



New IBM ThinkPad T43p notebooks — Perfect balance of performance and portability

Overview

The new ThinkPad® T43p mobile workstation notebook is the ideal solution for frequent travelers who need high performance in a lightweight package. It is an ideal companion or alternative to your workstation for displaying detailed designs, demonstrations, and high-powered presentations.

New data protection

New integrated fingerprint reader technology in selected models helps to prevent unauthorized access to your ThinkPad notebook and data.

- Fingerprint reader is integrated into the palm rest of the ThinkPad notebook computer.
- Combine the integrated fingerprint reader with IBM Password Manager and the Embedded Security Subsystem for strong security measures that are easy to follow.
- The fingerprint reader offers a more convenient solution — Authenticate at system startup and log into Microsoft™ Windows™ with a swipe of your finger.

The IBM Active Protection system, a ThinkVantage™ technology, helps protect your HDD from some damage that could be caused by shock. A system board-mounted sensor continuously monitors your ThinkPad notebook for sudden movement and temporarily parks the HDD read/write head when a fall or similar event is predicted.

Intel™ technology

- Intel Centrino mobile technology on selected models:
 - Intel Pentium™ M processor family
 - Intel PRO/Wireless family
 - Intel 915PM chipset family
- ATI Mobility FIRE GL V3200 (128 MB) graphics chipset for clear, crisp 3D images with full

OpenGL support. OpenGL is a standard for 3D graphics.

- UltraNav™ dual-pointing system, featuring TrackPoint® and customized touchpad for the ultimate in pointing flexibility.
- UltraConnect™ antenna to help optimize frequency coverage and performance for improved wireless LAN connectivity around the world.

Excellent features and options

- Selected systems with Intel PRO/Wireless 2200BG (Intel 11b/g)⁹ or Intel PRO/Wireless 2915ABG (Intel 11a/b/g) or IBM 11a/b/g Wi-Fi wireless
- Access Connections to help manage wired and wireless communications
- Rescue and Recovery™
- 381.0-mm (15.0-in) TFT display with resolution of 1600 x 1200 FlexView display with wide viewing angle and high density or 358.1-mm (14.1-in) TFT display with resolution of 1400 x 1050
- Windows XP Professional with selected applications
- Ultrabay™ Slim bay for fast and easy hot- and warm-swapping of selected options

Long battery operation: Up to 5.7 hours¹⁰ with the nine-cell system battery, and up to 7.4 hours with the nine-cell system battery and Ultrabay Slim battery options.

Light and portable: The ThinkPad T43p notebook is approximately 31 mm to 36 mm (1.2 to 1.4 in) thin¹¹ with optimal travel weight starting at 2.15 to 2.5 kg (4.5 to 5.5 lb)¹² with travel bezel and nine-cell battery.

The titanium and magnesium composite covers give added strength.

Robust system manageability: The ThinkPad T43p notebook features support for IBM Director Agent and is designed to the PXE 2.1 manageability requirements for mobile systems.

At a glance

The ThinkPad T43p notebook features:

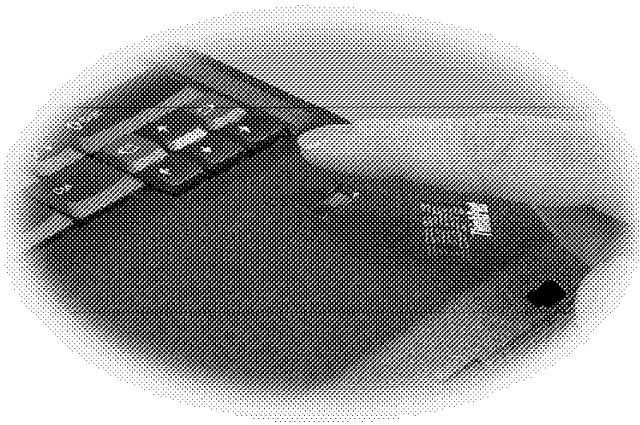
- Intel Pentium M processor 770 (2.1 GHz¹, 2 MB L2 cache, 533 MHz front-side bus (FSB))
- Sleek profile and light weight
- 533 MHz FSB with 533 MHz double data rate (DDR2) SO DIMM memory
- 1 GB of standard memory expandable to 2.0 GB²
- Rescue and Recovery, an enhanced support environment accessible via the blue Access IBM button, for user self-help and self-recovery
- UltraNav dual-pointing system with TrackPoint and customized touchpad
- ThinkPad HDD shock absorber
- 60 GB³ high-speed (HS) HDD at 7200 rpm, Multi-Burner DVD recordable 4x max Ultrabay slim drive, or 24x-24x-24x-8x⁴ max CD-RW/DVD⁵
- Standard integrated communications of V.90⁶ modem (V.92⁷-designed)
- 1 Gigabit Ethernet, Bluetooth wireless technology, and Embedded Security Subsystem 2.0, Trusted Computing Group (TCG)-compliant⁸
- Three-year limited warranty; one-year limited warranty on battery
- IBM Support Center: 800-IBM-SERV (426-7378)

Planned availability date

April 2005

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: <http://www.ibm.com>.

Description



ThinkPad T43p features

New data protection: New integrated fingerprint reader technology from ThinkVantage Technologies in selected systems helps protect access to your ThinkPad notebook and data.

- Because fingerprints are unique, using them along with other security measures can provide strong security.
- Fingerprint reader is built right into the palm rest area of the computer. When used with IBM Password Manager and the Embedded Security Subsystem, you can pass your finger over the reader instead of typing passwords or you can combine it with passwords.
- Combine the integrated fingerprint reader with IBM Password Manager and the Embedded Security Subsystem for strong security measures that are easy to follow. Security software is preloaded for an integrated solution out of the box.
- Administrators can implement strong security policies and users can meet ongoing password requirements easily.

Leadership design

- Shock absorber to help prevent some HDD crashes that could occur when system is placed on a hard surface while in use

- UltraConnect antenna to help optimize frequency coverage and performance for improved wireless LAN connectivity around the world; supports 2.4 GHz frequency band for 802.11b networks and four sub-bands in 5 GHz frequency band to meet unique country spectrum requirements for 802.11a networks
- Integrated Bluetooth wireless technology with Bluetooth antenna
- ATI Mobility FIRE GL V3200 (128 MB) graphics chipset for clear, crisp 3D images
- Access Connections software to easily manage wired and wireless connections
- Disk-to-disk recovery of preloaded software
- 533 MHz FSB
- 533 MHz DDR2 SO DIMM memory
- IBM Embedded Security Subsystem 2.0 (TCG-compliant)
- Selected systems with Intel Wi-Fi wireless (based on IEEE 802.11b/g), Intel PRO/Wireless 2915ABG (Intel 11a/b/g), or IBM 11a/b/g Wi-Fi wireless

Integrated Wi-Fi wireless lets you connect to a LAN without wires or cables. To connect to the Internet, the Cisco AP1200, or similar device, and an Internet connection are required. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

- 56K V.90 modem (V.92-designed) and 1 Gigabit Ethernet

ImageUltra™ services: All ThinkPad T43p notebooks are enabled for ImageUltra.

For more information, visit

<http://www.pc.ibm.com/us/accessories/services/imageultra.html>

Processor technology: The new ThinkPad T43p notebook computer features an Intel Pentium M processor 770 and floating-point decimal for exceptional performance. All models include enhanced Intel SpeedStep technology with two performance modes:

- Maximum performance mode for top performance while connected to ac external power using the ac power adapter.
- Battery-optimized performance mode for balance between performance and battery life when operating on battery power. In this mode the speed is reduced to conserve battery power.

Superior security and manageability

- Designed to the PXE 2.1 manageability requirements for mobile systems
- Support for IBM Director Agent, a comprehensive set of superior, standards-based PC hardware manageability tools that work with and complement existing systems management products
- Compliant with the industry-standard Common Information Model
- Local and remote asset management, and early detection of HDD failure via IBM Director Agent

- Remote setup and low-level maintenance via Remote Deployment Manager
- Asset and data security via multiple passwords and locks

Rescue and Recovery, an enhanced support environment accessible via the blue Access IBM button, enables self-help and self-recovery, including:

- Improved features and performance of Rapid Restore™ Ultra
- Broader recovery and diagnostic tools available even when your primary operating system is failing:
 - Rescue and restore your files, folders, or backups using Rapid Restore.
 - Restore the HDD to the same contents it held when the computer was manufactured.
 - Configure your system settings and passwords.
 - Communicate using the Internet and link to the IBM support site (with Internet access required, not included).
 - Troubleshoot by using diagnostics.

Operating system: Microsoft Windows XP Professional with selected applications

LCD TFT display: Systems have 381.0-mm (15.0-in) TFT display with resolution of 1600 x 1200 FlexView display with wide viewing angle and high density or 358.1-mm (14.1-in) TFT display with resolution of 1400 x 1050.

All displays are measured diagonally.

Video modes: ATI Mobility FIRE GL V3200 (128 MB) with 1600 x 1200 resolution TFT FlexView display with wide viewing angle and high density

Resolution	TFT LCD		
	Color depth		
640 x 480	256,	64K,	16M
800 x 600	256,	64K,	16M
1024 x 768	256,	64K,	16M
1280 x 1024	256,	64K,	16M
1600 x 1200	256	64K	16M
2048 x 1536	256(14), 64K(14), 16M(14)		

Resolution	Color	External monitor	
		Refresh rate (Hz)	
640 x 480	256	60, 72, 75, 85, 90, 100, 120, 160	
640 x 480	64K	60, 72, 75, 85, 90, 100, 120, 160	
640 x 480	16M	60, 72, 75, 85, 90, 100, 120, 160	
800 x 600	256	60, 70, 72, 75, 85, 90, 100, 120, 160	
800 x 600	64K	60, 70, 72, 75, 85, 90, 100, 120, 160	
800 x 600	16M	60, 70, 72, 75, 85, 90, 100, 120, 160	
1024 x 768	256	60, 70, 72, 75, 85, 90, 100, 120, 150, 160	
1024 x 768	64K	60, 70, 72, 75, 85, 90, 100, 120, 150, 160	
1024 x 768	16M	60, 70, 72, 75, 85, 90, 100, 120, 150, 160	
1280 x 1024	256	60, 70, 75, 85, 90, 100, 120, 160	
1280 x 1024	64K	60, 70, 75, 85, 90, 100, 120, 160	
1280 x 1024	16M	60, 70, 75, 85, 90, 100, 120, 160	
1400 x 1050	256	60	
1400 x 1050	64K	60	
1400 x 1050	16M	60	
1600 x 1200	256	60, 75, 85, 100, 120	
1600 x 1200	64K	60, 75, 85, 100, 120	
1600 x 1200	16M	60, 75, 85, 100, 120	
2048 x 1536	256	60, 66, 70, 75	
2048 x 1536	64K	60, 66, 70, 75	
2048 x 1536	16M	60, 66, 70, 75	

ATI Mobility FIRE GL V3200 (128 MB) with 1400 x 1050 resolution TFT display

Resolution	TFT LCD		
	Color depth		
640 x 480	256,	64K,	16M
800 x 600	256,	64K,	16M
1024 x 768	256,	64K,	16M
1280 x 1024	256,	64K,	16M
1400 x 1050	256,	64K,	16M
1600 x 1200	256(14), 64K(14), 16M(14)		
2048 x 1536	256(14), 64K(14), 16M(14)		

Resolution	Color	External monitor	
		Refresh rate (Hz)	
640 x 480	256	60, 72, 75, 85, 90, 100, 120, 160	
640 x 480	64K	60, 72, 75, 85, 90, 100, 120, 160	
640 x 480	16M	60, 72, 75, 85, 90, 100, 120, 160	
800 x 600	256	60, 70, 72, 75, 85, 90, 100, 120, 160	
800 x 600	64K	60, 70, 72, 75, 85, 90, 100, 120, 160	
800 x 600	16M	60, 70, 72, 75, 85, 90, 100, 120, 160	
1024 x 768	256	60, 70, 72, 75, 85, 90, 100, 120, 150, 160	
1024 x 768	64K	60, 70, 72, 75, 85, 90, 100, 120, 150, 160	
1024 x 768	16M	60, 70, 72, 75, 85, 90, 100, 120, 150, 160	
1280 x 1024	256	60, 70, 75, 85, 90, 100, 120, 160	
1280 x 1024	64K	60, 70, 75, 85, 90, 100, 120, 160	
1280 x 1024	16M	60, 70, 75, 85, 90, 100, 120, 160	
1400 x 1050	256	60	
1400 x 1050	64K	60	
1400 x 1050	16M	60	
1600 x 1200	256	60, 75, 85, 100, 120	
1600 x 1200	64K	60, 75, 85, 100, 120	
1600 x 1200	16M	60, 75, 85, 100, 120	
2048 x 1536	256	60, 66, 70, 75	
2048 x 1536	64K	60, 66, 70, 75	
2048 x 1536	16M	60, 66, 70, 75	

Keyboard with TrackPoint and enhanced features: The keyboard has the familiar layout of a ThinkPad notebook with function keys that allow you to quickly access system functions such as power management control.

- UltraNav combines the advantages of the TrackPoint device, center-scrolling button, and a touchpad.
- ThinkLight®; easy to view your keyboard in low-light conditions.
- The ThinkPad button provides one-button access to critical information. Choose from three different caps for the TrackPoint.
- The TrackPoint with enhanced features includes the Press-to-Select and Release-to-Select function.

Just tap the TrackPoint to speed icon launches and help reduce keystrokes. The programmable center button enables fast scrolling of Web sites and documents or fast panning across wide spreadsheets. Switch to the innovative magnifying glass feature to enlarge screen views in any application.

Memory: The system has 1 GB of standard memory and can be configured for up to 2 GB of addressable memory. Memory options up to 1 GB 533 MHz DDR2 SO DIMMs can be added for memory expansion.

It is recommended that 533 MHz DDR2 SO DIMMs be used for memory expansion in this system. The use of 133 MHz SO DIMM memory is not supported.

PC card: One Type II PC card slot and one ExpressCard/54 slot.

Storage: The customer-removable HDD is 60 GB HS (7200 rpm)

A second HDD in the Ultrabay Slim expands storage. The second HDD option, which also requires an optional adapter, can be used with all ThinkPad T43p models.

Drives: Multi-Burner DVD Recordable 4x max Ultrabay Slim drive or 24x-24x-24x-8x max CD-RW/DVD

Audio: Full-duplex audio on the system board and the integrated microphone allow voice annotation and audio. The system is equipped with audio in/out jacks for stereo speakers, headphone, or external microphone. The system supports Microsoft DirectSound applications.

Video: Digital visual interface for digital displays is supported through the optional ThinkPad Dock II or ThinkPad Port Replicator II.

Infrared (IR): The system has one fast IR transceiver (up to 4 Mbps) for wireless file and data transfer and printing. The ThinkPad T43p notebook is designed for compliance with the Infrared Data Association (IrDA) IR data link specification V1.1.

Other features: The ThinkPad T43p systems include these ports:

- Enhanced parallel
- External display
- Built-in RJ-11 and RJ-45 connectors for telephony and LAN connections
- IR
- Microphone
- Headphone
- Two USB ports
- S-Video out (TV out)

PS/2® port is not included, but one can be obtained through the optional ThinkPad Port Replicator II, ThinkPad Dock II, or ThinkPad Mini-Dock.

The USB ports, which connect external drives and other devices, are supported with Microsoft Windows XP Professional.

The 240-pin connector supports these optional docking solutions:

- ThinkPad Port Replicator II for simple port replication and cable management
- ThinkPad Dock II for a more advanced docking solution

AC adapter

The ac adapter is an ac-to-dc converter that supplies the necessary power to the computer. The ac adapter also charges the battery pack when it is installed in the computer.

Li-Ion battery pack

- A nine-cell Li-Ion battery pack is shipped with the system. This same battery is also available as an optional feature.
- A different Li-Ion battery pack fits into the Ultrabay Slim so that two batteries can be installed to increase battery operating time.
- The battery pack is an internal power source to the computer when the ac adapter is not available. The rechargeable battery pack is charged using the ac adapter with the system.
- You can determine how much battery power remains by using the Fuel-Gauge ThinkPad utility program. This displays the percent charge remaining, whether one or two batteries are in the system.

Approximate operation and charging hours:

- Power off/suspend charging¹⁵:
 - Six-cell: 3.6 hr
 - Nine-cell: 4.5 hr
- Charging during operation¹⁵:
 - Six-cell: 3.6 to 6.0 hr
 - Nine-cell: 4.5 to 6.0 hr
- Battery operation:
 - Nine-cell battery: Up to 5.7 hr
 - Nine-cell plus bay battery: Up to 7.4 hr

Software

Non-IBM software: The non-IBM software programs listed in this section may be licensed to you under the non-IBM manufacturer's, supplier's, or publisher's terms and conditions. The non-IBM manufacturers, suppliers, or publishers are responsible for providing any service or support associated with these programs. The descriptions of these programs were obtained from information made available by these companies to the general public. IBM does not warrant these products. Some software may differ from its separately available version (if available), and may not include user manuals or all program function.

IBM software available for download from the Web

- IBM Client Security Software¹⁶
<http://www.pc.ibm.com/us/security/secdownload.html>
- IBM Director Agent
http://www.pc.ibm.com/us/eserver/xseries/systems_management/dwnl.html
- Remote Deployment Manager
http://www.pc.ibm.com/us/eserver/xseries/systems_management/dwnl.html

Software that may be included or preloaded on the system

Standard preload systems

U.S. and Canada English Machines Software #1 (Windows XP Professional)

- Microsoft Windows XP Professional
- InterVideo WinDVD Player — only for systems with DVD drive or DVD/CD-RW
- InterVideo WinDVD Creator — only for systems with DVD-RW/CD-RW drive
- IBM Access IBM
- PC-Doctor diagnostics
- IBM Record Now and IBM Drive Letter Access by Sonic — only for systems with DVD/CD-RW or DVD-RW/CD-RW drive
- IBM Access Connections
- Adobe Acrobat Reader
- IBM Rescue and Recovery
- Norton AntiVirus 2005 (OEM Edition) with 90 days of virus definition updates

- IBM Client Security Software
- IBM fingerprint software on selected systems

Warranty information

For a copy of applicable product warranties, write to:

Warranty Information
P.O. Box 12195
Research Triangle Park, NC 27709
Attn: Dept JDJA/B203

IBM makes no representation or warranty regarding third-party products or services.

Telephone support may be subject to additional charges, even during the limited warranty period. For IBM machines with on-site labor, IBM will attempt to diagnose and resolve the problem remotely before sending a technician. For IBM machines with EasyServ service, IBM will attempt to diagnose and resolve the problem remotely before sending a courier.

All offers are subject to availability. IBM reserves the right to alter product offerings and specifications at any time without notice. IBM is not responsible for photographic or typographic errors.

Accessibility by people with disabilities

The following features support use by people with disabilities:

- Controls and latches operable with one hand and minimal dexterity
- Keys discernible by touch without activating them
- Ports and connectors for connection of industry-standard devices

Reference information

- ¹ Power management reduces processor speed when in battery mode.
- ² Recognizes up to 2 GB of addressable memory in these models. Memory options up to 1 GB DDR SO DIMMs each can be added in the two slots for memory expansion.
- ³ For hard drive, GB equals one billion bytes and TB equals one trillion bytes. Accessible capacity is less; up to 4 GB in the service partition.
- ⁴ CD and DVD drive rates are variable and are often less than the maximum possible. Often, just the maximum rate is displayed.
- ⁵ For CD-RW/DVD combination drives, speeds are given in the following order: CD-W, CD-RW, CD-R, DVD-R.
- ⁶ The V.90 modem can receive data at up to 56 Kbps from a compatible service provider and transmit data at up to 31.2 Kbps. Public networks currently limit maximum download speeds to about 53 Kbps. Actual speeds depend on many factors and are often less than the maximum possible.
- ⁷ Public network download speeds are limited to 53 Kbps. Upload speeds are limited to 48 Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require a compatible phone line and server equipment, and download of V.92 support device driver when available. Check with your telephone and Internet service providers for availability.
- ⁸ Requires download of Client Security Software from the Web.
- ⁹ 11a, 11b, and 11g wireless are based on IEEE 802.11a, 802.11b, and 802.11g. An adapter with 11 a/b or 11a/b/g can communicate in any of these formats; the actual connection is based on the access point to which it connects.

- ¹⁰ These model numbers achieved the Ziff Davis Media Inc.'s Business Winstone 2002 BatteryMark V1.0 battery rundown time of at least the time shown. This test was performed without independent verification by the VeriTest testing division of Lionbridge Technologies, Inc. nor Ziff Davis Media Inc.; neither Ziff Davis Media Inc. nor VeriTest makes any representations or warranties as to these test results. For a description of the environment under which the test was performed, visit

<http://www.ibm.com/pc/ww/thinkpad/batterylife>

Battery life (and recharge times) varies based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

- ¹¹ Thickness may vary at certain points on the system.
- ¹² Actual weight may vary depending on vendor components, manufacturing process, or options. Weight includes battery and optional travel bezel instead of the standard optical drive in the Ultrabay Plus.
- ¹³ Selected ThinkPad models are designated as wireless upgradeable. This means that the system can be wireless enabled with the addition of an optional wireless LAN Mini-PCI card. These systems are designed to operate only with wireless LAN Mini-PCI options sold by IBM. This feature is not available in all countries.
- ¹⁴ Supported in panning mode.
- ¹⁵ Recharge time will also vary.
- ¹⁶ Models with IBM Embedded Security Subsystem only.

Trademarks

ThinkVantage, UltraNav, UltraConnect, Rescue and Recovery, Ultrabay, ImageUltra, and Rapid Restore are trademarks of International Business Machines Corporation in the United States or other countries or both.

ThinkPad, TrackPoint, ThinkLight, and PS/2, are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Intel and Pentium are trademarks of Intel Corporation.

Windows and Microsoft are trademarks of Microsoft Corporation.

Other company, product, and service names may be trademarks or service marks of others.



IBM US Announcement Supplemental Information

January 19, 2005

Optional features

The ThinkPad® T43p notebook is compatible with peripherals and software products that run on other IBM systems.

For the latest information on options available for the ThinkPad T43p models and other ThinkPad notebooks, visit

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

Publications

ThinkPad data sheets and other publications are now available on the Web. Many can be downloaded or printed free of charge.

To view or print marketing publications or data sheets on ThinkPad notebooks, visit

<http://www.ibm.com/thinkpad>

- Under the ThinkPad Overview bar or in the left menu click Literature.
- Scroll down to the Data sheets bar and then to the ThinkPad notebook you want information about.
- Click PDF to the right of the product.
- To print the data sheet for the system, click Print.

To view, download, or print ThinkPad publications, visit

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

- Under Browser click Notebooks and PC Companions.
- Click Online publications.
- Under for your product, choose the product or family.
- Click on the publication you want to see.
- Scroll to the file link under the File details bar and click on the link to view the publication.
- To print the publication, click Print.

IBM Business Partners can order marketing collateral at

<https://www.printers.ibm.com/sales/catalog.nsf/agpcdcatalog>

Follow the directions under Collateral by Product Family.

The Publication Notification System (PNS) is available by order number or product number. If you currently subscribe to PNS, you automatically receive notifications by e-mail. To subscribe, visit

<http://www.ibm.com/shop/publications/order>

To order the publications listed on the notification, call 800-879-2755, option 1.

The Publications Center is a worldwide central repository for IBM product publications and marketing material. Extensive search facilities are provided, as well as payment options via credit card. A large number of publications are available online in various file formats, which can currently be downloaded free of charge.

Services

Integrated technology services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure for e-business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

For details on available services, contact your IBM representative or visit

<http://www.ibm.com/services/>

For details on education offerings related to specific products, visit

<http://www.ibm.com/services/learning/index.html>

Select your country, and then select the product as the category.

Technical information

Physical specifications

Note: Actual specifications and weights may vary based on features, vendor components, or manufacturing processes. All weights and dimensions are approximate.

For systems with 381.0-mm (15.0-in) TFT display:

- Width: 329 mm (13 in)
- Depth: 268 mm (10.6 in)
- Height: 31 mm to 36 mm (1.2 in to 1.4 in)
- Weight: 2.6 kg (5.8 lb) with travel bezel

For systems with 358.1-mm (14.1-in) TFT display:

- Width: 311 mm (12.2 in)
- Depth: 255 mm (10.0 in)
- Height: 26.6 mm (1.0 in)
- Weight: 2.3 kg (5.0 lb) with travel bezel

Accessories

- Li-Ion battery pack: 325 g (0.72 lb)
- AC adapter (two-pin or three-pin): 360 g (0.795 lb)

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: <http://www.ibm.com>.

- Power cord for ac adapter: 90 g (0.19 lb)
- DVD drive: 345 g (0.76 lb)

Electrical specifications

- Universal ac adapter (72 W):
 - Input: 100/240 V ac, 1.4/0.70 A, 50/60 Hz
 - Output: 16 V dc, 4.5 A
- Li-Ion battery packs: 10.8 V, 6.6 Ah

Heat dissipation: 246 Btu/hr maximum

Heat emissions: 72 watts maximum

Air temperature for shipping and storage: -20° to 60°C (-4° to 140°F)

Acoustic noise level: Category 3D (office environment)

- Low cooling fan speed:
 - Sound power level: 3.7 bels (idling), 4.0 bels (HDD seeking)
 - Sound pressure level at the operator position: 31 dB (idling), 34 dB (HDD seeking)
- Middle cooling fan speed:
 - Sound power level: 3.9 bels (idling), 4.0 bels (HDD seeking)
 - Sound pressure level at the operator position: 33 dB (idling), 34 dB (HDD seeking)
- High cooling fan speed:
 - Sound power level: 4.0 bels (idling), 4.1 bels (HDD seeking)
 - Sound pressure level at the operator position: 36 dB (idling), 37 dB (HDD seeking)

Note: All measurements are made in accordance with ISO 7779 and reported in conformance with ISO 9296.

Operating environment: ThinkPad computers are designed, built, and tested for high quality and reliability. When used properly in standard business environments, a ThinkPad system should be a reliable computing asset for many years. Harsh environments and abuse can damage ThinkPads since they are not intended to withstand extreme temperatures, dust, shock, or other severe physical environments. ThinkPad systems should not be used in unsuitable environments. For example, a ThinkPad system should not be used in non-stationary environments, such as in-vehicle installations, without additional casing or shock dissipation. IBM warrants that the ThinkPad notebook will conform to its Official Published Specifications when used in a suitable physical operating environment.

Air temperature

- 0 to 8,000 ft:
 - Operating: 5° to 35°C (41° to 95°F)
 - System off: 5° to 43°C (41° to 110°F)
 - Storage/shipment: -20° to 60°C (-4° to 140°F)
 - Wet bulb (maximum): 29.4°C (85°F)
- 8,000 to 10,000 ft:
 - Operating: 5° to 31.3°C (41° to 88°F)
 - System off: 5° to 43°C (41° to 110°F)
 - Storage/shipment: -20° to 60°C (-4° to 140°F)
 - Wet bulb (maximum): 25.7°C (78°F)

Note: The maximum temperature when the system is on is linearly decreased from 8,000 to 10,000 ft.

Relative humidity

- Operating: 8% to 95%
- Storage/shipment: 5% to 95%

Altitude: 10,000 ft maximum (3,048 m)

Agency approvals: System unit approvals:

- FCC Part 15 Class-B (Doc)
- VCCI Class 2
- UL-60950
- C-UL
- CCC (for China)
- BSMI (for Taiwan)
- SMA 3548 (Australia and New Zealand)
- MPR-II (Sweden)
- CE Mark
- CB Report
- NOM (Mexico)
- MIC (Korea)

Software requirements: The following operating systems support the ThinkPad T43p computer:

- Microsoft™ Windows™ 2000 Professional (no service pack, SP1, SP2, SP3, or SP4) with USB 2.0 support
- Windows XP Professional (no service pack, SP1, SP2) with USB 2.0 support

For information about support for these operating systems, visit

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

Note: Previous versions of these operating systems are not supported.

For a list of completed Linux™ certifications, visit

<http://www-306.ibm.com/pc/support/site.wss/MIGR-48NT8D.html>

Operating systems other than those preinstalled on the systems may not provide full-feature function. To view considerations or Service Hints and Tips by operating system, visit

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

- In the middle of the page, in the Quick path to a product field, enter your system's four-digit machine type and model number, such as 2668-123.
- On the left side of the page, click Hints and Tips.
- In middle of the page, select a category such as Windows 2000 to see the list of considerations or hints and tips for your machine type.

Compatibility and supported products

Contact your IBM representative for a list of supported features and options.

PC card

The ThinkPad T43p computer conforms to the PC Card Standard 95, which encompasses both the former 16-bit Release 2.1 card standard and the new 32-bit CardBus card. Other PC card adapters that comply with the PC Card Standard may also function, but have not been tested by IBM.

Vendor software compatibility

IBM tests a large number of commonly used and available applications for compatibility with its ThinkPad systems, using supporting operating systems and configurations. In general, you can expect that most vendor applications designed to run on supported operating systems and Intel™-compatible system architectures should be compatible with a ThinkPad system. Some configurations, however, may not be compatible.

IBM does not warrant or support vendor software products, nor guarantee compatibility of those products with IBM systems. Refer to the applicable warranty and license terms provided by the respective vendors.

ThinkPad T43p systems contain BIOS in flash ROM, and a GUI to set up the system and power management features for Windows users. BIOS provides the hardware instructions and interfaces designed to support the standard features of the ThinkPad T43p computer and to maintain compatibility with many software programs currently operating under Windows 2000 and Windows XP Professional.

Limitations: For a list of tips about running various versions of operating systems, visit the IBM electronic support site at

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

General

- IBM 11a/b/g Wireless Mini-PCI Adapter (IBM 11a/b/g), IBM Dual-Band Wi-Fi Wireless Mini-PCI Adapter (IBM 11a/b), IBM 11b/g Wireless Mini-PCI Adapter (IBM 11b/g), Intel PRO/Wireless 2100, and Intel PRO/Wireless 2200 wireless adapters support ad hoc wireless connection mode for 2.4 GHz 802.11b connections. IBM 11a/b/g, IBM 11b/g, and Intel PRO/Wireless 2200 wireless adapters support ad hoc wireless connections for 2.4 GHz 802.11g connections at 802.11b data rates (up to 11 Mbps) as defined in the IEEE 802.11g standard. Ad hoc wireless connection mode is not supported for 5 GHz connections (802.11a) on IBM 11a/b/g or IBM 11a/b wireless adapters.
- Do not use the RJ-11, RJ-45, or VGA port of the ThinkPad T43p notebook when it is docked on the ThinkPad Dock II or Port Replicator II.
- In systems with IBM Dual-Band Wi-Fi Wireless Mini-PCI Adapter purchased in Japan, the wireless LAN feature cannot be used in countries and regions other than Japan.
- Selected systems are wireless upgradable with wireless LAN Mini-PCI options sold by IBM. Systems are not wireless upgradable in all countries.
- Systems with the wireless LAN product permit legal operation worldwide in regions in which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi brand.
- Using Wi-Fi wireless and optional Bluetooth products together may impact the performance of both.
- Support for a DVI monitor is through the ThinkPad Dock II option and is limited to a resolution of 1280 x 1024 at 60 Hz.
- Active Protection system does not support a second HDD bay.

- Active Protection system is automatically disabled while the computer is:
 - Loading the operating system
 - In standby or hibernation mode
 - Resuming from normal operation after being in standby or hibernation
 - Being shut down

Windows 2000

- Screen expansion for DVD playback is not supported.
- DVD playback is not supported in 1400 x 1050, 32-bit mode.

Planning information

Cable orders: All required cables are included in the shipment group.

Installability: ThinkPad notebook systems require approximately 20 minutes for installation. Installation includes unpacking, setting up, and powering on the system. Additional time is required to install optional memory and other features.

Packaging

Shipment group

- System unit with display and U.S. English keyboard
- 1 GB of memory
- Appropriate optical drive installed
- Modem and Ethernet
- IBM Embedded Security Subsystem 2.0
- Fingerprint reader in selected models
- Wi-Fi wireless card
- Bluetooth wireless technology card and antenna
- Windows XP Professional operating system
- Appropriate preloaded software
- AC adapter
- Rechargeable battery pack (Li-Ion)
- Power cord
- TrackPoint® caps
- ThinkPad T Series Service and Troubleshooting Guide
- ThinkPad T Series Setup Guide
- License agreement and supporting documentation
- Lotus SmartSuite® Millennium license of use
- Lotus Notes® stand-alone client license of use
- Envelope Group BM (Miscellaneous Envelope): Brochure for optional third-party insurance offering

Security, auditability, and control

Passwords: These password protection mechanisms are available:

- Power-on passwords to help protect the system from unauthorized use
- Supervisor password for use by a system administrator
- HDD password to help protect data on the removable HDD

In addition, an optional locking device in the IBM security slot provides physical security.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions

IBM Global Financing: Yes

To obtain copies of the IBM Statement of Limited Warranty, contact your reseller or IBM.

In the United States, call 800-IBM-SERV (426-7378), or write to:

Warranty Information
P.O. Box 12195
Research Triangle Park, NC 27709
Attn: Dept JDJA/B203

Warranty period

- System hardware — Three years on parts and labor
- System battery — One year

Optional IBM features initially installed in an IBM system carry the same warranty period as the system. If installed after the initial system installation, they carry the balance of the system warranty or the optional feature warranty, whichever is greater.

Warranty service: If required, IBM provides repair or exchange service depending on the type of warranty service specified below for the machine. An IBM technician will attempt to resolve your problem over the telephone. You must follow IBM's problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations. Additional charges may apply outside IBM's normal service area. Contact your local IBM representative or your reseller for country- and location-specific information.

Customer replaceable unit (CRU) (keyboard, mouse, speaker, memory, or HDD) service and courier or depot service (ThinkPad EasyServ) for other selected parts.

CRU service: IBM provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM at any time on your request. CRUs are designated as being either a Tier 1 or a Tier 2 CRU. Installation of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU, at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge under the type of warranty service specified below.

Based upon availability, CRUs will be shipped for next business day delivery. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, return instructions and a container are shipped with the replacement CRU and you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

The following parts have been designated as Tier 1 CRUs:

- Battery
- HDD
- Optical drive
- Ultrabay™ device
- Optional memory
- AC adapter and power cord

- Phone line cord
- TrackPoint cap

Courier or depot service: You will disconnect the failing machine for collection arranged by IBM. IBM will provide you with a shipping container for you to return your machine to a designated service center. A courier will pick up your machine and deliver it to the designated service center. Following its repair or exchange, IBM will arrange the return delivery of the machine to your location. You are responsible for its installation and verification.

This type of service is called ThinkPad EasyServ in the U.S. and Canada.

Call IBM at 800-IBM-SERV (426-7378) to assist with problem isolation for hardware to determine if warranty service is required. Telephone support may be subject to additional charges, even during the limited warranty period. If a hardware problem is identified, the HelpCenter® will either initiate the shipment of a CRU or arrange for a courier to pick up the system for overnight delivery (where available) to the repair location. Most repairs should be made within 48 hours after the system is received at the repair location (actual repair time may vary). Keep the original shipping carton for shipping to the repair location. If the original shipping carton is not available, the courier will deliver a shipping carton and return to pick up the system for delivery to the repair location.

International Warranty Service (IWS): IWS is available during the warranty period to customers who travel or relocate to countries where their computer is sold and serviced by IBM or IBM resellers authorized to perform warranty service. Eligible IBM computers are identified by their four-digit machine type.

You can obtain IWS through the method of service, such as CRU, depot, carry-in, or on-site, provided in the servicing country. Service methods and procedures vary by country, and some service or parts may not be available in all countries. Service centers in certain countries may not be able to service all models of a particular machine type. In addition, some countries may have fees and restrictions that apply at the time of service.

To determine the eligibility of your computer and to view a list of countries where service is available, visit

<http://www-3.ibm.com/pc/support/site.wss/warranty/warranty.vm>

For more information on IWS, refer to Services Announcement 601-034, dated September 25, 2001.

Note: Due to the earth's magnetic field, cathode ray tube (CRT) monitors are manufactured to work in northern, southern, and equatorial regions of the earth and may not produce a satisfactory image when moved between them. Any required adjustment (if possible) is not covered under IWS and may be subject to a chargeable action. The magnetic field does not affect flat-panel LCD monitors and ThinkPad LCD displays.

Agreement: Programs included with this product are licensed under the terms and conditions of the License Agreements that are shipped with the system.

Maintenance services — ServiceElect and ServiceSuite™

ServiceElect and ServiceSuite provide hardware warranty service upgrades, maintenance, and selected annuity support services in one agreement.

Warranty service upgrade: During the warranty period, warranty service upgrade provides an enhanced level of on-site service for an additional charge. A warranty service upgrade must be purchased during the warranty period and is for a fixed term (duration). It is not refundable or transferable and may not be prorated. If required, IBM will provide the warranty service upgrade enhanced level of on-site service acquired by the customer. Service levels are response time objectives and are not guaranteed.

IBM will attempt to resolve your problem over the telephone or electronically by access to an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability. CRUs will be provided as part of the machine's standard warranty CRU Service.

On-site service: IBM on-site repair (IOR), 9 hours per day, Monday through Friday excluding holidays, next-business-day (NBD) response. IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose. Some repairs may require sending the ThinkPad to a service center for repair.

Maintenance service: If required, IBM provides repair or exchange service depending on the type of maintenance service specified below for the machine. IBM will attempt to resolve your problem over the telephone or electronically by access to an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed.

CRU service: If your problem can be resolved with a CRU (keyboard, mouse, speaker, memory, or HDD), IBM will ship the CRU to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM at any time on your request.

IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, return instructions and a container are shipped with the replacement CRU and you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

Courier or depot service (ThinkPad EasyServ): You will disconnect the failing machine for collection arranged by IBM. IBM will provide you with a shipping container for you to return your machine to a designated service center. A courier will pick up your machine and deliver it to the designated service center. Following its repair or exchange, IBM will arrange the return delivery of the Machine to your location. You are responsible for its installation and verification (EZA).

On-site service: IOR, 9 hours per day, Monday through Friday excluding holidays, NBD response. IBM will repair

the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose. Some repairs may require sending the ThinkPad to a service center for repair.

Maintenance service (ICA)

Maintenance services are available for existing ICA legacy contracts. The preferred go-to-market offerings are ServiceElect. However, ICA legacy contracts will still be available for current customers until they are withdrawn.

Alternative service (Warranty service upgrades): During the warranty period, warranty service upgrade provides an enhanced level of on-site service for an additional charge. A warranty service upgrade must be purchased during the warranty period and is for a fixed term (duration). It is not refundable or transferable and may not be prorated. If required, IBM will provide the warranty service upgrade enhanced level of on-site service acquired by the customer. Service levels are response time objectives and are not guaranteed.

IBM will attempt to resolve your problem over the telephone or electronically by access to an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability. CRUs will be provided as part of the machine's standard warranty CRU service.

On-site service: IOR, 9 hours per day, Monday through Friday excluding holidays, NBD response. IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose. Some repairs may require sending the ThinkPad to a service center for repair.

Maintenance service: If required, IBM provides repair or exchange service depending on the type of maintenance service specified below for the machine. An IBM technician will attempt to resolve your problem over the telephone, you must follow IBM's problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed.

CRU service: If your problem can be resolved with a CRU (keyboard, mouse, speaker, memory, or HDD), IBM will ship the CRU to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM at any time on your request.

IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, return instructions and a container are shipped with the replacement CRU and you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

Courier or depot service (ThinkPad EasyServ): You will disconnect the failing machine for collection arranged by IBM. IBM will provide you with a shipping container for you to return your machine to a designated service center. A courier will pick up your machine and deliver it to the designated service center. Following its repair

or exchange, IBM will arrange the return delivery of the machine to your location. You are responsible for its installation and verification (IZA).

On-site service: IOR, 9 hours per day, Monday through Friday excluding holidays, NBD response. IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose. Some repairs may require sending the ThinkPad to a service center for repair.

Packaged offerings: IBM packaged offerings provide "value-packaged" maintenance services for ThinkPad customers. These offerings must be purchased during the product warranty period and are offered for a fixed term (duration). They are not refundable or transferable and may not be prorated.

- EasyServ Plus provides CRU service and ThinkPad EasyServ repair service in yearly increments after the warranty period has expired, up to a total of three years. Refer to the **Prices** section for offering increments and charges.
- On-site Plus provides CRU service and on-site service 9 hours a day, Monday through Friday excluding holidays, NBD response. This offering include on-site service during the warranty period and for a fixed term after the warranty period has expired. Some repairs may require the use of ThinkPad EasyServ. Refer to the **Prices** section for offering increments and charges.

Non-IBM parts support

Warranty service: IBM is now shipping machines with selected non-IBM parts that contain an IBM field replaceable unit (FRU) part number label. These parts are to be serviced during the IBM warranty period. IBM is covering the service on these selected non-IBM parts as an accommodation to customers, and normal warranty service procedures for the IBM machine apply.

Warranty service upgrades and maintenance services: Under certain conditions, IBM Integrated Technology Services repairs selected non-IBM parts at no additional charge for machines that are covered under a warranty service upgrade or maintenance services.

IBM Service provides hardware problem determination on non-IBM parts (adapter cards, PCMCIA cards, disk drives, memory, and so forth) installed within IBM systems covered under the IBM warranty service upgrade or maintenance services and provide the labor to replace the failing parts at no additional charge. If IBM has technical service agreements with the manufacturers of the failing part, or if the failing part is an accommodations part (a part with an IBM FRU label), IBM may also source and replace the failing parts at no additional charge. For all other non-IBM parts, customers are responsible for sourcing the parts. Installation labor is provided at no additional charge, if the machine is covered under a warranty service upgrade or maintenance services.

IBM hourly service rate classification: One

International service for ThinkPads: International service for ThinkPads is a hardware repair service for customers who have purchased an IBM warranty service upgrade, maintenance services, or package offerings. This service is provided at no additional charge. International service is available wherever IBM sells and services ThinkPad products. Customers are required to register for this service.

For more information, refer to Services Announcement 698-019, dated March 24, 1998. To register, call one of the following offices:

- United States: 800-497-7426 or 248-740-1215
- Scotland: 44-1475-893638
- Japan: 81-462-73-7598
- Australia: 61-2-9354-4171

ServicePac® offerings

Warranty and maintenance options: The announced products may be eligible for ServicePacs for warranty and maintenance options, convenient prepackaged offerings for warranty service upgrades and maintenance services.

Installation services: The announced products may be eligible for ServicePacs for installation services, convenient prepackaged offerings for installation services. Refer to the **Prices** section for information on the availability of ServicePac offerings.

For additional ServicePac information, visit

<http://www-1.ibm.com/services/its/us/servicepac.html>

Field-installable features: Yes

Model conversions: No

Machine installation: Customer setup. Customers are responsible for installation according to the instructions IBM provides with the machine.

Graduated program license charges apply: No. This product does not contain licensed internal code or licensed machine code.

Prices

All models include Intel Pentium™ M processor 770 and Intel 915 PM chipset. Selected models include the Intel PRO/Wireless 2200BG or Intel PRO/Wireless 2915ABG and have "Intel 11b/g wireless" or "Intel 11a/b/g wireless" in their description.

These models have Intel Centrino mobile technology.

Selected models have IBM 11a/b/g card installed.

All of these ThinkPad T43p models have a modem, 1 Gigabit Ethernet, ThinkPad UltraNav™, IBM Embedded Security Subsystem 2.0, and Bluetooth wireless technology.

Note: Preloads are described in the **Description** sections of this document.

Description	Machine type/ model	Part number	IBM list price ¹⁷	Description	Machine type/ model	Part number	IBM list price ¹⁷
Standard preinstalled software							
Software #1 Windows XP Professional							
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, 24x/24x/24x/8x max CD-RW/DVD drive, 128 MB Mobility FIRE GL V3200 graphics chipset, Intel 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 14.1-in TFT 1400 x 1050	2668-G1U	2668G1U	\$3,629	60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, DVD Recordable drive 4x max, 128 MB Mobility FIRE GL V3200 graphics chipset, IBM 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 14.1-in TFT 1400 x 1050	2668-G6U	2668G6U	\$3,579
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, 24x/24x/24x/8x max CD-RW/DVD drive, 128 MB Mobility FIRE GL V3200 graphics chipset, Intel 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 14.1-in TFT 1400 x 1050	2668-G3U	2668G3U	3,579	60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, DVD Recordable drive 4x max, 128 MB Mobility FIRE GL V3200 graphics chipset, IBM 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 14.1-in TFT 1400 x 1050	2668-G7U	2668G7U	3,779
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, DVD Recordable drive 4x max, 128 MB Mobility FIRE GL V3200 graphics chipset, Intel 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 14.1-in TFT 1400 x 1050	2668-G2U	2668G2U	3,779	60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, 24x/24x/24x/8x max CD-RW/DVD drive, 128 MB Mobility FIRE GL V3200 graphics chipset, Intel 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 15.0-in TFT 1600 x 1200 FlexView display with wide viewing angle and high density	2668-H1U	2668H1U	3,729
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, 24x/24x/24x/8x max CD-RW/DVD drive, 128 MB Mobility FIRE GL V3200 graphics chipset, IBM 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 14.1-in TFT 1400 x 1050	2668-G5U	2668G5U	3,629	60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, 24x/24x/24x/8x max CD-RW/DVD drive, 128 MB Mobility FIRE GL V3200 graphics chipset, IBM 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 15.0-in TFT 1600 x 1200 FlexView display with wide viewing angle and high density	2668-H3U	2668H3U	3,729

Description	Machine type/ model	Part number	IBM list price ¹⁷
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, fingerprint reader, DVD Recordable drive 4x max, 128 MB Mobility FIRE GL V3200 graphics chipset, Intel 11b/g wireless, 9-cell battery, Bluetooth wireless technology, 15.0-in TFT 1600 x 1200 FlexView display with wide viewing angle and high density	2668-H2U	2668H2U	\$3,879
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, 24x/24x/24x/8x max CD-RW/DVD drive, 128 MB Mobility FIRE GL V3200 graphics chipset, Intel 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 15.0-in TFT 1600 x 1200 FlexView display with wide viewing angle and high density	2668-H4U	2668H4U	3,679
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, DVD Recordable drive 4x max, 128 MB Mobility FIRE GL V3200 graphics chipset, Intel 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 15.0-in TFT 1600 x 1200 FlexView display with wide viewing angle and high density	2668-H5U	2668H5U	3,829
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, 24x/24x/24x/8x max CD-RW/DVD drive, 128 MB Mobility FIRE GL V3200 graphics chipset, IBM 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 15.0-in TFT 1600 x 1200 FlexView display with wide viewing angle and high density	2668-H7U	2668H7U	3,679

Description	Machine type/ model	Part number	IBM list price ¹⁷
60.0 GB 7200 rpm HS HDD, Intel Pentium M Processor 770, 1 GB, DVD Recordable drive 4x max, 128 MB Mobility FIRE GL V3200 graphics chipset, IBM 11a/b/g wireless, 9-cell battery, Bluetooth wireless technology, 15.0-in TFT 1600 x 1200 FlexView display with wide viewing angle and high density	2668-H8U	2668H8U	\$3,829

¹⁷ IBM price; does not include tax or shipping and is subject to change without notice. Reseller prices may vary.

ServicePac for warranty and maintenance

Description	Part number
2-year IOR 9 x 5 NBD	30L9190
3-year IOR 9 x 5 NBD	30L9197
4-year IOR 9 x 5 NBD	69P9198
5-year IOR 9 x 5 NBD	69P9200
4-year P&L P/U Depot	69P9199
5-year P&L P/U Depot	69P9201

Maintenance ServicePac for post warranty/warranty service upgrade service

Description	Part number
1-year IOR 9 x 5 NBD	69P9381
1-year P&L P/U Depot	69P9380
2-year IOR 9 X 5 NBD	96P2075
2-year P&L P/U Depot	96P2074

ServicePac for installation services

Description	Part number
Basic installs 1 to 25 units	21P2001

For ServicePac prices, visit

<http://www-1.ibm.com/services/its/us/spwarmain.html>

Maintenance service (Legacy) charges

Alternative service (Warranty service upgrades)

**IOR
9 x 5
for ThinkPads with
a 3-year warranty**

\$147

Maintenance services

EasyServ	
1-year	1-year IOR
courier depot	9 x 5
\$315	\$378

For ServiceElect (ESA) Maintenance Service Charges, contact IBM Global Services at 888-IBM-4343 (426-4343).

IBM Global Financing: IBM Global Financing offers competitive financing to credit-qualified customers and Business Partners to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, both from IBM and other manufacturers or vendors, as well as commercial financing (revolving lines of credit, terms loans, acquisition facilities, and inventory financing credit lines) for Business Partners. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or visit

<http://www.ibm.com/financing>

IBM Global Financing offerings are provided through IBM Credit LLC in the United States and other IBM subsidiaries and divisions worldwide to qualified commercial and government customers. Rates are based on a customer's credit rating, financing terms, offering type, equipment type, and options, and may vary by country. Other restrictions may apply. Rates and offerings are subject to change, extension, or withdrawal without notice.

Financing solutions from IBM Global Financing can help you stretch your budget and affordably acquire the new product. But beyond the initial acquisition, our end-to-end approach to IT management can also help keep your technologies current, reduce costs, minimize risk, and preserve your ability to make flexible equipment decisions throughout the entire technology life cycle.

Trademarks

Ultrabay, ServiceSuite, and UltraNav are trademarks of International Business Machines Corporation in the United States or other countries or both.

ThinkPad, TrackPoint, Lotus SmartSuite, Lotus Notes, HelpCenter, and ServicePac are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Intel and Pentium are trademarks of Intel Corporation.

Microsoft and Windows are trademarks of Microsoft Corporation.

Linux is a trademark of Linus Torvalds in the United States, other countries or both.

Other company, product, and service names may be trademarks or service marks of others.