



High-Rate Wireless LAN Access Point

Quick Start Guide

OPTIONS
by IBM

19K4544



High-Rate Wireless LAN Access Point

Quick Start Guide

Note: Before using this information and the product it supports, be sure to read the information under Appendix D, “Product warranties and notices” on page D-1.

First Edition (May 2000)

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Safety Information



Before installing this product, read the Safety Information book.

مج، يجب قراءة دات السلامة

Antes de instalar este produto, leia o Manual de Informações sobre Segurança.

安装本产品前请先阅读《安全信息》手册。

Prije instalacije ovog proizvoda pročitajte priručnik sa sigurnosnim uputama.

Před instalací tohoto produktu si přečtete příručku bezpečnostních instrukcí.

Læs hæftet med sikkerhedsforskrifter, før du installerer dette produkt.

Lue Safety Information -kirjanen, ennen kuin asennat tämän tuotteen.

Avant de procéder à l'installation de ce produit, lisez le manuel Safety Information.

Vor Beginn der Installation die Broschüre mit Sicherheitshinweisen lesen.

Πριν εγκαταστήσετε αυτό το προϊόν, διαβάστε το εγχειρίδιο Safety Information.

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

Installálás el tt olvassa el a Biztonsági el írások kézikönyvét !

Prima di installare questo prodotto, leggere l'opuscolo contenente le informazioni sulla sicurezza.

本製品を導入する前に、安全情報資料を御読みください。

이 제품을 설치하기 전에, 안전 정보 책자를 읽어보십시오.

Пред да го инсталирате овој производ прочитајте ја книгата со безбедносни информации.

Lees voordat u dit product installeert eerst het boekje met veiligheidsvoorschriften.

Les heftet om sikkerhetsinformasjon (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu należy przeczytać broszurę Informacje Dotyczące Bezpieczeństwa.

Antes de instalar este produto, leia o folheto Informações sobre Segurança.

Перед установкой продукта прочтите брошюру по технике безопасности (Safety Information).

Pred inštaláciou tohto produktu si prečítajte Informáciu o bezpečnosti.

Preden namestite ta izdelek, preberite knjižico Varnostne informacije.

Antes de instalar este producto, lea la Información de Seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

在安裝本產品之前，也請先閱讀「安全性資訊」小冊子。

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About this book

This manual contains instructions for installing and using the IBM® High-Rate Wireless LAN Access Point. The manual is divided into two parts:

Part 1: Installation and user's guide

This guide contains the product description, hardware and software installation instructions, and product use and maintenance information.

Part 2: Appendixes

The appendixes contain help and service information, the product warranties, and notices.

Note: The illustrations in this manual might be slightly different from your hardware.

Part 1: Installation and user's guide

This section provides the product description, installation instructions, and user's guide.

Product description

The IBM® High-Rate Wireless LAN Access Point is a modular bridge with an integrated Ethernet interface and two PC Card slots. You can use your access point with High-Rate Wireless LAN PC Cards. The access point provides easy migration paths among various generations of High-Rate Wireless LAN products.

The access point is a wire-to-wireless bridge that you can use to connect wireless cells to one another or to a wired (Ethernet) local area network (LAN). It can serve mobile wireless stations roaming between various locations within a network.

The access point, combined with PC Cards, enables you to build a variety of network configurations:

- A wireless LAN environment for mobile computers
- A flexible network that enables the adding or relocating of workstations quickly and easily

In addition to this manual, the following items are included in your option package:

- High-Rate Wireless LAN Access Point
- Mounting plate
- Processor module
- Access point cover plate
- Power supply
- AC power cord
- High-Rate Wireless LAN PC Card and slot protector card
- T-connector and terminator for Ethernet 10BASE2
- Various screws and plugs
- Tie wraps
- *High-Rate Wireless LAN CD*

If any of these items are missing or damaged, contact your reseller.

Note: You can also purchase from your reseller the High-Rate Wireless LAN Range Extender Antenna, an omni-directional indoor antenna that enables you to extend the wireless range of the access point when it is connected to the High-Rate Wireless LAN PC Card.

Software description

The *High-Rate Wireless LAN* CD contains several software programs and the *High-Rate Wireless LAN Manager User's Guide*. The *High-Rate Wireless LAN Manager User's Guide* describes the following:

- Examples of various configuration scenarios
- How to set up a LAN administrator's station to configure your High-Rate Wireless LAN Access Point
- How to modify the performance of your wireless LAN
- How to optimize the performance of your wireless LAN, using the advanced features of your access point bridge
- How to enhance network security, using the various security options available to your access point
- Troubleshooting unexpected performance

The High-Rate Wireless LAN AP Manager software also contains context-sensitive help, which you can access by clicking **Help** or **?**, or by pressing F1.

Registering your option

Thank you for purchasing OPTIONS by IBM. Please take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at

<http://www.ibm.com/pc/register>

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

Before you begin

Before you install your High-Rate Wireless LAN Access Point, the following requirements must be met:

- Connect the access point to a grounding type ac electrical outlet (100—240 Vac). Use the included power adapter.
- Place the access point so that you can easily disconnect the power from the electrical outlet.
- Do not cover the access point or block the airflow with any other objects. Keep the access point away from excessive heat and humidity, and free from vibration and dust.
- Ensure that the installation conforms to local regulations.
- If you are connecting an outdoor antenna to your access point, read the documentation that comes with the antenna for additional regulatory information, safety instructions, or installation requirements.

Installing the High-Rate Wireless LAN Access Point

This section provides instructions on installing the High-Rate Wireless LAN Access Point hardware and network interfaces.

Access point placement

The High-Rate Wireless Access Point can be mounted vertically or horizontally.

Note: Before mounting the access point to a fixed location, see the *High-Rate Wireless LAN Manager User's Guide* for more information on determining optimal placement for your access point.

Indoor antenna placement

The integrated antennas of your High-Rate Wireless LAN Access Point operate optimally in an open environment with as few obstructions as possible.

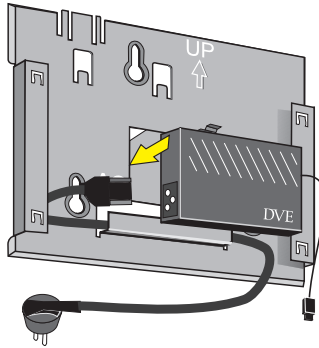
To ensure optimal performance, do the following:

- Place the access point as high and as central as possible, relative to the High-Rate Wireless LAN Stations in the vicinity.
- Do not conceal or obstruct the antenna.
- Use the PC Card in combination with an external antenna.

Note: If you are using your access point with two High-Rate Wireless LAN PC Cards, connect an external antenna to at least one of the PC Cards. Mount the external antenna as far away as possible from the other PC Card for optimal performance.

Placing the mounting plate and power supply

To place the mounting plate and power supply for you High-Rate Wireless Access Point, do the following:



1. Use the included screws and plugs to attach the mounting plate in the chosen position. The mounting plate can be attached horizontally or vertically.

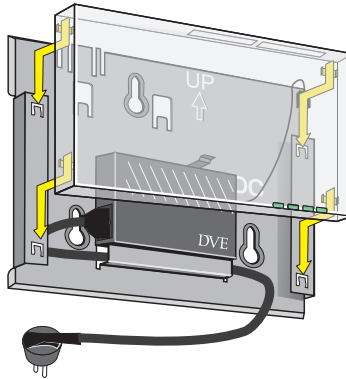
CAUTION:

The mounting plate is not designed to be attached to a ceiling. Attaching the access point to a ceiling exposes it to vibrations, and might cause the processor module to slide off the mounting plate, causing personal injury or damage to your High-Rate Wireless LAN equipment.

2. Attach the power supply to the mounting plate as shown in the illustration.
3. Connect the ac power cord to the power supply unit, in the middle of the mounting plate.
4. Use the included tie wraps to secure the power cord to the small loops on the mounting plate at the position where the cord will leave the access point.

Mounting the processor module

To mount the processor module for the High-Rate Wireless LAN Access Point, do the following.



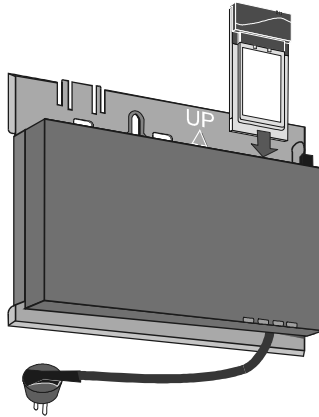
1. Connect the dc power cable to the dc power inlet on the processor module.
2. Place the rear side of the processor module on to the mounting plate, sliding the four recesses on the module over the corresponding tabs on the mounting plate.
3. Apply pressure to secure the module to the mounting plate.

CAUTION:

Make sure that all four recesses are fitted securely on the corresponding tabs of the mounting plate. If the processor module is not secure, it might drop, causing personal injury or damage to your High-Rate Wireless LAN equipment.

Inserting the High-Rate Wireless LAN PC Card

To insert a High-Rate Wireless LAN PC Card, do the following:



1. Insert the PC Card into the processor module.
2. If you are using the optional High-Rate Wireless LAN Range Extender Antenna, do the following:
 - a. Remove the protective cap from the external antenna connector on your PC Card.
 - b. Insert the cable connector in the external antenna connector in your PC Card.
 - c. Gently push the connector until it clicks into place.
 - d. Mount the external antenna vertically to ensure optimal performance.

Note: If you are using your access point with two High-Rate Wireless LAN PC Cards, mount the external antenna as far away as possible from the other PC Card for maximum performance.
3. You can connect the Ethernet cable to one of the following Ethernet interfaces:
 - 10BASE-T (RJ 45 connector)
 - 10BASE2 (BCN connectors or the included T-connector)

Note: Attach the included 10Base2 Ethernet terminator to the processor module if either of the following conditions exist:

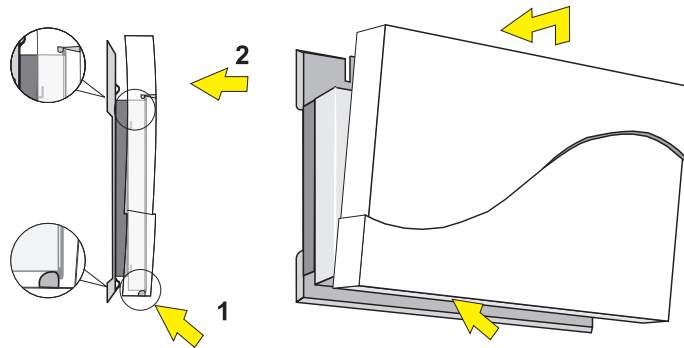
 - The processor module is the last unit on a 10BASE2 cable.
 - You intend to use the access point with two High-Rate Wireless LAN network interfaces instead of the Ethernet interface.
4. You can use the included tie-wraps to secure the Ethernet cable to the small loops on the mounting plate at the position where the cable leaves the access point.

One PC Card slot of the High-Rate Wireless LAN Access Point is equipped with a plastic slot protector card. The purpose of this card is to protect the access point from dust when the access point is used with a single High-Rate Wireless LAN network.

When using two High-Rate Wireless LAN network interfaces, you must remove the slot protector card. Keep the slot protector in case you would like to change the access point configuration in the future.

Mounting the access point cover plate

To mount the cover plate for the High-Rate Wireless LAN Access Point, do the following:



1. Mount the cover plate so that the LED windows are over the LED lights on the access point.
2. Position the latches on the inside of the cover underneath the rim at the bottom of the processor module.
3. Gently push the top of the cover plate toward the access point until it clicks.
4. Verify that the access point is properly seated; then turn the access point on as described in “Turning on the access point” on page 1-8.

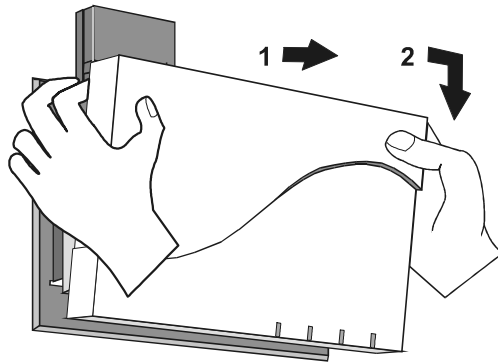
Note: For instructions on removing the cover plate, see “Removing the access point cover plate” on page 1-8.

Removing the access point cover plate

Removing the access point cover plate might be required in one of the following situations:

- You want to change or replace the network interface of your access point.
- You want to access the Reboot or Forced Reload buttons on the processor module.

To remove the cover plate, gently pull the top of the cover towards you to release the latches.



Turning on the access point





The High-Rate Wireless LAN Access Point power supply accepts any input AC voltage in the range of 100—240 Vac.

CAUTION:

Use only the power cord included in your option package and insert it into a grounded electrical outlet. If you use the access point in combination with an outdoor antenna, the grounding of the ac electrical outlet must be connected to the safety grounding system of the outdoor antenna and the High-Rate Wireless LAN Lightning Protector.

When turned on, the access point performs a start-up diagnostic LED sequence. The LEDs will change color from amber to red; then to green. When the sequence is finished, the access point begins a bridging operation.

The bridging operation consists of LED activity as listed in the following table.

LED	Description	Activity	Definition
	Power	Green	Power enabled
	Ethernet	Flash green	Ethernet LAN activity
	Wireless interface A	Flash green	Wireless LAN activity on socket A
	Wireless interface B	Flash green	Wireless LAN activity on socket B

Note: LED activity will occur only when there is network activity on the access point network interface.

If the access point does not switch to normal operation within two minutes, see the troubleshooting section of the *High-Rate Wireless LAN Manager User's Guide*, which can be found on the *High-Rate Wireless LAN CD*.

Appendix A. Product specifications

This appendix provides the hardware and software specifications for the IBM High-Rate Wireless LAN Access Point

Hardware specifications

The following tables provide the hardware specifications for the High-Rate Wireless LAN Access Point.

Table A-1. Physical specifications

Dimensions	Weight	Power cord length
5 x 18.5 x 26 cm (2.0 x 7.3 x 10.2 in.)	1.75 kg (3.8 lbs)	2.5 m (8.2 ft.)

Table A-2. Electrical specifications

Voltage	Current	Power consumption
100—240 Vac	0.2 Amp	20 Watt

Table A-3. Environmental specifications

Operating	Transit	Storage
Temperature: 0° to 40° C (32° to 104° F)	Temperature: -40° to 60° C (-40° to 140° F)	Temperature: -10° to 60° C (14° to 140° F)
Humidity: 20 to 80% (relative humidity)	Humidity: 15 to 95% (no condensation allowed)	Humidity: 10 to 90% (no condensation allowed)

Table A-4. Ethernet interface

10BASE2	10BASE-T
BNC female connector socket (Terminator and T-connector included)	RJ 45 female socket

Wireless interface: PC Card Type II socket, which can be used for a High-Rate Wireless LAN PC Card

Software specifications

This section provides information on the the software included in your option package.

High-Rate Wireless LAN Access Point operating software

wpntxxx.bin: Factory-installed operating software (where *xxx* is the version number) for the High-Rate Wireless LAN Access Point. This software is loaded in the flash ROM of the access point and controls its features and functions.

When new features and functionality become available, you can upgrade your access point by uploading the latest software, using the instructions in the *High-Rate Wireless LAN Manager User's Guide*, found on the *High-Rate Wireless LAN* CD.

High-Rate Wireless LAN AP Manager

wman_ap.exe: Configuration and management software for High-Rate Wireless LAN Access Points. This software runs on Microsoft® Windows® 95, Windows 98, Windows NT® 4.0, and Windows 2000.

Appendix B. Access Point startup configuration

The IBM High-Rate Wireless LAN Access Point comes with the access point operating software preinstalled. The access point configuration has been factory set, for "out-of-the-box" operation.

Note: The factory-set configuration is not the default configuration. If you have to restart the access point or perform a forced reload (described in the *High-Rate Wireless LAN Manager User's Guide*), the access point will not return to the factory-set configuration.

To connect to an access point, configure the parameters of each wireless station to match the values as identified for the access point.

- When you turn on the access point for the first time, these values must match the values listed in the tables in this appendix.
- For normal operation, these values must match the ones you identified when configuring your access point. Record this information on the "Configuration record" on page B-2.
- When you set the access point to forced reload mode, those values must match the settings listed in the *High-Rate Wireless LAN manager User's Guide*.

Table B-1. High-Rate Wireless LAN Access Point identifiers

IP address ¹	Subnet mask	Read password	Read/write password
153.69.254.254	255.255.0.0	Public	Public

¹When using IP networks, change this IP address to a unique address in the range assigned to your organization.

Table B-2. Wireless interface

RF-channel	Network name	RTS/CTS medium reservation	Multicast rate	Encryption
2.462 (France) 2.484 (Japan) 2.422 (All others)	WaveLAN Network	Disabled	Auto select 1-2 MBps	Disabled

Configuration record

You can use this form to record the configuration information for your High-Rate Wireless LAN Access Point.

High-Rate Wireless LAN					
Serial Number	MAC Address	IP Address	Location	Installation Date	Configuration Date

Appendix C. Help and service information

This section contains information on how to obtain online and telephone technical support.

Technical support

Technical support is available during the life of your product. Assistance can be obtained through the Personal Computing Support Web site and the IBM Automated Fax System. During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

Technical support	
IBM Personal Computing Support Web Site	http://www.ibm.com/pc/support
IBM Automated Fax System	1-800-426-3395 1-800-465-3299 (in Canada)

Marketing, installation, and configuration support through the HelpCenter will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

Telephone technical support

To assist the technical support representative, have available as much of the following information as possible:

1. Option name
2. Option number
3. Proof of purchase
4. Computer manufacturer, model, serial number (if IBM), and manual
5. Exact wording of the error message (if any)
6. Description of the problem
7. Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

For the support telephone number and support hours by country, refer to the following table or to the enclosed technical support insert. If the number is not provided, contact your IBM reseller or IBM marketing representative. Response time may vary depending on the number and nature of the calls received.

Support 24 hours a day, 7 days a week	
Canada (Toronto only)	1-416-333-3344
Canada (all others)	1-800-565-3344
U.S.A. / Puerto Rico	1-800-772-2227

Appendix D. Product warranties and notices

The following section provides product warranty information and legal notices.

Warranty Statements

The warranty statements consist of two parts: Part 1 and Part 2. Part 1 varies by country. Part 2 is the same for both statements. Be sure to read both the Part 1 that applies to your country and Part 2.

- **United States, Puerto Rico, and Canada (Z125-4753-05 11/97)** “IBM Statement of Limited Warranty for United States, Puerto Rico, and Canada (Part 1 - General Terms)”
- **Worldwide except Canada, Puerto Rico, Turkey, and United States (Z125-5697-01 11/97)** “IBM Statement of Warranty Worldwide except Canada, Puerto Rico, Turkey, United States (Part 1 - General Terms)” on page D-4
- **Worldwide Country-Unique Terms** “Part 2 - Worldwide Country-Unique Terms” on page D-7

IBM Statement of Limited Warranty for United States, Puerto Rico, and Canada (Part 1 - General Terms)

This Statement of Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 may replace or modify those of Part 1. The warranties provided by IBM in this Statement of Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

The IBM Warranty for Machines

Machine - IBM High-Rate Wireless Access Point

Warranty period* - 3 Years

** Contact your place of purchase for warranty service information. Some IBM Machines are eligible for on-site warranty service depending on the country where service is performed.*

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under

the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded. The replacement may not be new, but will be in good working order.

Extent of Warranty

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

Items Not Covered by Warranty

IBM does not warrant uninterrupted or error-free operation of a Machine.

Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND.**

Any technical or other support provided for a Machine under warranty, such as assistance via telephone with "how-to" questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

Warranty Service

To obtain warranty service for the Machine, contact your reseller or IBM. In the United States, call IBM at 1-800-565-3344. In Canada, call IBM at 1-800-565-3344. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. IBM may repair the failing Machine or exchange it at its discretion.

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item.

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides,
 - b. secure all programs, data, and funds contained in a Machine,
 - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations, and
 - d. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

IBM Statement of Warranty Worldwide except Canada, Puerto Rico, Turkey, United States (Part 1 - General Terms)

This Statement of Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 may replace or modify those of Part 1. The warranties provided by IBM in this Statement of Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

Machine - IBM High-Rate Wireless Access Point

Warranty period* - 3 Years

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During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded. The replacement may not be new, but will be in good working order.

Extent of Warranty

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

Items Not Covered by Warranty

IBM does not warrant uninterrupted or error-free operation of a Machine.

Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND.**

Any technical or other support provided for a Machine under warranty, such as assistance via telephone with "how-to" questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

Warranty Service

To obtain warranty service for the Machine, contact your reseller or IBM. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. IBM may repair the failing Machine or exchange it at its discretion.

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item.

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides,
 - b. secure all programs, data, and funds contained in a Machine,
 - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations, and
 - d. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL

DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Part 2 - Worldwide Country-Unique Terms

ASIA PACIFIC

AUSTRALIA: The IBM Warranty for Machines: The following paragraph is added to this Section:

The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other legislation and are only limited to the extent permitted by the applicable legislation.

Extent of Warranty: The following replaces the first and second sentences of this Section:

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, operation in other than the Specified Operating Environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible.

Limitation of Liability: The following is added to this Section:

Where IBM is in breach of a condition or warranty implied by the Trade Practices Act 1974, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

PEOPLE'S REPUBLIC OF CHINA: Governing Law: The following is added to this Statement:

The laws of the State of New York govern this Statement.

INDIA: Limitation of Liability: The following replaces items 1 and 2 of this Section:

1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM's negligence;
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Warranty, IBM's liability will be limited to the charge paid by you for the individual Machine that is the subject of the claim.

NEW ZEALAND: The IBM Warranty for Machines: The following paragraph is added to this Section:

The warranties specified in this Section are in addition to any rights you may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that Act.

Limitation of Liability: The following is added to this Section:

Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.

EUROPE, MIDDLE EAST, AFRICA (EMEA)

The following terms apply to all EMEA countries.

The terms of this Statement of Warranty apply to Machines purchased from an IBM reseller. If you purchased this Machine from IBM, the terms and conditions of the applicable IBM agreement prevail over this warranty statement.

Warranty Service

If you purchased an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

If you purchased an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

The applicable laws, Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided. However, the laws of Austria govern this Statement if the warranty service is provided in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Federal Republic of Yugoslavia, Georgia, Hungary, Kazakhstan, Kirghizia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, and Ukraine.

The following terms apply to the country specified:

EGYPT: Limitation of Liability: The following replaces item 2 in this Section: 2. as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

FRANCE: Limitation of Liability: The following replaces the second sentence of the first paragraph of this Section: In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: (items 1 and 2 unchanged).

GERMANY: The IBM Warranty for Machines: The following replaces the first sentence of the first paragraph of this Section: The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this Section:
The minimum warranty period for Machines is six months.

In case IBM or your reseller are unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

Extent of Warranty: The second paragraph does not apply.

Warranty Service: The following is added to this Section:
During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

Production Status: The following paragraph replaces this Section:
Each Machine is newly manufactured. It may incorporate in addition to new parts, re-used parts as well.

Limitation of Liability: The following is added to this Section:
The limitations and exclusions specified in the Statement of Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

In item 2, replace "U.S. \$100,000" with "1.000.000 DEM."

The following sentence is added to the end of the first paragraph of item 2:
IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

IRELAND: Extent of Warranty: The following is added to this Section:
Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

Limitation of Liability: The following replaces items one and two of the first paragraph of this Section:

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence; and 2. the amount of any other actual direct damages, up to the greater of Irish Pounds 75,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

Applicability of suppliers and resellers (unchanged).

The following paragraph is added at the end of this Section:
IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

ITALY: Limitation of Liability: The following replaces the second sentence in the first paragraph:

In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than: (item 1 unchanged) 2) as to any other actual damage arising in all situations involving non-performance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

The following replaces the second paragraph of this Section:
Unless otherwise provided by mandatory law, IBM and your reseller are not liable for any of the following: (items 1 and 2 unchanged) 3) indirect damages, even if IBM or your reseller is informed of their possibility.

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND:

Limitation of Liability: The following is added to this Section:
IBM's entire liability to you for actual damages arising in all situations involving

nonperformance by IBM in respect of the subject matter of this Statement of Warranty will be limited to the charge paid by you for the individual Machine that is the subject of your claim from IBM.

TURKIYE: Production Status: The following replaces this Section:
IBM fulfills customer orders for IBM Machines as newly manufactured in accordance with IBM's production standards.

UNITED KINGDOM: Limitation of Liability: The following replaces items 1 and 2 of the first paragraph of this Section:

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence;
2. the amount of any other actual direct damages or loss, up to the greater of Pounds Sterling 150,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

The following item is added to this paragraph:

3. breach of IBM's obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982.

Applicability of suppliers and resellers (unchanged).

The following is added to the end of this Section:

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default will be limited to damages.

NORTH AMERICA

CANADA: Warranty Service: The following is added to this section:
To obtain warranty service from IBM, call **1-800-565-3344**. In Toronto, call **416-383-3344**.

UNITED STATES OF AMERICA: Warranty Service: The following is added to this section:
To obtain warranty service from IBM, call **1-800-772-2227**.

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Electronic emission notices

High-Rate Wireless LAN Access Point

Federal Communications Commission (FCC) Statement

Note: 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 and, if not installed and used in accordance with the instructions, 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 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 an IBM authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible party:

International Business Machines Corporation
New Orchard Road
Armonk, NY 10504
Telephone: 1-919-543-2193

 Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

Industry Canada Class B emission compliance statement

This Class B digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de classe B est conforme à la norme NMB-003 du Canada.

Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

Dieses Gerät ist berechtigt in Übereinstimmung mit dem deutschen EMVG vom 9.Nov.92 das EG-Konformitätszeichen zu führen.

Der Aussteller der Konformitätserklärung ist die IBM UK, Greenock.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse B.

European Union EMC Directive conformance statement

This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a nonrecommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to CISPR 22/European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

Union Européenne - Directive Conformité électromagnétique

Ce produit est conforme aux exigences de protection de la Directive 89/336/EEC du Conseil de l'UE sur le rapprochement des lois des États membres en matière de compatibilité électromagnétique.

IBM ne peut accepter aucune responsabilité pour le manquement aux exigences de protection résultant d'une modification non recommandée du produit, y compris l'installation de cartes autres que les cartes IBM.

Ce produit a été testé et il satisfait les conditions de l'équipement informatique de Classe B en vertu de CISPR22 / Standard européen EN 55022. Les conditions pour l'équipement de Classe B ont été définies en fonction d'un contexte résidentiel ordinaire afin de fournir une protection raisonnable contre l'interférence d'appareils de communication autorisés.

Unione Europea - Directiva EMC (Conformidad electromagnética)

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la legislación de los Estados Miembros sobre compatibilidad electromagnética se refiere.

IBM no puede aceptar responsabilidad alguna si este producto deja de satisfacer dichos requisitos de protección como resultado de una modificación no recomendada del producto, incluyendo el ajuste de tarjetas de opción que no sean IBM.

Este producto ha sido probado y satisface los límites para Equipos Informáticos Clase B de conformidad con el Estándar CISPR22 y el Estándar Europeo EN 55022. Los límites para los equipos de Clase B se han establecido para entornos residenciales típicos a fin de proporcionar una protección razonable contra las interferencias con dispositivos de comunicación licenciados.

Union Europea - Normativa EMC

Questo prodotto è conforme alle normative di protezione ai sensi della Direttiva del Consiglio dell'Unione Europea 89/336/CEE sull'armonizzazione legislativa degli stati membri in materia di compatibilità elettromagnetica.

IBM non accetta responsabilità alcuna per la mancata conformità alle normative di protezione dovuta a modifiche non consigliate al prodotto, compresa l'installazione di schede e componenti di marca diversa da IBM.

Le prove effettuate sul presente prodotto hanno accertato che esso rientra nei limiti stabiliti per le apparecchiature di informatica Classe B ai sensi del CISPR 22 / Norma Europea EN 55022. I limiti delle apparecchiature della Classe B sono stati stabiliti al fine di fornire ragionevole protezione da interferenze mediante dispositivi di comunicazione in concessione in ambienti residenziali tipici.

Korean B급 규격 증명서

이 장치는 옥내용으로 보증되었으며 모든 환경에서 사용할 수 있습니다.

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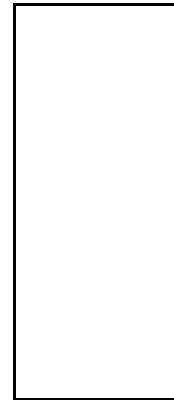
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