installation procedure for the RoamAbout 802.11a PC Card.

Please review the Regulatory information before installing the PC Card.

System Requirements

When you install the RoamAbout PC Card, you must also install its driver. You can also download the RoamAbout drivers and documentation from the RoamAbout wireless web site: www.enterasys.com/products/wireless

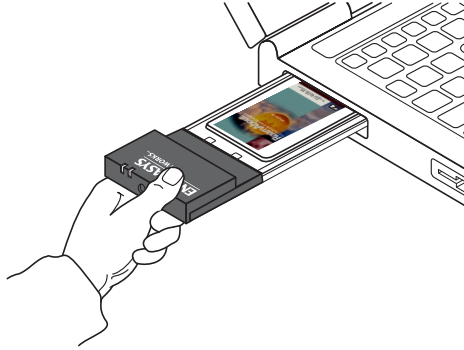
Check the RoamAbout wireless web site frequently for driver updates. If you download a driver from the web, refer to that driver's release notes and readme file for the instructions to extract and install the driver. The RoamAbout PC Card Drivers CD-ROM contains the driver and installation information for the supported Microsoft Windows operating systems.

DRAFT

PC Card Installation

To install the PC card, perform the following steps:

- 1.** Insert the PC Card in the PC Card slot, if available.



- 2.** If the system does not have a PC Card slot, install the optional PCI adapter. The installation instructions are in the PCI adapter kit.
- 3.** Refer to the driver operating system directory readme on the CD-ROM to install the appropriate driver. Or, if you downloaded the driver, refer to the directory where you downloaded the files.

Technical Specifications

Radio Characteristics

Consult your authorized RoamAbout reseller sales office for information about the radio regulations that apply in your country. **Table 1** shows the radio characteristics for the 802.11a PC Card.

Table 1: 802.11a Radio Characteristics

Characteristic	Value
R-F frequency band	5 GHz (5.15 - 5.35 GHz)
Number of selectable channels for North America and countries supporting FCC	8
Modulation technique	OFDM Modulation (BPSK, QPSK, 16 QAM, 64 QAM)
Bit error rate	Better than 10^{-5}
Receiver sensitivity at 54 Mbit/s	-68 dBm
Receiver sensitivity at 48 Mbit/s	-69 dBm
Receiver sensitivity at 36 Mbit/s	-71 dBm
Receiver sensitivity at 24 Mbit/s	-80 dBm
Receiver sensitivity at 18 Mbit/s	-83 dBm
Receiver sensitivity at 12 Mbit/s	-86 dBm
Receiver sensitivity at 9 Mbit/s	-89 dBm
Receiver sensitivity at 6 Mbit/s	-89 dBm
Integrated Antenna	up to 4.5 dBi

DRAFT

Supported Frequency Sub-Bands

The RoamAbout PC Card supports a number of factory-programmed channels. The number of available frequencies is subject to local radio regulations as defined by local authorities. **Table 2** shows the available channels and associated frequencies.

Table 2: IEEE 802.11a RoamAbout Channel Set

Frequency Range	5150-5350 MHz
Channel ID	FCC
36	5180
40	5200
44	5220
48	5240
52	5260
56	5280
60	5300
64	5320