Type-model	Processor	GHz	Memory	Screen	Disk	Ultrabay optical	Mini PCI	CDC Ethernet	CDC Mod/Blu	Security Chip	Preload	Small bus software	Workhorse or Global model	Avail date
2653-H3U	Pentium® 4-M	1.7	256MB	15" UXGA	60GB[8]	DVD/CD-RW	Open	10/100	Modem	Yes	XP Pro		No	Mar 2002
2653-H4U	Pentium 4-M	1.7	256MB	15" UXGA	60GB	DVD/CD-RW	Open	10/100	Modem	Yes	Windows® 2000		No	Mar 2002
2653-H5U	Pentium 4-M	1.7	256MB	15" UXGA	60GB	DVD/CD-RW	Wi-Fi[32]/mod	10/100	Bluetooth	Yes	XP Pro		No	Mar 2002
2653-H6U	Pentium 4-M	1.7	256MB	15" UXGA	60GB	DVD/CD-RW	Wi-Fi/mod	10/100	Bluetooth	Yes	Windows 2000		No	Mar 2002
2653-HTU	Pentium 4-M	1.7	256MB	15" UXGA	60GB	DVD/CD-RW	Wi-Fi/mod	10/100	Bluetooth	Yes	XP Pro	Office XP SB[28]	No	Mar 2002

Positioning	*High-performance desktop alternatives with exceptional versatility; three spindle*
Processor	**Mobile Intel® Pentium® 4 Processor-M 1.7GHz** with enhanced Intel SpeedStep™ technology[1] and 400MHz frontside bus
L2 cache	**512KB** / on die (at processor speed) / ECC
Memory	**256MB** std / 1GB max[7] / **PC2100 266MHz[30] DDR-SDRAM** / non-parity / 2.5v / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available
Diskette drive	None standard / use optional Ultrabay™-based or USB-based diskette drive
DVD-ROM/CD-RW	Combo / 8X/8X/24X/8X[21] speed / bootable / removable from Ultrabay Plus
Modular bays	**Two modular bays** for interchangeable devices / **Ultrabay 2000** (left side) and **Ultrabay Plus** (right side) / Ultrabay 2000 left bay empty at ship (uses Travel Bezel)
Disk (removable)	**60GB**[8] / high-speed 5400 rpm / upgradeable / S.M.A.R.T. / supports two additional disks with optional HDD adapter in each modular bay
Display	**15.0"** (381mm) **UXGA-IPS (1600x1200) TFT color** / Active Matrix / 400:1 contrast / FlexView display with wide viewing angle and high density using in plane switching (IPS) technology
Graphics controller	**ATI® Mobility™ FireGL™ 7800** / **AGP 4X** / **64MB** DDR-SDRAM 183MHz / supports OpenGL technology for 3D applications
Graphics - external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M colors at 75Hz / DDC2B / supports external digital monitor[5] via the Digital Video Interface (DVI) port on either of the optional docking solutions
Keyboard	87-key / Web navigation keys (6 total, 3 customizable) / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar / pitch: 19mm; stroke: 2.7mm
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions
UltraPort™	UltraPort connector on top of display for options such as digital UltraPort Camera
Case material	*Color:* black; *Top:* ABS plastic; *Bottom:* glass-fiber reinforced plastic
Dimensions[3]	Approximately 13.0 x 10.7 x 1.8"; 329mm x 272.5mm x 45.8mm
Approximate weight[2]	with battery and optical drive: 7.7 lb (3.49kg)
Battery - type	Lithium Ion 6-cell 10.8V 4.0Ah / intelligent / supports 2nd battery in Ultrabay 2000
Battery - life[10]	2.0 hours / universal 72 watt AC adapter (16Vdc 4.5A)
Architecture	**Intel 845MP** chipset / 82845MP Memory Controller Hub (MCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth], Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (Ricoh® R5C552 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared)
Port replicator	Optional **ThinkPad Port Replicator**
Docking Station	Optional **ThinkPad Dock** (includes Ultrabay 2000 and half-size PCI slot)
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / no Zoomed Video
Ports	Two USB (version 1.1) / one 9-pin serial / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 / no keyboard/mouse
Video in and out	S-video in and out ports / industry standard connectors / cable ships standard
IEEE 1394	IEEE 1394 FireWire port
Mini PCI	One Mini PCI IIIb slot (Communications Bay) / customer upgradeable
Wi-Fi[32]/modem	*Some:* Mini PCI Wi-Fi[32] wireless[4], Intersil® Prism 2.5 chipset, dual antennas in display cover / 56K[6] V.90 (V.92-designed[29]) modem combo, Lucent® chipset
CDC	Two Communications Daughter Card (CDC) sockets / customer accessible
Modem	*Some:* 56K[6] V.90 (V.92-designed[29]) CDC modem card / Lucent® chip set
Ethernet	10/100 ethernet on CDC / Intel 82562ET chipset (physical layer)
Bluetooth™	*Some:* Bluetooth wireless technology / on CDC / power button on display
Audio support	SoundBlaster Pro™-compatible / AD1881A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / mic input jack / output jack / line in jack
Security	Power-on password / hard disk password / supervisor password / security keyhole /
Security chip	**IBM Embedded Security Subsystem**[33] / hardware key storage / multi-factor authentication / local file encryption / enhances VPN security[16]
Limited warranty[12]	**3 years**/1 year battery - EasyServ™,[19] onsite pickup and delivery courier service
Service options	Service upgrades[22] provide up to three years of onsite or depot repair service coverage from date of ThinkPad purchase (including warranty period)

SOFTWARE[14]

Windows XP Pro models
- Microsoft® Windows® XP Professional
- ◇ Disk-to-Disk Recovery (in hidden Service Partition)

Windows 2000 models
- Microsoft Windows 2000 Professional[13]
- • ConfigSafe®
- ◇ Disk-to-Disk Recovery (in hidden Service Partition)

INCLUDED SOFTWARE[14] **(all)**

Preloaded
- • Access ThinkPad
  - Access Connections
  - Access Help
  - Access Support
- • Adobe Acrobat Reader
- • InterVideo™ Win DVD
- • MGI VideoWave 4
- • PC-Doctor™
- • ThinkPad Utilities
- • IBM Update Connector™,[15]
- • Veritas RecordNOW

Downloadable
- • IBM Rapid Restore™ PC
- • IBM Data Transfer
- • Client Security Software (models with security chip)
- • IBM Director Agent

License
- Lotus® SmartSuite® Millennium and Lotus Notes® Client 5.0

Office XP Small Business models only
- Microsoft Office XP Small Business[28] (Word, Excel, Outlook, Publisher, Small Business Tools)
- ◇ Office XP Small Business CD

Ultrabay Plus integrated modular bay supports most Ultrabay 2000 devices including CD-RW/DVD Combo drive, diskette drive, or Zip drive; the optional Ultrabay Plus Device Carrier adds potential functionality by supporting the Ultrabay Plus Numeric Keypad and Cradle for the WorkPad® c500 Series

128 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028	Ultrabay 2000 Li-Ion battery	02K6646
256 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030	Multiple Li-Ion/NiMH Battery Charger	02K6719
512 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032	ThinkPad 72W AC Adapter	02K6699
Second HDD Adapter for Ultrabay 2000	08K6068	ThinkPad Ultrabay Plus Carrier	22P5737
20GB Hard Disk Drive	08K9686	ThinkPad Ultrabay Plus c500 Cradle	22P5738
40GB Hard Disk Drive	08K9687	ThinkPad Ultrabay Plus Numeric Keypd	22P7330
60GB HS Hard Disk Drive (5400 rpm)	08K9688	ThinkPad Port Replicator	02K8667
IBM USB Portable Diskette Drive	05K9276	ThinkPad Dock	263120U
ThinkPad Removable Diskette Drive	08K9603	IBM USB Keyboard w/ USB Ports	10K3849
SuperDisk (LS-240) UltraBay 2000	08K9616	IBM USB Sleek Mouse	33L3244
Zip 250MB Ultrabay 2000 Drive	00N8253	IBM USB 32MB Memory Key	22P5296
8X/4X/24X Max CD-RW Ultrabay 2000	22P9101	Portable Drive Bay 2000	19K4480
Ultralight 8X Max DVD Ultrabay 2000	22P9102	10/100 Enet /56K Mini PCI (3Com)	09N9774
DVD/CD-RW Combo II Ultrabay 2000	08K9701	ServicePac®,[22] 2yr IOR 9x5 NBD	30L9190
Travel Bezel for Ultrabay 2000	08K6070	ServicePac 3yr IOR 9x5 NBD	30L9197
ThinkPad A30 Series Li-Ion Battery	02K6878	Other options at **ibm.com**/us/pc/accessories	

PC 2001-compliant
ACPI 1.0b and 2.0 support
CIM and DMI 2.0-compliant
IBM ImageUltra Services available
IBM Rapid Restore PC available to protect software image and data
Setup Guide, Service and Trouble-shooting Guide, Windows manual
Personalized Web-based support
International Warranty Service[17]
24 hour x 7 day[18] toll-free hardware support during the warranty

See footnotes for important warranty information
US models announced March 5, 2002
US models withdrawn effective July 2002

Type-model	Processor	GHz	Memory	Screen	Disk	Ultrabay optical	Mini PCI	CDC Ethernet	CDC Mod/Blu	Security Chip	Preload	Small bus software	Workhorse or Global model	Avail date
2653-N3U	Pentium® 4-M	1.8	256MB	15" UXGA	60GB[8]	DVD/CD-RW	Open	10/100	Modem	Yes	XP Pro		No	Jun 2002
2653-N4U	Pentium 4-M	1.8	256MB	15" UXGA	60GB	DVD/CD-RW	Open	10/100	Modem	Yes	Windows® 2000		No	Jun 2002
2653-N5U	Pentium 4-M	1.8	256MB	15" UXGA	60GB	DVD/CD-RW	Wi-Fi[32]/mod	10/100	Bluetooth	Yes	XP Pro		No	Jun 2002
2653-N6U	Pentium 4-M	1.8	256MB	15" UXGA	60GB	DVD/CD-RW	Wi-Fi/mod	10/100	Bluetooth	Yes	Windows 2000		No	Jun 2002
2653-NTU	Pentium 4-M	1.8	256MB	15" UXGA	60GB	DVD/CD-RW	Wi-Fi/mod	10/100	Bluetooth	Yes	XP Pro	Office XP SB[28]	No	Jun 2002

Positioning	*High-performance desktop alternatives with exceptional versatility; three spindle*
Processor	**Mobile Intel® Pentium® 4 Processor-M 1.8GHz** with enhanced Intel SpeedStep™ technology[1] and 400MHz frontside bus
L2 cache	**512KB** / on die (at processor speed) / ECC
Memory	**256MB** std / 1GB max[7] / **PC2100 DDR-SDRAM** / 266MHz[30] / non-parity / 2.5v / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available
Diskette drive	None standard / use optional Ultrabay™-based or USB-based diskette drive
DVD-ROM/CD-RW	Combo / 8X/8X/24X/8X[21] speed / bootable / removable from Ultrabay Plus
Modular bays	**Two modular bays** for interchangeable devices / **Ultrabay 2000** (left side) and **Ultrabay Plus** (right side) / Ultrabay 2000 left bay empty at ship (uses Travel Bezel)
Disk (removable)	**60GB**[8] / high-speed 5400 rpm / upgradeable / S.M.A.R.T. / supports two additional disks with optional HDD adapter in each modular bay
Display	**15.0"** (381mm) **UXGA-IPS (1600x1200) TFT color** / Active Matrix / 400:1 contrast / FlexView display with wide viewing angle and high density using in plane switching (IPS) technology
Graphics controller	**ATI® Mobility™ FireGL™ 7800** / **AGP 4X** / **64MB** DDR-SDRAM 183MHz / supports OpenGL technology for 3D applications
Graphics - external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M colors at 75Hz / DDC2B / supports external digital monitor[5] via the Digital Video Interface (DVI) port on either of the optional docking solutions
Keyboard	87-key / Web navigation keys (6 total, 3 customizable) / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar[13] / pitch: 19mm; stroke: 2.7mm
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions
UltraPort™	UltraPort connector on top of display for options such as digital UltraPort Camera
Case material	*Color:* black; *Top:* ABS plastic; *Bottom:* glass-fiber reinforced plastic
Dimensions[3]	Approximately 13.0 x 10.7 x 1.8"; 329mm x 272.5mm x 45.8mm
Approximate weight[2]	with battery and optical drive: 7.7 lb (3.49kg)
Battery - type	Lithium Ion 6-cell 10.8V 4.0Ah / intelligent / supports 2nd battery in Ultrabay 2000
Battery - life[10]	2.0 hours / universal 72 watt AC adapter (16Vdc 4.5A)
Architecture	**Intel 845MP** chipset / 82845MP Memory Controller Hub (MCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth], Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (Ricoh® R5C552 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared)
Port replicator	Optional **ThinkPad Port Replicator**
Docking Station	Optional **ThinkPad Dock** (includes Ultrabay 2000 and half-size PCI slot)
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / no Zoomed Video
Ports	Two USB (version 1.1) / one 9-pin serial / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 / no keyboard/mouse
Video in and out	S-video in and out ports / industry standard connectors / cable ships standard
IEEE 1394	IEEE 1394 FireWire port
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable
Wi-Fi[32]/modem	*Some:* Mini PCI Wi-Fi[32] wireless[4], Intersil® Prism 2.5 chipset, dual antennas in display cover / 56K[6] V.90 (V.92-designed[29]) modem combo, Lucent® chipset
CDC	Two Communications Daughter Card (CDC) sockets / customer accessible
Modem	*Some:* 56K[6] V.90 (V.92-designed[29]) CDC modem card / Lucent® chip set
Ethernet	10/100 ethernet on CDC / Intel 82562ET chipset (physical layer)
Bluetooth™	*Some:* Bluetooth wireless technology / on CDC / power button on display
Audio support	SoundBlaster Pro™-compatible / AD1881A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / mic input jack / output jack / line in jack
Security	Power-on password / hard disk password / supervisor password / security keyhole / **IBM Embedded Security Subsystem**[33] / hardware key storage / multi-factor authentication / local file encryption / enhances VPN security[16]
Limited warranty[12]	**3 years**/1 year battery - EasyServ™,[19] onsite pickup and delivery courier service
Service options	Service upgrades[22] provide up to three years of onsite or depot repair service coverage from date of ThinkPad purchase (including warranty period)

SOFTWARE[14]

Windows XP Pro models
- Microsoft® Windows® XP Professional
◇ Disk-to-Disk Recovery (in hidden Service Partition)

Windows 2000 models
- Microsoft Windows 2000 Professional[13]
● ConfigSafe®
◇ Disk-to-Disk Recovery (in hidden Service Partition)

INCLUDED SOFTWARE[14] (all)

Preloaded
● Access ThinkPad
  - Access Connections
  - Access Help
  - Access Support
● Adobe Acrobat Reader
● InterVideo™ Win DVD
● MGI VideoWave 4
● PC-Doctor™
● ThinkPad Utilities
● IBM Update Connector™,[15]
● Veritas RecordNOW and DLA

Downloadable
● IBM Rapid Restore™ PC
● IBM Data Transfer
● IBM Director Agent
● Client Security Software (security chip models)

License (CD not included)
- Lotus® SmartSuite® Millennium and Lotus Notes® Standalone Client

Office XP Small Business models only (Model NTU)
- Microsoft Office XP Small Business[28] (Word, Excel, Outlook, Publisher, Small Business Tools)
◇ Office XP Small Business CD

Certified software
- Visit **ibm.com**/pc/thinkpad/cert.html for a complete list of applications certified to run on the ThinkPad A31p

Supported operating systems[35]
- Microsoft Windows XP Professional
- Microsoft Windows 2000
- Microsoft Windows 98 Second Edition
- Microsoft Windows 98
- Microsoft Windows Millennium Edition
- Microsoft Windows NT® 4.0 SP6a
- Red Hat Linux®
- SuSE Linux

128 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028	Ultrabay 2000 Li-Ion battery	02K6646	
256 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030	Multiple Li-Ion/NiMH Battery Charger	02K6719	
512 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032	ThinkPad 72W AC Adapter	02K6699	
Second HDD Adapter for Ultrabay 2000	08K6068	ThinkPad Ultrabay Plus Carrier	22P5737	
20GB Hard Disk Drive	08K9686	ThinkPad Ultrabay Plus c500 Cradle	22P5738	
40GB Hard Disk Drive	08K9687	ThinkPad Ultrabay Plus Numeric Keypd	22P7330	
60GB HS Hard Disk 9.5mm (5400 rpm)	08K9688	ThinkPad Port Replicator	02K8667	
IBM USB Portable Diskette Drive	05K9276	ThinkPad Dock	263120U	
ThinkPad Removable Diskette Drive	08K9603	IBM USB Keyboard w/ USB Ports	10K3849	
SuperDisk (LS-240) UltraBay 2000	08K9616	IBM USB Sleek Mouse	33L3244	
Zip 250MB Ultrabay 2000 Drive	00N8253	IBM 128MB USB 2.0 Memory Key	22P8998	
8X/4X/24X Max CD-RW Ultrabay 2000	22P9101	Portable Data Bay 2000	19K4480	
Ultralight 8X Max DVD Ultrabay 2000	22P9102	10/100 Enet /56K Mini PCI (3Com)	09N9774	
DVD/CD-RW Combo II Ultrabay 2000	08K9701	ServicePac®,[22] 2yr IOR 9x5 NBD	30L9190	
Travel Bezel for Ultrabay 2000	08K6070	ServicePac 3yr IOR 9x5 NBD	30L9197	
ThinkPad A30 Series Li-Ion Battery	02K6878	Other options at **ibm.com**/us/pc/accessories		

PC 2001-compliant
ACPI 1.0b and 2.0 support
CIM and DMI 2.0-compliant
IBM ImageUltra Services available
IBM Rapid Restore PC available to protect software image and data
Setup Guide, Service and Trouble-shooting Guide, Windows manual
Personalized Web-based support[31]
Proactive e-mail updates[31]
International Warranty Service[17]
24x7 toll-free support[18] for warranty-related issues during the warranty period[12]

See footnotes for important warranty information
US models announced June 4, 2002
US models withdrawn effective October 2002

Type-model	Processor	GHz	Memory	Screen	Disk	Ultrabay optical	Mini PCI	CDC ethernet	CDC mod/Blue	Security chip	Preload	Small bus software	Workhorse or Global model	Avail date
2653-R3U	Pentium® 4-M	2.0	256MB	15" UXGA	60 or 80GB*[8]	Combo	Open	10/100	Modem	Yes	XP Pro		No	Sep 2002
2653-R4U	Pentium 4-M	2.0	256MB	15" UXGA	60 or 80GB*	Combo	Open	10/100	Modem	Yes	Windows® 2000		No	Sep 2002
2653-R5U	Pentium 4-M	2.0	256MB	15" UXGA	60 or 80GB*	Combo	11b Wi-Fi[32]/mod	10/100	Bluetooth	Yes	XP Pro		No	Sep 2002
2653-R6U	Pentium 4-M	2.0	256MB	15" UXGA	60 or 80GB*	Combo	11b Wi-Fi/mod	10/100	Bluetooth	Yes	Windows 2000		No	Sep 2002
2653-R8U	Pentium® 4-M	2.0	256MB	15" UXGA	40GB	Combo	Open	10/100	Modem	Yes	XP Pro		No	Mar 2003
2653-RBU	Pentium 4-M	2.0	256MB	15" UXGA	40GB	Combo	Open	10/100	Modem	Yes	Windows® 2000		No	Mar 2003
2653-R9U	Pentium 4-M	2.0	256MB	15" UXGA	40GB	Combo	11b Wi-Fi[32]/mod	10/100	Bluetooth	Yes	XP Pro		No	Mar 2003
2653-RCU	Pentium 4-M	2.0	256MB	15" UXGA	40GB	Combo	11b Wi-Fi/mod	10/100	Bluetooth	Yes	Windows 2000		No	Mar 2003
2653-RTU	Pentium 4-M	2.0	256MB	15" UXGA	60 or 80GB*	Combo	11b Wi-Fi/mod	10/100	Bluetooth	Yes	XP Pro	Office XP SB[28]	No	Sep 2002

Positioning	*High-performance desktop alternatives with exceptional versatility; three spindle*
Processor	**Mobile Intel® Pentium® 4 Processor-M 2.0GHz** with enhanced Intel SpeedStep™ technology[1] and 400MHz system bus
L2 cache	**512KB** / on die (at processor speed) / ECC
Memory	**256MB** std / 1GB max[7] / **PC2100 DDR-SDRAM** / 266MHz[30] / non-parity / 2.5v / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available
Diskette drive	None standard / use optional Ultrabay™-based or USB-based diskette drive
Combo	DVD-ROM/CD-RW / 8X/16X/10X/24X[21] speed / removable from Ultrabay Plus
Modular bays (both 12.7mm)	**Two modular bays** for interchangeable devices / **Ultrabay 2000** (left side) and **Ultrabay Plus** (right side) / Ultrabay 2000 left bay empty at ship (uses Travel Bezel)
Disk (removable)	**40GB**[8] (9.5mm, 5400 rpm), **60GB** (12.5mm, 5400rpm), or **80GB** (9.5mm, 4200rpm) / upgradable and removable / 12.5mm bay / supports two additional disks with optional HDD adapter in each modular bay
Display	**15.0"** (381mm) **UXGA-IPS (1600x1200) TFT color** / Active Matrix / 400:1 contrast / FlexView display with wide viewing angle and high density using IPS technology
Graphics controller	**ATI® Mobility™ FireGL™ 7800 / AGP 4X / 64MB** DDR-SDRAM 183MHz / supports OpenGL technology for 3D applications
Graphics - external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M colors at 75Hz / DDC2B / supports external digital monitor via the Digital Video Interface (DVI) port on either of the optional docking solutions
Keyboard	87-key / Web navigation keys (6 total, 3 customizable) / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar[13] / pitch: 19mm; stroke: 2.7mm
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions
UltraPort™	UltraPort connector on top of display for options such as digital UltraPort Camera
Case material	*Color:* black; *Top:* ABS plastic; *Bottom:* glass-fiber reinforced plastic
Dimensions[3]	Approximately 13.0 x 10.7 x 1.8"; 329mm x 272.5mm x 45.8mm
Approximate weight[2]	with battery and optical drive: 7.7 lb (3.49kg)
Battery - type	Lithium Ion 6-cell 10.8V 4.0Ah / intelligent / supports 2nd battery in Ultrabay 2000
Battery - life[10]	2.0 hours / universal 72 watt AC adapter (16Vdc 4.5A)
Architecture	**Intel 845MP** chipset / 82845MP Memory Controller Hub (MCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth], Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (Ricoh® R5C552 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared)
Port replicator	Optional **ThinkPad Port Replicator** or **Port Replicator II**
Docking Station	Optional **ThinkPad Dock** or **Dock II** (includes Ultrabay 2000 and half-size PCI slot)
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door
Ports	Two USB (version 1.1) / one 9-pin serial / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 / no keyboard/mouse
Video in and out	**S-video in and out ports** / industry standard connectors / cable ships standard
IEEE 1394 (FireWire)	**IEEE 1394 (FireWire) port** (4-pin connector)
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable
11b Wi-Fi[32]/mod	*Some:* Mini PCI 11b Wi-Fi[32] wireless[4], Intersil® Prism 2.5 chipset, dual antennas in display cover / 56K[6] V.90 (V.92-designed[29]) modem combo, Lucent® chipset
CDC	Two Communications Daughter Card (CDC) sockets / customer accessible
Modem	*Some:* 56K[6] V.90 (V.92-designed[29]) CDC modem card / Lucent® chip set
Ethernet	10/100 ethernet on CDC / Intel 82562ET chipset (physical layer) / PXE / Wake on LAN®
Bluetooth™	*Some:* Bluetooth wireless technology / on CDC / power button on display
Audio support	SoundBlaster Pro™-compatible / AD1881A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / mic input jack / output jack / line in jack
Security	Power-on password / hard disk password / supervisor password / security keyhole / **IBM Embedded Security Subsystem**[33] / hardware key storage / multi-factor authentication / local file encryption / enhances VPN security[16] / TCG-compliant
Limited warranty[12]	**3 years**/1 year battery - EasyServ™[19] onsite pickup and delivery courier service

SOFTWARE[14]

Windows XP Pro models
- Microsoft® Windows® XP Professional
- ◇ Disk-to-Disk Recovery (in hidden Service Partition)

Windows 2000 models
- Microsoft Windows 2000 Professional[13]
- ● ConfigSafe®
- ◇ Disk-to-Disk Recovery (in hidden Service Partition)

INCLUDED SOFTWARE[14] **(all)**
Preloaded
- Access ThinkPad
  - Access Connections
  - Access Help
  - Access Support
- Adobe Acrobat Reader
- InterVideo™ Win DVD
- MGI VideoWave 4
- PC-Doctor™
- ThinkPad Utilities
- IBM Update Connector™[15]
- Veritas RecordNOW and DLA

Downloadable
- IBM Rapid Restore™ PC
- Sofware Delivery Assistant
- System Migration Assistant
- IBM Director Agent
- Client Security Software (security chip models)

License (CD not included)
- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

Office XP Small Business models only (Model RTU)
- Microsoft Office XP Small Business[28] (Word, Excel, Outlook, Publisher, Small Business Tools)
- ◇ Office XP Small Business CD

Certified software
- Visit **ibm.com**/pc/thinkpad/cert.html for a complete list of applications certified to run on the ThinkPad A31p

PC 2001-compliant
ACPI 1.0b and 2.0 support
CIM and DMI 2.0-compliant
IBM ImageUltra™ Services available
IBM Rapid Restore PC available to protect software image and data
Setup Guide, Service and Trouble-shooting Guide, Windows manual
International Warranty Service[17]
24x7 toll-free support[18] for warranty-related issues during the warranty period[12]

128 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028	ThinkPad A30 Series Li-Ion Battery	02K6878	
256 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030	Ultrabay 2000 Li-Ion battery	02K6646	
512 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032	Multiple Li-Ion/NiMH Battery Charger	02K6719	
Second HDD Adapter for Ultrabay 2000	08K6068	ThinkPad Port Replicator II	74P6733	
20GB Hard Disk Drive	08K9686	ThinkPad Mini Dock	287810U	
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ThinkPad Dock	263120U	
IBM 256MB USB 2.0 Memory Key	22P9025	ThinkPad Dock II	287710U	
IBM USB Portable Diskette Drive	05K9276	IBM Optical Travel Wheel Mouse (black)	31P7410	
ThinkPad Removable Diskette Drive	08K9603	ServicePac®,[22] 2yr IOR 9x5 NBD	30L9190	
Zip 250MB Ultrabay 2000 Drive	00N8253	ServicePac 3yr IOR 9x5 NBD	30L9197	
DVD/CD-RW Combo IV Ultrabay 2000	22P6991	ServicePac 4yr IOR 9x5 NBD	69P9198	
Travel Bezel for Ultrabay 2000	08K6070	ServicePac 5yr IOR 9x5 NBD	69P9200	
Portable Drive Bay 2000	19K4480	ServicePac 4yr P&L P/U Depot	69P9199	
IBM Portable USB 2.0 CD-RW Drive	2295297	ServicePac 5yr P&L P/U Depot	69P9201	
ThinkPad 72W AC Adapter	02K6699	Other options at **ibm.com**/us/pc/accessories		

See footnotes for important warranty information
US models announced on August 27, 2002 or March 12, 2003
US models withdrawn effective January 2004

*80GB for systems manufactured after May 2003

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