



iBook and AirPort FAQ

iBook has everything that made the world fall in love with the iMac: blazing speed, eye-catching style, and incredibly easy setup that will have you surfing the Internet in minutes. iBook brings it all to life in a stunning notebook design that's powered to go where you go.

Design

Q. How much does iBook weigh?

A. iBook weighs 6.6 pounds.

Q. What are its dimensions?

A. iBook is 13.5 inches long, 11.6 inches wide, and an average of 1.8 inches deep. The depth ranges from 1.24 inches at the thinnest point to 2.06 inches at the thickest point.

Q. Why are there no latches or buttons to close iBook?

A. iBook uses a new "latchless" design developed by Apple. This mechanism allows iBook to be opened and remain open, or be closed and remain closed, without the need for cumbersome latches or buttons that may break over time.

Q. Will iBook survive in a kid's backpack?

A. iBook was designed specifically with students in mind. The result is a combination of unique design features and materials. iBook has no doors or latches to open and break. There are no hot-swappable devices that can fall out, be lost, or get stolen. There are no sharp edges.

Also, the iBook has a unique rubber overmolding that is up to four times thicker in some areas than the plastics used in traditional PowerBook designs. iBook was designed with the thought that it might spend much of its life in a backpack.

Q. What are the metal contacts on the bottom of the system for?

A. The two circular metal contacts located next to each other on the bottom of the system near the center are charging contacts. These contacts allow a third-party developer to create a charging station that could charge several units simultaneously without the need to plug each unit into a wall socket, such as in schools.

Q. What happens if I accidentally touch the charging contacts?

A. Nothing will happen if a metal or other object happens to touch the contacts. The charging contacts were designed to withstand poking, prodding, and accidental contact, such as in a backpack, without any consequences to the battery or the system.



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Q. Does iBook have a reset button?

A. Yes. The reset button is located directly above the power button on the keyboard. You can press the reset button by inserting the end of a paper clip into the small reset hole. iBook also has the equivalent of a reset button via a key sequence. To reset the hardware, press the Ctrl-Command-Power keys simultaneously.

Q. Does iBook have a fan?

A. No. It does not have a built-in fan for cooling purposes. iBook does not create significant heat; thus it doesn't require a fan while in operation. The little heat that is generated dissipates quite readily.

Q. What I/O connectors does iBook have?

A. iBook includes one USB port, an RJ-45 Ethernet connector, an RJ-11 connector for the built-in modem, a 16-bit stereo output jack, and a power adapter jack.

Q. Does iBook have a PCMCIA slot?

A. iBook does not have any PCMCIA expansion slots. It is a fully featured system that comes standard with 10/100BASE-T Ethernet capability and a 56-kilobit-per-second V.90 modem*—the two most common uses for PCMCIA slots in notebook computers. In addition, iBook has a dedicated internal expansion slot for a wireless communications module. And it has ample external expansion capability through the high-speed USB port, which lets you connect up to 127 USB devices.

Processor and Memory

Q. What processor is used in iBook, and how fast is it?

A. iBook uses a 300-megahertz PowerPC G3 microprocessor with 64 kilobytes of level 1 cache (32 kilobytes for the instruction cache and 32 kilobytes for the data cache) on the chip. It also has 512K of backside level 2 cache.

Q. Is it possible to add more memory to iBook

A. Yes. 32 megabytes of SDRAM comes preinstalled on the logic board. There is one open expansion slot for additional memory expansion.

Q. What is the maximum amount of memory that can be installed?

A. iBook supports up to 160 megabytes of SDRAM via a 128-megabyte SO-DIMM in the memory expansion slot in conjunction with the 32 megabytes of on-board SDRAM. iBook also accepts a 32-, 64-, or 96-megabyte SO-DIMM.

Q. Does iBook use special memory modules or standard SO-DIMMs?

A. iBook uses a standard 144-pin, 1.25-inch SDRAM SO-DIMM.

Q. Does the new PowerBook G3 use the same kind of memory?

A. No. The new PowerBook G3 has two SO-DIMM slots. The first slot accepts up to 2-inch 144-pin SO-DIMMs. The second slot accepts up to 1.5-inch, 144-pin SO-DIMMs. The PowerBook G3 SO-DIMMs must be 3.3-volt, unbuffered, 64-bit, 144-pin SO-DIMMs.



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Q. How do I expand the memory?

A. iBook was designed so that you can easily add more memory. You can access the memory slot by removing the iBook keyboard, the AirPort Card if you have one installed, and the RAM shield. Only ordinary tools such as slot-head and phillips-head screwdrivers are needed.

Video and Graphics

Q. What video controller is used in iBook?

A. iBook uses the ATI RAGE Mobility video controller for 2D and 3D graphics acceleration. The ATI RAGE Mobility comes standard with 4 megabytes of SDRAM video memory.

Q. Is the SGRAM video memory upgradable?

A. No. Because the video memory is embedded in the ATI RAGE Mobility chip, it cannot be upgraded. However, 4 megabytes of SDRAM is ample memory for supporting millions of colors and running the most popular games.

Q. What resolution can you get on the iBook screen?

A. The iBook standard resolution is 24-bit color—millions of colors—at 800 by 600 pixels. You can also scale down to view millions of colors at 640 by 480 pixels.

Q. Can you connect an external display to iBook?

A. No. iBook does not support video output or mirroring to an external display. The computer's video architecture is designed to provide the best personal user experience. Thus, it uses the highest-quality 12.1-inch TFT screen for easy viewing and clarity. In addition, iBook has outstanding graphics. The ATI RAGE Mobility graphics controller provides at least two to three times the performance of like notebooks, and with 4 megabytes of SDRAM video memory, it has twice the video RAM of most competitive notebooks.

Battery

Q. What battery technology is used in iBook, and what is the life between charges?

A. The battery is lithium-ion. The estimated battery life with maximum power conservation functions selected is up to 6 hours.

Q. How long does it take to charge the battery?

A. If the system is shut down or in sleep mode, it takes approximately 2 hours to recharge the battery. When the computer is running, the battery charges in about 4 hours.

Q. Does the battery charge while iBook is asleep?

A. Yes, the battery charges while the system is asleep.



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Q. Can I change the battery while the system is asleep?

A. No. You cannot change the battery while the system is asleep without losing all of the data stored in RAM.

Q. What is the difference between Sleep Now, Save and Sleep Now, and Save & Power Off Now in the Energy Control Strip module?

A. Sleep Now is the traditional form of sleep. When iBook is in Sleep Now mode, it must continually draw a small amount of power from the batteries in order to maintain the current information in RAM. In the Save and Sleep Now mode, prior to going to sleep, the system creates a single file of all the information contained in the computer's memory (RAM) at the time, and stores it on the hard disk. In Save & Power Off Now, the system again creates a single file of all the information contained in the computer's memory at the time, stores it on the hard disk and then powers off the computer.

Q. What is the difference between Save & Power Off Now in the Control Strip module and Shut Down in the Special pull-down menu?

A. In Save & Power Off Now, the system creates a single file of all the information contained in the computer's memory at the time, stores it on the hard disk and then powers off the computer. When Shut Down is selected from the Special menu, the computer powers off without saving the contents of the computer's memory. The benefit of Save & Power Off Now is a significantly reduced start-up time and the contents that were saved from the computer's memory are instantly restored.

Q. How do I wake iBook when it is asleep?

A. If the system is asleep when the lid is open, press any key to wake it. If the system is asleep and the lid is closed, just open the lid. Once the display lid is raised, the system will automatically wake from sleep. This is a feature that can be disabled in the Control Panel if desired.

Q. How do I change the battery?

A. Either select Shut Down from the Special pull-down menu or select Save & Power Off Now from the Energy Saver Control Strip module to change the battery. Then turn the system over so you can see the battery door on the bottom. Open the door and change the battery.

Q. What is the battery's watt-hour rating?

A. The lithium-ion battery is rated at 45 watt-hours minimum.

Q. How can I tell whether the battery is charged?

A. If the AC adapter is plugged into the power connector you can determine the charge status by simply glancing at the power connector port. If the area immediately surrounding the power connector is glowing green, the battery is fully charged. If the area is glowing amber, the battery is in the process of charging. (The power connector glows only if external power is supplied to iBook. The ring does not glow when iBook is using internal battery power.)

You can also look at the Control Strip battery module or the battery symbol in the upper right corner of the Finder menu bar to find out the battery's status.



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Q. Why does the area around the AC connector glow green or amber when the power adapter is plugged in?

A. The green glow surrounding the power connector indicates that the battery is fully charged. The amber glow surrounding the power connector indicates that the battery is in the process of charging.

Wireless Communications

Q. Can I add wireless communications capability to iBook?

A. Yes. Simply include the AirPort Card as a build-to-order option when you purchase iBook through the Apple Store. Alternatively, you can purchase an AirPort Card through the Apple Store and install it yourself.

Q. What is AirPort?

A. AirPort is a wireless local area network (LAN) technology that offers a simple, affordable way to bring the Internet to every room in your home or every desk in a classroom—without cables, additional phone lines, or complicated networking hardware.

AirPort enables multiple computer users to simultaneously surf different web sites and access e-mail through a single Internet service account. Users of AirPort-enabled computers can also exchange files without needing floppy disks or other media.

Q. Is AirPort difficult to set up?

A. No. Apple has made it remarkably easy for anyone to set up AirPort. A software setup assistant walks you through the process in simple terms, and automatically configures your computer for you.

Q. What is the AirPort Hardware Access Point?

A. This unit is similar to the base station of a cordless telephone. It connects to the phone line in your home. The AirPort Hardware Access Point enables different family members to share a single modem connection so that they can simultaneously access different Internet sites—all without wires. The access point also has an Ethernet connection in case you have a cable modem or DSL line in your home. Whenever you open your browser, the hardware access point dials your ISP and goes to the web site you've requested. It automatically hangs up soon after you're finished.

Q. What is the AirPort Software Access Point?

A. This special software allows you to use a second iBook computer as a wireless base station to connect to the Internet instead of using an AirPort Hardware Access Point. The software works similarly to the hardware access point, except that it uses the modem of the iBook as its Internet connection.



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Q. Can I transfer files between iBook computers equipped with AirPort if there is not an access point?

A. Yes. You can transfer files or play multiplayer games directly between AirPort-enabled computers. Simply use the AirPort Control Strip module on both computers to switch from using the AirPort Hardware Access Point to using direct computer-to-computer communications. Depending on their surroundings, the computers will be able to communicate within about 150 feet of each other.

Q. How far from the hardware access point does AirPort work?

A. AirPort typically has a transmission radius of about 150 feet—even through walls. So you can use AirPort-enabled iBook systems in every corner of your house or across several classrooms.

Q. How can AirPort work through walls?

A. AirPort uses radio frequencies for communication. Unlike infrared signals, which require an unobstructed line of sight between the remote unit and the base station, radio frequencies can pass through solid objects such as walls.

Q. What is the AirPort data rate?

A. The data rate is 11 megabits per second—up to 10 times faster than the most popular home networking products. With speeds equivalent to an Ethernet network, AirPort can easily handle demanding file-sharing needs as well as multiplayer gaming.

Q. Can I use more than one computer in my house with AirPort?

A. Yes. You can share Internet access, exchange files, and play games among all the AirPort-enabled computers in your home. This includes iBook systems as well as Macintosh PowerBook computers with compatible third-party wireless cards. The computers can communicate directly with each other or log on to the Internet from any room in the house.

Q. Will my modem connection slow down if I'm using AirPort?

A. No. If you use a V.90 connection you'll still have up to 56 kilobits per second to share among all the computers using your AirPort Hardware Access Point.*

Q. Can I create an AirPort network in a classroom?

A. Yes. With AirPort-enabled iBook computers and an AirPort Hardware Access Point, you can create a wireless network in your classroom. You can also add more access points to provide coverage for your entire school.

Q. What version of the Mac OS do I need to use AirPort?

A. You'll need Mac OS 8.6 or later.

Q. What kind of security does AirPort provide?

A. AirPort offers password access control and encryption to deliver security equivalent to that of a physical network cable. Users are required to enter a password to log on to the AirPort network—and, optionally, an additional password for access to any other computer on the network. When transmitting information, AirPort uses 40-bit encryption to scramble data, rendering it useless to eavesdroppers.



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Q. What effect does AirPort have on the iBook battery life?

A. Because AirPort requires battery power, it draws some power. However, because the computer itself draws much more power than AirPort does, there is minimal impact during normal use. If you want to maximize battery life, you can turn off power to the AirPort Card (through its Control Strip module) when you aren't using it.

Q. What Apple systems are wireless capable?

A. iBook comes with an antenna already built in; all you need to add is an AirPort Card. PowerBook computers can use a PC Card to communicate with an AirPort network.

Q. How do I add an iMac or Power Macintosh G3 system to an AirPort network?

A. An iMac or Power Macintosh G3 can easily be added to the network by using a crossover Ethernet cable with the AirPort Hardware Access Point. You merely locate the hardware access point near the desktop computer, connect the Ethernet port of that computer to the Ethernet port on the access point using the crossover cable, and you're ready to share the AirPort Hardware Access Point modem. You can also share files and play multiplayer games.

Q. How do I add a PowerBook G3 computer to an AirPort network?

A. Several third-party companies offer Macintosh-compatible wireless PC Cards that can be used in an AirPort network.

Q. Can I share a printer among computers on an AirPort network?

A. Currently, Apple offers the same printer-sharing capabilities for wired and wireless connections. In the classroom, IP printers can be shared on the AirPort network just as they are on your Ethernet network. In the home, many USB printers cannot be shared among Macintosh systems. However, because AirPort allows files to be easily exchanged between computers, you can simply transfer your file to the computer that's connected to the printer.

Q. If I use iBook with AirPort at school, can I also use AirPort at home?

A. Yes. If you purchase an AirPort Hardware Access Point for your home (or you set up an AirPort Software Access Point), you can use AirPort there, too. The AirPort Control Strip module allows you to quickly change between your home and school networks.

Q. What is IEEE 802.11 and why does it matter to me?

A. IEEE 802.11 is a standard developed by the same organization that set standards for Ethernet networking, which is commonly used in offices. 802.11 is a worldwide standard, so companies that build products conforming to this standard can have their products work together. Schools often find it beneficial to use standardized equipment so that they can combine hardware from different vendors. Home users who buy a standardized product are assured that it will work with products from other companies.

Q. Will my iBook work with third-party 802.11 wireless products?

A. iBook works with third-party access point products that conform to the IEEE 802.11 standard and use Direct Sequence Spread Spectrum (DSSS) modulation.

Q. Can I use a PC notebook in an AirPort network?

A. Yes. Because AirPort is based on the IEEE 802.11 DSSS standard, there are a number of companies with products that allow a PC to be used in an AirPort network.



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Q. What's the difference between DSSS and FHSS?

A. Direct Sequence Spread Spectrum (DSSS) and Frequency Hopping Spread Spectrum (FHSS) are two different technologies in the IEEE 802.11 specification. They are incompatible with each other. Frequency Hopping technology is older and is limited by government regulation to 2 megabits per second. Direct Sequence technology is becoming more widespread and supports data rates of up to 11 megabits per second. Apple uses DSSS technology because it is equivalent to Ethernet data rates.

Q. Can I turn AirPort off in my computer?

A. Yes. The AirPort Control Strip module allows you to turn off the AirPort Card. You may want to do this if you are on an airplane or don't need to use AirPort capabilities.

Q. How much does it cost to add wireless capability to my iBook?

A. The AirPort Card has a suggested retail price of \$99, whether you order it as part of your initial iBook configuration through the Apple Store or buy it separately later from the Apple Store. The AirPort Hardware Access Point has a suggested retail price of \$299 and can also be purchased from the Apple Store. AirPort Software Access Point software comes free with the AirPort Card.

Q. Do I have to decide I want wireless capability when I buy my system, or can I add it later?

A. If you don't choose wireless capability as a build-to-order option when you buy an iBook, you can easily add it later on. Simply order an AirPort Card from the Apple Store. You may also choose to purchase an AirPort Hardware Access Point if you intend to have wireless Internet access at home.

Q. Who should install the AirPort Card?

A. You can install an AirPort Card yourself and have it operating in minutes. Following the instructions that come with the card, simply plug the card into the appropriate slot in your computer and run the installation software, which walks you through setup. You may feel more comfortable having an authorized Apple service provider install it for you.

Communications

Q. Is Ethernet built onto the logic board?

A. 10/100BASE-T Ethernet is built onto every iBook logic board as a standard feature.

Q. Is the modem built in or optional?

A. The 56-kilobit-per-second V.90 modem is located on a daughter card and is a standard feature in every iBook system.*

Q. How fast is the modem?

A. The modem is a K56flex modem and connects to equivalent devices at rates of up to 56 kilobits per second.*

Q. Does fax software come with the modem?

A. Yes. Apple includes FAXstf with all iBook systems. This software allows you to use your iBook to both send and receive faxes.



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Q. Does the modem work internationally?

A. Yes. With the proper telephone cables and connectors, you can use your iBook modem around the world.

Q. Does iBook support IrDA (infrared communications) capability?

A. No. iBook does not support IrDA capability.

Keyboard

Q. Does the iBook trackpad support “tap, double-tap” functionality?

A. Yes. This functionality can be activated through the Trackpad control panel.

Q. What functions can the programmable function keys perform?

A. The programmable function keys were created to help simplify common, everyday tasks performed on the computer. You can use these keys to launch a browser, an e-mail application, or any other frequently used application or server by pressing a single key. You can even program a function key to execute an entire AppleScript script.

Q. How can I set the programmable function keys?

A. Setting up the programmable function keys is easy. Simply open the Keyboard control panel under the Apple menu. Or, if the keys have not been programmed yet, simply pressing one of them brings up a dialog box that leads you to the Keyboard control panel.

Q. Which keys are programmable?

A. Apple has preprogrammed F1 through F6 with such common control functions as screen brightness, speaker volume, and so on. F7 through F12 can be programmed for your personal programming choices.

Q. How can I remember what I’ve set my function keys to do?

A. To help you identify what the function keys were programmed to do, Apple includes with iBook a variety of durable stickers with preselected icons. Once the keys are programmed, you can select the stickers that will best remind you of the assigned functions.

Q. Can I make the original F1–F12 functions primary again?

A. Yes. The function keys F1 through F12 can be easily reset to have primary functionality. Simply open the Keyboard control panel and select Options. Then check the box that says “Use F1 through F12 as Function keys.”

Q. Can I secure the keyboard so that retracting the two latches will not allow easy access to computer memory and the AirPort Card?

A. Yes. An optional keyboard locking mechanism was created to provide additional security for iBook. To activate the keyboard lock, locate the Num Lock LED key between the F4 and F5 keys on the keyboard. The round LED light in the middle of the Num Lock LED key is actually a small translucent retaining screw. Turning the screw allows you to secure the keyboard.



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Software

Q. What applications and games are bundled with iBook?

A. iBook comes with Mac OS 8.6, AppleWorks, Palm Desktop, FAXstf, World Book Encyclopedia, EdView Internet Safety Kit Family Edition, Bugdom, Nanosaur, Netscape Communicator, Microsoft Internet Explorer, Microsoft Outlook Express, America Online, EarthLink Total Access,** and Adobe Acrobat Reader software.†

Sound

Q. Does iBook have a built-in microphone?

A. No. However, you can easily connect an external USB microphone to provide sound input.

Q. Can I add external speakers to iBook?

A. Yes. External speakers can be connected to iBook via the stereo sound output jack.

CD-ROM Drive

Q. How fast is the CD-ROM drive?

A. The CD-ROM drive plays CDs at up to 24x speed.

Q. Is the CD-ROM drive removable?

A. No. The CD-ROM drive was built into the system so that Apple could offer a lower-priced, fully featured notebook computer. In addition, a built-in CD-ROM drive helps prevent CD drive theft and makes the computer more durable when you carry it in a backpack. However, it can be removed for servicing by an Apple-certified technician.

Q. Can I play DVD movies on my iBook?

A. iBook does not currently support the playback of DVD movies. However, the new PowerBook G3 computer does offer a DVD option if you need that capability.

Q. Is there a DVD upgrade for iBook?

A. No. There is currently no DVD upgrade.

Pricing and Configuration

Q. What configurations of iBook are available?

A. iBook is available in one configuration. It includes a 300-megahertz PowerPC G3 processor, 512K of backside level 2 cache, 32 megabytes of SDRAM, 4 megabytes of video memory, a 3.2-gigabyte hard disk drive, a 24x-speed (maximum) CD-ROM drive, 10/100BASE-T Ethernet, a 56-kilobit-per-second V.90 modem, and a 12.1-inch SVGA TFT color display. When purchased through the Apple Store, iBook can be customized with additional SDRAM and/or an AirPort Card for wireless Internet access.



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Q. What is the price of iBook?

A. The suggested retail price is \$1,599 (tax and shipping not included). Education customer pricing is available separately.

Build-to-order Systems

Q. Is iBook available through the Apple Store?

A. Yes. Build-to-order options include additional SDRAM (64 or 96 megabytes) and an AirPort wireless communications card.

Q. Why doesn't Apple offer a 160-megabyte configuration through the Apple Store?

A. Apple offers SDRAM expansion options designed to meet the needs of most iBook customers. Customers who require the 160 megabytes of SDRAM can purchase a 128-megabyte SO-DIMM from other companies. The Macintosh Products Guide at www.apple.com/guide contains information on third-party RAM upgrades.

Other Information

Q. What cables come with iBook?

A. iBook comes with an AC power cord and a standard RJ-11 telephone/modem cable.

Q. How do I transfer files between my iBook and another computer?

A. There are several easy ways to transfer files between your new iBook and another computer. The two computers can exchange files over Ethernet, either on a network or directly using an Ethernet crossover cable. They can use the Internet. Or they can use an external USB mass-storage device, such as an Iomega Zip drive.

*Data speeds up to 56 Kbps; fax speeds up to 14.4 Kbps. Download speeds vary with line conditions and your ISP's modem capabilities. FCC regulations limit ISP transmission speeds to 53 Kbps in the U.S.

**TotalAccess software includes a 30-day free EarthLink trial offer; setup fee is waived. Internet access requires an Internet service account.

†Most applications are preinstalled. Some applications require the use of an included CD-ROM. Product contains electronic documentation. Backup software is provided on CD-ROM.

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