Type-model	Processor	Speed	Memory	Screen	Disk	Optical	Mini PCI	Security Chip	Communications Daughter Card	Preload	Available
2647-2KU	Pentium® III-M	866MHz1	128MB	13.3" XGA	15GB	CD-ROM	Modem		Ethernet V	Vindows® 98 SE	Jul 2001
2647-6KU	Pentium III-M	866MHz	128MB	13.3" XGA	15GB	CD-ROM	Modem		Ethernet V	Vindows 2000	Jul 2001
2647-5KU	Pentium III-M	1.13GHz		14.1" SXGA+	48GB	DVD-ROM	Modem		Ethernet V	Vindows 98 SE	Jul 2001
2647-9KU	Pentium III-M	1.13GHz	128MB	14.1" SXGA+	48GB	DVD-ROM	Modem		Ethernet V	Vindows 2000	Jul 2001
2647-5LU	Pentium III-M	1.13GHz	128MB	14.1" SXGA+	48GB	DVD-ROM	802.11b/mod	Yes	Ethernet V	Vindows 98 SE	Jul 2001
2647-9LU	Pentium III-M	1.13GHz	128MB	14.1" SXGA+	48GB	DVD-ROM	802.11b/mod	Yes	Ethernet V	Vindows 2000	Jul 2001
2647-HLU	Pentium III-M	1.13GHz	128MB	14.1" SXGA+	48GB	DVD-ROM	802.11b/mod	Yes	Ethernet 2	000, XP Sm Bus	Jul 2001

Positioning Processor L2 cache Memory	The perfect balance of performance and portability  Mobile Intel® Pentium® III Processor-M 866MHz¹ or 1.13GHz¹ with enhanced Intel SpeedStep™ technology and 133MHz front side bus 512KB / on die (at processor speed) / ECC 128MB standard / 1GB maximum² / SDRAM / non-parity / 133MHz / PC 133 / 3.3v / two 144-pin SO-DIMM sockets / 128MB in one socket / one socket available	SOFTWARE14, 27 Windows 98 models - Microsoft® Windows® 98 Second Edition13  Disk-to-Disk Recovery
Diskette drive CD-ROM DVD-ROM Ultrabay 2000 Disk	3.5" 1.44MB (use in Ultrabay 2000 or attach ext with optional cable via parallel port)  Some: CD-ROM / 24X-10X <sup>9</sup> speed / bootable / removable from Ultrabay™ 2000  Some: DVD-ROM / 8X-3.3X <sup>9</sup> speed / bootable / removable from Ultrabay 2000  Modular bay for interchangeable devices  15GB <sup>8</sup> (4200 rpm) or 48GB (5400 rpm) / upgradeable / S.M.A.R.T. /  supports 2nd disk with optional HDD Adapter in Ultrabay 2000	(in hidden Service Partition)  Windows 2000 models  - Windows 2000 Professional  - PC Card Wizard  ⇒ Disk-to-Disk Recovery to Windows 2000 or Windows NT 4.0
Display	Some: 13.3" (337.8mm) XGA (1024x768) TFT color / Active Matrix Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix All: Easy-open cover to unlatch and open with one hand	(in hidden Service Partition)  INCLUDED SOFTWARE <sup>14</sup> (all)
	S3® SuperSavage/IXC16 / <b>AGP 4X / 16MB</b> SDRAM External SVGA to various modes such as 16.7 million colors, 85Hz, 1600x1200	Preloaded  • ThinkPad Assistant™
Keyboard ThinkLight™ UltraPort™	85-key / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar / pitch: 19mm; stroke: 2.7mm Illuminates the keyboard to improve visibility in low-light conditions UltraPort connector on top of display for options such as digital UltraPort Camera	Access ThinkPad II     ThinkPad Utilities     ConfigSafe®     Access Connections (W2000
Dimensions <sup>3</sup>	xKx: 12.0" x 9.8" x 1.3"; xLx: 12.1" x 9.8" x 1.3" With optical drive and battery: 2Kx/6Kx: 5.4 lbs; 5Kx/9Kx: 5.45 lbs; 5Lx/9Lx: 5.5 lbs  Titanium Composite in the top and bottom covers for enhanced strength <sup>4</sup> Lithium Ion 6-cell / 10.8V 3.6AH / intelligent / supports unique 2nd battery in Ultrabay xKx: 3.0 hrs; xLx: 2.8 hrs Universal 72 watt / 16VDC 4.5A	wireless models only) • PC-Doctor™ • Mediamatics™ DVD (DVD models)  Downloadable • IBM Backup and Restore • IBM Data Transfer
Architecture  Docking Station PC Card Std slots Ports	Intel 830MP chipset / 82830MP Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, Low Pin Count (LPC) interface, USB) / E82802AC Firmwave Hub / PCI bus 2.2 32-bit, 33MHz (TI® PCI1420 CardBus, Mini PCI, external expansion) / LPC bus 33Mhz (PC87392 Super I/O for diskette, serial, parallel, infrared) Optional ThinkPad Dock (includes Ultrabay 2000 and half-size PCI slot) 2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / no Zoomed Video Two USB (Version 1.1) / 9-pin serial / parallel / keyboard / mouse / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet)	Universal Manageability Services     IBM Update Connector™.15     Client Security Software 2.0 (models with security chip)  License     Lotus® SmartSuite® Millennium and Lotus Notes® Client 5.0  Office XP Small Business models     Microsoft Office XP Small Business
Video out Mini PCI CDC	S-video out / one industry standard connector / full MPEG-2 support / optional cable for S-video to composite conversion available Mini PCI IIIb slot / customer accessible One Communications Daughter Card socket (used by ethernet)	(Word, Excel, Outlook, Publisher, Small Business Tools)     Office XP Small Business CD
Modem 802.11b/modem Ethernet Audio support Security	xKx: Mini PCI 56K <sup>6</sup> V.90 modem card / Lucent® chipset xLx: Mini PCI 802.11b wireless, Intersil® Prism 2.5 chipset, diversity antennas in display cover, Wi-Fi-certified / 56K <sup>6</sup> V.90 modem combo, Lucent® chipset 10/100 ethernet on Communications Daughter Card / Intel® 82562ETchipset Soft audio / ICH AC97 controller / SoundBlaster compatible / CS4299 AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / line in jack (3.5 mm) Power-on password / hard disk password / supervisor password / security keyhole xLx: Embedded Security Chip / authenticates and encrypts data communications / stores encrypted passwords in hardware	The Ultrabay 2000 plus supports:  optional or standard CD-ROM optional or standard DVD drive optional Zip drive optional second battery optional SuperDisk drive optional CD-RW optional CD-RW/DVD combo optional HDD adapter (for 2nd disk) optional travel bezel
Limited warranty*,12	3 year - EasyServ <sup>TM.19</sup> onsite pickup and delivery courier service	PC 99-compliant CIM and DMI 2.0-compliant
128 MB SO DIMM 256 MB SO DIMM 512 MB SO DIMM SuperDisk (LS-24( Zip 250MB Ultraba 24X-10X CD-ROM 8X/4X/24X CD-RW 8X-2X DVD Ultrab CD-RW/DVD Com Travel Bezel for Ul Second HDD Ada 15GB Hard Disk D 30GB Hard Disk D	ay 2000 Drive 00N8253	Wired for Management 2.0 Local and remote asset manage ment via the IBM Universal Manageability solutions IBM ImageUltra Services available IBM Rapid Restore PC available to protect software image and data Asset ID™ wireless RF technology (via installing into disk cover) Personalized Web-based support International Warranty Service¹7

						Small Workhorse (W)				
Type-model Proce		Screen Disk	Optical	Mini PCI Comm Bay	Securit CDC Chip	y business or Global (G) Avail Preload software model date				
2647-HNU Pentiur 2647-8QU Pentiur 2647-8MU Pentiur 2647-8NU Pentiur 2647-9MU Pentiur	n III-M 1.13 128MB 1 n III-M 1.13 128MB 1 n III-M 1.13 128MB 1 n III-M 1.2 128MB 1 n III-M 1.2 128MB 1 n III-M 1.13 128MB 1 n III-M 1.13 128MB 1	4.1" SXGA+ 48GB 4.1" XGA 30GB 4.1" XGA 30GB 4.1" XGA 30GB 4.1" XGA 30GB	DVD-ROM DVD-ROM DVD-ROM DVD-ROM	11b Wi-Fi/mod Modem Modem Modem 11b Wi-Fi/mod Modem 11b Wi-Fi/mod Modem	Ethernet Yes Ethernet Ethernet Yes Ethernet Yes Ethernet Ethernet	XP Pro         Office XP SB <sup>28</sup> Oct 2001           XP Pro         Office XP SB           XP Pro         W Oct 2001           Windows® 2000         W Oct 2001           XP Pro         W G Oct 2001           XP Pro         Oct 2001           Windows 2000         W G Oct 2001           Windows 2000         W Oct 2001           Windows 2000         Oct 2001           Windows 2000         Oct 2001           Windows 2000         Oct 2001				
Positioning Processor L2 cache Memory	The perfect balance of Mobile Intel® Pentium enhanced Intel SpeedS 512KB / on die (at proc 128MB standard / 1GB 3.3v / two 144-pin SO-l	<sup>(®</sup> <b>III Processor-M</b> 1 Step™ technology¹ a cessor speed) / EC0 B maximum <sup>7</sup> / SDRA	<b>I.13 or 1.2GH</b> and 133MHz f C aM / non-parit	<b>Iz with</b> frontside bus ty / 133MHz / PC		SOFTWARE <sup>14</sup> Windows XP Pro models - Microsoft® Windows® XP Professional \$\times \text{Disk-to-Disk Recovery}\$				
Diskette drive CD-RW DVD-ROM Ultrabay 2000 Disk	3.5" 1.44MB (use in eit Some: CD-RW/8X/4X Some: DVD-ROM/8X One modular bay for in 30GB <sup>8</sup> (4200 rpm) or 4 supports 2nd disk with	(/24X Max <sup>9</sup> / remova -3.3X <sup>9</sup> speed / remo terchangeable devi <b>8GB</b> (5400 rpm) / u	able from Ultr ovable from U ces (right side pgradable / S	abay 2000 Iltrabay 2000 e) / <b>Ultrabay Plus</b> S.M.A.R.T. /	. ,	(in hidden Service Partition)  Windows 2000 models  - Microsoft Windows 2000 Professional¹³  ⇒ Disk-to-Disk Recovery to Windows 2000 or Windows NT 4.0				
Display	Some: 14.1" (358.1mr Some: 14.1" (358.1mr All: Easy-open cov		050) TFT col	or / Active Matrix		(in hidden Service Partition)  INCLUDED SOFTWARE <sup>14</sup> (all)				
Graphics - external Keyboard	S3 Graphics® SuperSa External SVGA to vario 85-key / ThinkPad Butt Internet Scroll Bar <sup>13</sup> / pi	ous modes such as on / palm rest / Traditch: 19mm; stroke:	16.7 million o ckPoint®, "Pre 2.7mm	colors, 85Hz, 160 ess-to-Select,"	0x1200	Preloaded  • Access ThinkPad  - Access Connections  - Access Help  • ConfigSafe®				
ThinkLight™ UltraPort™ Dimensions³	Illuminates the keyboar UltraPort connector on Wi-Fi <sup>32</sup> models: 12.1" x	top of display for o	otions such a	s digital UltraPor	t Camera	<ul> <li>Mediamatics™ DVD (DVD models)</li> <li>PC-Doctor™</li> </ul>				
	with optical drive and b Titanium Composite i Lithium Ion 6-cell / intel 3 hrs 11 minutes to 3 h Universal 72 watt / 16V	h	SystemSoft CardWizard     ThinkPad Utilities     Veritas RecordNOW (CD-RW mod)     Downloadable     IBM Rapid Restore™ PC     IBM Data Transfer							
Architecture  Docking Station PC Card Std slots Ports	Intel 830MP chipset / 8 82801CAM ICH3-M I/O (LPC) interface, USB) / PCI bus 2.2 32-bit, 33M LPC bus 33MHz (PC8 Optional ThinkPad Do 2 Type I, 2 Type II, or 1 Two USB (Version 1.1)	O Controller Hub (A <sup>-</sup> / E82802AC Firmwa // E82802AC Firmwa // 392 Super I/O for c ck (includes Ultrab Type III / CardBus / / 9-pin serial / para	TA-100/66 EI are Hub / CardBus, Mini diskette, seria ay 2000 and l 32-bit / PCM allel / keyboar	DE, PCI bus, Lov i PCI, external ex il, parallel, infrare half-size PCI slot ICIA 2.1 rd / mouse /	v Pin Count pansion) / ed)	<ul> <li>Universal Manageability Services™</li> <li>IBM Update Connector™.15</li> <li>Client Security Software (models with security chip)</li> <li>License</li> <li>Lotus® SmartSuite® Millennium and Lotus Notes® Client 5.0</li> </ul>				
Video out Mini PCI	external DB-15 monitor S-video out port (TV ou One Mini PCI type III sl	ıt) / one industry sta	indard conne	ctor	15 (ethernet)	Office XP Small Business models only - Microsoft Office XP Small				
CDC Modem 11b Wi-Fi <sup>32</sup> /modem	One Communications I Some: Mini PCI 56K <sup>6</sup> V Some: Mini PCI 11b W	′.90 (V.92-designed ï-Fi³² wireless, Inter	d <sup>29</sup> ) modem ca sil® Prism 2.5	ard / Lucent® chip chipset, diversity	oset vantennas in	Business <sup>26</sup> (Word, Excel, Outlook, Publisher, Small Business Tools) \$\displayedrightarrow\text{Office XP Small Business CD}\$				
Ethernet Audio support Security Security chip	Lucent® chipset Some: 10/100 ethernet Soft audio / ICH AC97 stereo speakers / 1 war microphone input jack Power-on password / h Some: IBM Embeddet	t on Communication controller / SoundB tt / volume up, down (3.5 mm) / headpho nard disk password d Security Subsys	ns Daughter Claster-compan, mute button one jack (3.5 i supervisor p tem <sup>33</sup> / hardy	Card / Intel® 8256; ttible / CS4299 At ns / internal micro mm) / line in jack bassword / secur ware key storage	2ETchipset C97 codec / ophone / (3.5 mm) ity keyhole	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				
Limited warranty <sup>12</sup>	authentication / 3 years/1 year battery	local file encryptior - EasyServ™,19 onsi			service	Cradle for the WorkPad® c500 Series				
128 MB SO DIMM 256 MB SO DIMM 512 MB SO DIMM SuperDisk (LS-24/ Zip 250MB Ultraba 24X-10X CD-ROM 8X/4X/24X Max CI 8X-3X DVD Ultrab CD-RW/DVD Com Travel Bezel for Ul Second HDD Adag IBM ThinkPad Ultr IBM ThinkPad Ultr IBM ThinkPad Ultr	ný 2000 Dríve I Ultrabay 2000 Drive D-RW Ultrabay 2000 ay 2000 Drive bo Ultrabay 2000 trabay 2000 trabay 2000 oter for Ultrabay 2000 abay Plus Carrier abay Plus c500 Cradle Plus Numeric Keypad	19K4652 Ultraba 19K4654 ThinkF 19K4656 OK96616 Multipl 00N8253 ThinkF 05K9233 ThinkF 05K9233 ThinkF 27L3448 Portab 08K9572 OK6068 T Servic 22P5737 Servic 22P5738 Servic 22P7330 40GB	ay 2000 Li-lor Pad 72W AC A' Pad 72W DC A' Pad Port Repl Pad Dock Pad Monitor S Ile Drive Bay 000 media ar oth™ UltraPo es FDD Exter ePac®, 22 2yr ePac 3yr IOF HS Hard Disk	Adapter Auto/Air Adapter Auto/Air Adapter Battery Charger icator  tand 2001 2000 (accepts Uld Storage device the Module from IB all Cable Kit IOR 9x5 NBD	02K8667 263120U 22P5265 trabay es) 19K4480 M 09N9811 27L0524 30L9190 30L9197 em) 08K9816	PC 99-compliant CIM and DMI 2.0-compliant Wired for Management 2.0 Local and remote asset manage ment via the IBM Universal Manageability solutions IBM ImageUltra Services available IBM Rapid Restore PC available to protect software image and data Asset ID™ wireless RF technology (via installing into disk cover) International Warranty Service¹ 24 hour x 7 day¹³ toll-free hardware support during the warranty¹²				

						Small Workhou	'so (M/)				
Type-model Proce	Speed ssor GHz Memory Screen	Disk Optical	Mini PCI Comm Bay	Securit CDC Chip	y Preload	business or Glob software mod	al (Ġ) Avail				
2647-6RU Pentiur 2647-2TU Pentiur 2647-2SU Pentiur 2647-5RU Pentiur 2647-9RU Pentiur 2647-9SU Pentiur 2647-9SU Pentiur	n° III-M       1.0       128MB       14.1" XGA         n III-M       1.0       128MB       14.1" XGA         n III-M       1.0       256MB       14.1" XGA         n III-M       1.0       128MB       14.1" XGA         n III-M       1.0       256MB       14.1" XGA         n III-M       1.2       256MB       14.1" SXGA+	60GB DVD/CD-RW 60GB DVD/CD-RW 60GB DVD/CD-RW	Modem Modem Modem Modem 11b Wi-Fi <sup>32</sup> /mod 11b Wi-Fi/mod	Ethernet Ethernet Ethernet Yes Ethernet Yes Ethernet Yes Ethernet Yes	XP Pro Windows20 XP Pro	W G 0000 W G 0000 W G	Jan 2002 Jan 2002 Feb 2002 Feb 2002 Jan 2002 Jan 2002 Jan 2002 Jan 2002 Jan 2002 Jan 2002				
Positioning Processor L2 cache Memory	The perfect balance of performance Mobile Intel® Pentium® III Process enhanced Intel SpeedStep™ techno 512KB / on die (at processor speed 128MB or 256MB standard / 1GB r 3.3v / two 144-pin SO-DIMM socke	s <b>or-M 1.0 or 1.2GHz</b> v blogy¹ and 133MHz fro )) / ECC nax² / SDRAM / non-	with ontside bus -parity / 133MHz		- Microso	SOFTWARE <sup>14</sup> XP Pro models ft® Windows® XP I Disk Recovery en Service Partitio	Professiona				
Diskette drive CD-ROM DVD-ROM DVD-ROM/CD-RW Ultrabay 2000 Disk	3.5" 1.44MB (use in either Ultrabay Some: CD-ROM / 24X-10X9 / remore Some: DVD-ROM / 8X-3.3X9 speet Some: DVD-ROM / CD-RW / 8X/8X One modular bay for interchangeat 20GB8 (4200 rpm) or 60GB (5400 rpsupports 2nd disk with optional HDD	vable from Ultrabay 2 d / bootable / remova /24X/8X <sup>21</sup> speed / rer ble devices (right side bm) / upgradable / S.l	/ 2000 rabay 2000	windows 2000 models  - Microsoft Windows 2000 Professional <sup>13</sup> • ConfigSafe <sup>®</sup> ⇒ Disk-to-Disk Recovery to Windows 2000 or Windows NT 4.0 (in hidden Service Partition)							
Display	Some: 14.1" (358.1mm) XGA (102 Some: 14.1" (358.1mm) SXGA+ (1 All: Easy-open cover to unlatch	400x1050) TFT colo	r / Active Matrix		INCLUDE	D SOFTWARE14	,				
Graphics controller Graphics - external Keyboard ThinkLight™	S3 Graphics® SuperSavage / IXC1 External SVGA to various modes s 85-key / ThinkPad Button / palm re Internet Scroll Bar <sup>13</sup> / pitch: 19mm; Illuminates the keyboard to improve	uch as 16.7 million c st / TrackPoint®, "Pre stroke: 2.7mm (stand	olors, 85Hz, 1600 ess-to-Select," dard-size keys)	0x1200	Preloaded  • Access ThinkPad  - Access Connections  - Access Help  - Access Support  • Mediamatics™ DVD (DVD model)						
UltraPort™  Dimensions³ Approximate weight²  Case material Battery - type Battery - life¹0	UltraPort connector on top of displa Wi-Fi <sup>2</sup> models: 12.1" x 9.8" x 1.3"; with optical drive and battery: 2Rx/e (2.36kg); 5Rx/9Rx: 5.58 lbs (2.53kg) Titanium Composite in the top an Lithium Ion 6-cell / intelligent / supp	5.19 lbs	PC-Doctor™     ThinkPad Utilities     Veritas RecordNOW (CD-RW mod)     IBM Software Installer     IBM Update Connector™.15     Downloadable     IBM Rapid Restore™ PC     IBM Data Transfer								
Architecture  Docking Station PC Card Std slots Ports	Intel 830MP chipset / 82830MP Gr 82801CAM ICH3-M I/O Controller (LPC) interface, USB) / E82802AC PCI bus 2.2 32-bit, 33MHz (TI® PC LPC bus 33MHz (PC87392 Super I Optional ThinkPad Dock (includes 2 Type I, 2 Type II, or 1 Type III / C	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay 2000 3.1 hrs to 3.5 hrs depending on model  Intel 830MP chipset / 82830MP Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, Low Pin Count (LPC) interface, USB) / E82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (TI® PCI1420 CardBus, Mini PCI, external expansion) / LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared) Optional ThinkPad Dock (includes Ultrabay 2000 and half-size PCI slot) 2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 Two USB (Version 1.1) / 9-pin serial / parallel / keyboard / mouse /									
Video out Mini PCI CDC Modem	S-video out port (TV out) / one indu One Mini PCI type III slot (Commur One Communications Daughter Ca Some: Mini PCI 56K <sup>6</sup> V.90 (V.92-de	istry standard conne- nications Bay) / custo ard (CDC) socket / cu esigned <sup>29</sup> ) modem ca	ctor omer upgradable istomer accessib ard / Lucent® chip	le eset	only  - Microsoft Office XP Small Business <sup>26</sup> (Word, Excel, Outlook, Publisher, Small Business Tools)						
Ethernet Audio support	Some: Mini PCI 11b Wi-Fi <sup>32</sup> wireles display cover, Wi-Fi-certified 10/100 ethernet on Communication Soft audio / ICH AC97 controller / S stereo speakers / 1 watt / volume u microphone input jack (3.5 mm) / h	d / 56K <sup>6</sup> V.90 modem ns Daughter Card / In SoundBlaster-compa p, down, mute buttor	combo, Lucent® ( tel® 82562ETchip tible / CS4299 AC ns / internal micro	chipset oset C97 codec / ophone /	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						
Security Security chip	Power-on password / hard disk pas Some: IBM Embedded Security S authentication / local file en	<b>Subsystem</b> <sup>33</sup> / hardv cryption / enhances \	vare key storage VPN security <sup>16</sup>	/ multi-factor	functional Ultrabay F	ity by supporting the Numeric Keyporthe WorkPad® c50	ne pad and				
128 MB SO DIMM 256 MB SO DIMM 512 MB SO DIMM SuperDisk (LS-244 Zip 250MB Ultraba 24X-10X CD-ROM 8X/4X/24X Max CI Ultralight 8X Max I CD-RW/DVD Com Travel Bezel for Ul Second HDD Adar IBM ThinkPad Ultr IBM ThinkPad Ultr ThinkPad Ultrabay ThinkPad Asset ID	ný 2000 Drive     00N8253       1 Ultrabay 2000 Drive     05K9233       D-RW Ultrabay 2000     22P9101       2DVD Ultrabay 2000     22P6980       1 Ultrabay 2000     08K6070       1 Ultrabay 2000     08K6070       2 Ultrabay 2000     08K6068       2 Ultrabay 2000     22P5737       2 Ultrabay 2000     22P5738       2 Ultrabay 2000     22P7330	ThinkPad T20 Seri Ultrabay 2000 Li-lo ThinkPad 72W AC ThinkPad 72W DC Multiple Li-lon/NiM ThinkPad Port Rep ThinkPad Dock ThinkPad Monitor S Portable Drive Bay 2000 media a Bluetooth™ UltraPo T Series FDD Exte ServicePac®,22 2yr ServicePac 3yr IOI 20GB Hard Disk 9.5	es Li-Ion Battery n battery Adapter Auto Adapter H Battery Charge licator  Stand 2001 2000 (accepts U nd storage devic ort Module from It rnal Cable Kit IOR 9x5 NBD R 9x5 NBD 5mm (4200 rpm) k 9.5mm (5400 rp	02K6649 02K6646 02K6699 10K3820 02K6719 02K8667 263120U 22P5265 Iltrabay es) 19K4480 BM 09N9811 27L0524 30L9197 08K9686	Universal PC 99-cor CIM and E PXE 2.0-c Wired for Local and ment via Manage IBM Imag IBM Rapic protect Asset ID™ (via inst Internatio 24 hour x	DMI 2.0-complian	nage sal available ilable to nd data nnology over) rice <sup>17</sup> ardware				

Type-model	Processor	Speed GHz Memory	Screen	Disk	Optical	Mini PCI Comm Bay	CDC	Security Chip	Preload	Workhorse (W or Global (G) model	Avail date
2647-GGU I	Pentium® III-N	/ 1.0 256MB	14.1" XGA	20GB8	DVD/CD-RW	11b Wi-Fi32/mod	Ethernet	No	Windows® XP	Pro No Apr	2002

This educational model of the ThinkPad T23 notebook must be sold only to qualified education customers. Qualified institution/customer is a public or private K-12 (or higher) accredited school organized and operated exclusively for educational purposes for use by Qualified Students and/or Qualified Teachers.

This model for education is for sale direct from IBM or through an Authorized Education Reseller. The model or models for education are not available for resale to any other organization or individual.

Positioning	The perfect balance of performance and portability; two-spindle system	COETWA DE 14			
Processor	Mobile Intel® Pentium® III Processor-M 1.0GHz with	SOFTWARE <sup>14</sup> Windows XP Pro models			
L2 cache	enhanced Intel SpeedStep™ technology¹ and 133MHz frontside bus 512KB / on die (at processor speed) / ECC	- Microsoft® Windows® XP			
Memory	<b>256MB</b> standard / 1GB max <sup>7</sup> / SDRAM / non-parity / 133MHz / PC133-compliant /	Professional <sup>20</sup>			
Dialectta deire	3.3v / two 144-pin SO-DIMM sockets / std mem in one socket / one socket available	♦ Disk-to-Disk Recovery   (in hidden Service Partition)			
Diskette drive DVD-ROM/CD-RW	3.5" 1.44MB (use in either Ultrabay™ or attach ext with optional cable via parallel port) DVD-ROM/CD-RW / 8X/8X/24X/8X <sup>21</sup> speed / removable from Ultrabay 2000				
Ultrabay 2000	One modular bay for interchangeable devices (right side) / <b>Ultrabay Plus</b> -compatible	INCLUDED SOFTWARE <sup>14</sup> (all)			
Disk	<b>20GB</b> <sup>8</sup> (4200 rpm) / upgradable / S.M.A.R.T. / supports 2nd disk with optional HDD Adapter in Ultrabay 2000	Preloaded  • Access ThinkPad			
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix /	- Access Connections			
	easy-open cover to unlatch and open with one hand (two latches)	- Access Help - Access Support			
	S3 Graphics® SuperSavage / IXC16 / <b>AGP 4X / 16MB</b> SDRAM External SVGA to various modes such as 16.7 million colors, 85Hz, 1600x1200	Mediamatics™DVD     PC-Doctor™			
Keyboard	85-key / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select,"	ThinkPad Utilities Veritas RecordNOW			
ThinkLight™	Internet Scroll Bar <sup>13</sup> / pitch: 19mm; stroke: 2.7mm (standard-size keys) Illuminates the keyboard to improve visibility in low-light conditions	IBM Software Installer			
UltraPort™	UltraPort connector on top of display for options such as digital UltraPort Camera	■ IBM Update Connector™,15			
Dimensions <sup>3</sup> Approximate weight <sup>2</sup>	12.1" x 9.8" x 1.3" (305 mm x 250 mm x 33.1 mm) with optical drive and battery: 5.3 lbs (2.4kg)	Downloadable  ■ IBM Rapid Restore™ PC			
Case material	<b>Titanium Composite</b> in the top and bottom covers for enhanced strength	IBM Data Transfer			
Battery - type Battery - life <sup>10</sup>	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay 2000 3.1 hrs	IBM Director Agent			
Architecture	Intel 830MP chipset / 82830MP Graphics Memory Controller Hub (GMCH-M) /	License - Lotus® SmartSuite® Millennium and			
	82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, Low Pin Count	Lotus Notes® Client 5.0			
	(LPC) interface, USB) / E82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (TI® PCI1420 CardBus, Mini PCI, external expansion) /				
Dealine Otation	LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared)				
Docking Station PC Card Std slots	Optional <b>ThinkPad Dock</b> (includes Ultrabay 2000 and half-size PCI slot) 2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1				
Ports	Two USB (Version 1.1) / 9-pin serial / parallel / keyboard / mouse /				
Video out	external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) S-video out port (TV out) / one industry standard connector	-			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable				
11b Wi-Fi <sup>32</sup> /mod	Mini PCI 11b Wi-Fi <sup>32</sup> wireless <sup>4</sup> , Intersil <sup>®</sup> Prism 2.5 chipset, dual antennas in display cover, Wi-Fi-certified / 56K <sup>®</sup> V.90 (V.92-designed <sup>29</sup> ) modem combo, Lucent <sup>®</sup> chipset				
CDC	One Communications Daughter Card (CDC) socket / customer accessible	Ultrabay Plus integrated modular			
Ethernet Audio support	10/100 ethernet on Communications Daughter Card / Intel 82562ETchipset Soft audio / ICH AC97 controller / SoundBlaster-compatible / CS4299 AC97 codec /	bay supports most Ultrabay 2000			
AddioSupport	stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone /	devices including CD-RW/DVD Combo drive, diskette drive, or Zip			
Security	microphone input jack (3.5 mm) / headphone jack (3.5 mm) / line in jack (3.5 mm) Power-on password / hard disk password / supervisor password / security keyhole	drive; the optional Ultrabay Plus			
Limited warranty <sup>12</sup>	3 years/1 year battery - EasyServ <sup>TM,19</sup> onsite pickup and delivery courier service	Device Carrier adds potential functionality by supporting the			
Service options	Service upgrades <sup>22</sup> provide up to five years of onsite or depot repair service coverage	Ultrabay Plus Numeric Keypad and			
	from date of ThinkPad purchase (including warranty period)	Cradle for the WorkPad® c500 Series			
64MB SO DIMM	133MHz CL3 NP SDRAM 19K4650 ThinkPad T20 Series Li-Ion Battery 02K6649	Universal 72 watt AC adapter			
128 MB SO DIMM	133MHz CL3 NP SDRAM 19K4652 Ultrabay 2000 Li-Ion battery 02K6646	PC 99-compliant			
	133MHz CL3 NP SDRAM 19K4654   ThinkPad 72W AC Adapter 02K6699 133MHz CL3 NP SDRAM 19K4656   ThinkPad 72W DC Auto Adapter 10K3820	CIM and DMI 2.0-compliant PXE 2.0-compliant			
SuperDisk (LS-24)	0) UltraBay 2000 08K9616   Multiple Li-Ion/NiMH Battery Charger 02K6719	Wired for Management 2.0			
Zip 250MB Ultraba	ay 2000 Drive 00N8253   ThinkPad Port Replicator 02K8667	Local and remote asset manage			
	l Ultrabay 2000 Drive 05K9233   ThinkPad Dock 263120U D-RW Ultrabay 2000 22P9101   ThinkPad Monitor Stand 2001 22P5265	ment via the IBM Universal Manageability solutions			
Ultralight 8X Max [	DVD Ultrabay 2000 22P9102 Portable Drive Bay 2000 (accepts Ultrabay	IBM ImageUltra™ Services available			
CD-RW/DVD Com Travel Bezel for UI	bo III Ultrabay 2000 22P6980 2000 media and storage devices) 19K4480 trabay 2000 08K6070 Bluetooth™ UltraPort Module from IBM 09N9811	IBM Rapid Restore PC available to protect software image and data			
Second HDD Adap	oter for Ultrabay 2000 08K6068 T Series FDD External Cable Kit 27L0524	Asset ID™ wireless RF technology			
IBM ThinkPad Ultr		(via installing into disk cover) International Warranty Service <sup>17</sup>			
	abay Plus c500 Cradle 22P5738   ServicePac 3yr IOR 9x5 NBD 30L9197 Plus Numeric Keypad 22P7330   20GB Hard Disk 9.5mm (4200 rpm) 08K9686	24 hour x 7 day <sup>18</sup> toll-free hardware			
ThinkPad Asset ID	08K6064 40GB HS Hard Disk 9.5mm (5400 rpm) 08K9816	support during the warranty <sup>12</sup>			
Otner options at ib	m.com/pc/us/accessories 80GB Hard Disk 9.5mm (4200 rpm) 08K9869				

Type-model	Processor	Speed GHz	l Memory	Screen	Disk	Optical	Mini PCI Comm Bay	CDC	Securit Chip	y Preload		Workhorse (\) or Global (0 model	
2647-4SU 2647-8RU 2647-8SU	Pentium® III-M Pentium III-M Pentium III-M Pentium III-M Pentium III-M	1 1.2 1.2 1.2 1.2 1.2	256MB 256MB 256MB 256MB 256MB	14.1" XGA 14.1" XGA 14.1" XGA 14.1" XGA 14.1" XGA	40GB 40GB 40GB	DVD-ROM DVD-ROM DVD-ROM DVD-ROM DVD-ROM	Modem 11b Wi-Fi <sup>32</sup> /mod Modem 11b Wi-Fi/modem 11b Wi-Fi/modem	Ethernet Ethernet Ethernet	No No No	XP Pro		W G Ap W G Ap W G Ap W G Ap B <sup>28</sup> W Ap	or 2002 or 2002
Positioning Processor  Mobile Intel® Pentium® III Processor-M 1.2GHz with enhanced Intel SpeedStep™ technology¹ and 133MHz frontside bus  12 cache Memory  Memory  The perfect balance of performance and portability; two-spindle system  Mobile Intel® Pentium® III Processor-M 1.2GHz with enhanced Intel® Pentium® III Processor-M 1.3MHz frontside bus 512KB / on die (at processor speed) / ECC  256MB standard / 1GB max² / SDRAM / non-parity / 133MHz / PC 133 / 3.3y / two 144-pin SO-DIMM sockets / 256MB in one socket / one socket available						- Micros sional <sup>2</sup> Disk-to	SOFTWARE <sup>14</sup> Windows XP Pro models - Microsoft® Windows® XP Professional <sup>20</sup> ⇒ Disk-to-Disk Recovery						
Diskette driv DVD-ROM							th optional cable via		oort)	,	lden Servic s <b>2000 mo</b>	e Partition)	

CD-RW Optional / removable from Ultrabay 2000 DVD-ROM/CD-RW Optional / removable from Ultrabay 2000 Ultrabay 2000 One modular bay for interchangeable devices (right side) / Ultrabay Plus-compatible 40GB8 (4200 rpm) / upgradable / S.M.A.R.T. /

supports 2nd disk with optional HDD Adapter in Ultrabay 2000

14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / Display easy-open cover to unlatch and open with one hand

Graphics controller S3 Graphics® SuperSavage / IXC16 / AGP 4X / 16MB SDRAM Graphics - external External SVGA to various modes such as 16.7 million colors, 85Hz, 1600x1200

85-key / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select," Keyboard Internet Scroll Bar<sup>13</sup> / pitch: 19mm; stroke: 2.7mm (standard-size keys) Illuminates the keyboard to improve visibility in low-light conditions ThinkLight™ UltraPort™ UltraPort connector on top of display for options such as digital UltraPort Camera

Dimensions<sup>3</sup> Wi-Fi<sup>2</sup> models: 12.1" x 9.8" x 1.3"; Other (4RU/8RU): 12.0" x 9.8" x 1.3"; Approximate weight<sup>2</sup> with optical drive and battery: 5.17 lbs (2.34kg)

Case material Titanium Composite in the top and bottom covers for enhanced strength Battery - type Battery - life<sup>10</sup> Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay 2000 xSU: 3.3 hrs; xRU: 3.4 hrs

Architecture Intel 830MP chipset / 82830MP Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, Low Pin Count (LPC) interface, USB) / E82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (TI® PCI1420 CardBus, Mini PCI, external expansion) /

LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared) Optional **ThinkPad Dock** (includes Ultrabay 2000 and half-size PCI slot) 2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 Two USB (Version 1.1) / 9-pin serial / parallel / keyboard / mouse / Docking Station PC Card Std slots **Ports** 

external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) Video out S-video out port (TV out) / one industry standard connector Mini PCI One Mini PCI type III slot (Communications Bay) / customer upgradable CDC One Communications Daughter Card (CDC) socket / customer accessible

Modem Some: Mini PCI 56K<sup>6</sup> V.90 (V.92-designed<sup>29</sup>) modem card / Lucent<sup>®</sup> chipset

11b Wi-Fi<sup>32</sup>/modem Some: Mini PCI 11b Wi-Fi<sup>32</sup> wireless<sup>4</sup>, Intersil<sup>®</sup> Prism 2.5 chipset, dual antennas in display cover, Wi-Fi-certified / 56K<sup>6</sup> V.90 modem combo, Lucent<sup>®</sup> chipset

Ethernet 10/100 ethernet on Communications Daughter Card / Intel® 82562ETchipset Soft audio / ICH AC97 controller / SoundBlaster-compatible / CS4299 AC97 codec / Audio support stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / line in jack (3.5 mm)

Security Power-on password / hard disk password / supervisor password / security keyhole 3 years/1 year battery - EasyServ<sup>TM.19</sup> onsite pickup and delivery courier service Service upgrades<sup>22</sup> provide up to five years of onsite or depot repair service coverage Limited warranty<sup>12</sup> Service options from date of ThinkPad purchase (including warranty period)

64 MB SODIMM 133MHz CL3 NP SDRAM 19K4650 ThinkPad T20 Series Li-Ion Battery 02K6649 128 MB SO DIMM 133MHz CL3 NP SDRAM 19K4652 Ultrabay 2000 Li-Ion battery ThinkPad 72W AC Adapter ThinkPad 72W DC Auto Adapter 02K6646 256 MB SO DIMM 133MHz CL3 NP SDRAM 19K4654 512 MB SO DIMM 133MHz CL3 NP SDRAM 19K4654 02K6699 10K3820 SuperDisk (LS-240) UltraBay 2000 Zip 250MB Ultrabay 2000 Drive 24X-10X CD-ROM Ultrabay 2000 Drive 08K9616 Multiple Li-Ion/NiMH Battery Charger 02K6719 ThinkPad Port Replicator 00N8253 02K8667 ThinkPad Dock 05K9233 263120U ThinkPad Monitor Stand 2001 22P9101 8X/4X/24X Max CD-RW Ultrabay 2000 22P5265 Ultralight 8X Max DVD Ultrabay 2000 22P9102 Portable Drive Bay 2000 (accepts Ultrabay 22P6980 CD-RW/DVD Combo III Ultrabáy 2000 2000 media and storage devices) 19K4480 Travel Bezel for Ultrabay 2000 08K6070 Bluetooth™ UltraPort Module from IBM 09N9811 T Series FDD External Cable Ki 27L0524 Second HDD Adapter for Ultrabay 2000 08K6068 ServicePac®, 22 2yr IOR 9x5 NBD IBM ThinkPad Ultrabay Plus Carrier 22P5737 30L9190 ServicePac 3yr IOR 9x5 NBD IBM ThinkPad Ultrabay Plus c500 Cradle 22P5738 30L9197 ThinkPad Ultrabay Plus Numeric Keypad 22P7330 20GB Hard Dísk 9.5mm (4200 rpm) 08K9686 ThinkPad Asset ID RF Adapter 08K6064 40GB HS Hard Disk 9.5mm (5400 rpm) 08K9816 Other options at ibm.com/pc/us/accessories 80GB Hard Disk 9.5mm (4200 rpm) 08K9869

### Windows 2000 models

- Microsoft Windows 2000 Professional<sup>20</sup>
- ConfigSafe®
- Disk-to-Disk Recovery (in hidden Service Partition)

# INCLUDED SOFTWARE<sup>14</sup> (all)

## Preloaded

- Access ThinkPad
- Access Connections
- Access Help
- Access Support Adobe® Acrobat Reader
- Mediamatics™ DVD (DVD models)
- PC-Doctor™
  - ThinkPad Utilities
- Veritas RecordNOW (CD-RW mod)
- IBM Software Installer
- IBM Update Connector<sup>TM,15</sup>

# **Downloadable**

- IBM Rapid Restore™ PC
- IBM Data Transfer
- IBM Director Agent

License (CD not included)
- Lotus® SmartSuite® Millennium and Lotus Notes® Client 5.0

## Office XP Small Business model only (2647-BSU)

- Microsoft Office XP Small Business<sup>28</sup> (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

Universal 72 watt AC adapter PC 99-compliant CIM and DMI 2.0-compliant

PXE 2.0-compliant Local and remote asset manage ment via the IBM Universal Manageability solutions IBM ImageUltra™ Services available IBM Rapid Restore PC available to

protect software image and data Asset ID™ wireless RF technology (via installing into disk cover) International Warranty Service<sup>17</sup> 24 hour x 7 day<sup>18</sup> toll-free hardware support during the warranty12

See footnotes for important warranty information US models announced April 23, 2002 US models withdrawn effective July 2003

									Workhor	se (W)				
Type-model Proce		Screen	Disk	Optical	Diskette Drive		CDC	Preload	or Glob mod	al (G) Avail el date				
2647-7MU Pentiur 2647-3GU Pentiur 2647-2MU Pentiur 2647-2NU Pentiur 2647-4U2 Pentiur 2647-4U3 Pentiur 2647-T4U Pentiur	m® III-M     1.0     256MB       n III-M     1.13     256MB       n III-M     1.13     256MB       n III-M     1.0     256MB       n III-M     1.13     256MB	14.1" XGA 14.1" XGA 14.1" XGA 14.1" XGA 14.1" XGA 14.1" SXGA+ 14.1" SXGA+ 14.1" XGA	30GB 30GB 20GB 30GB 30GB 20GB 30GB 30GB		None None None None None None Diskette	Modem Modem 11b Wi-Fi/mod Modem modem modem	Etherno Etherno Etherno Etherno Etherno Etherno Etherno Etherno Etherno	et Windows® XF et Windows XP et Windows XP et Windows 200	Pro No Pro No N	Jun 2002 Jun 2002 Jun 2002 Jun 2002 Jun 2002 Jun 2002 Jun 2002 Jun 2002 Jun 2002 Jun 2002				
Positioning Processor	The perfect balance of Mobile Intel® Pentium			SOFT	WARE <sup>14</sup>									
L2 cache Memory	enhanced Intel Spee 512KB / on die (at pr 256MB standard / 10 3.3v / two 144-pin S0	dStep™techno ocessor speed 3B max² / SDF D-DIMM socke	ology¹ a d) / ECC RAM / n ets / std	nd 133MHz fro con-parity / 133 mem in one s	ntside bus MHz / PC ocket / on	133-compliant / e socket availab	- ⇒	Windows XP Pro models - Microsoft® Windows® XP Professional ⇒ Disk-to-Disk Recovery (in hidden Service Partition)						
Diskette drive CD-ROM DVD-ROM/CD-RW Ultrabay 2000 Disk	Some: 3.5" 1.44MB ( Some: CD-ROM / 24 Some: Combo / DV/ Ultrabay 2000 One modular bay for 20GB8 or 30GB (420	-	Windows 2000 models  - Microsoft Windows 2000 Professional <sup>13</sup> • ConfigSafe®  ♦ Disk-to-Disk Recovery (in hidden Service Partition)											
Display	Some: 14.1" (358.1r Some: 14.1" (358.1r Some: 14.1" (358.1r All: Easy-open co	mm) <b>XGA (102</b> mm) <b>SXGA+ (</b> 1	(4x768) (400x10	TFT color / Ac	ctive Matri	<b>/</b> latrix	Pi	ICLUDED SOFT	WARE <sup>14</sup>	•				
Graphics controller Graphics - external	S3 Graphics® Supers External SVGA to va	•	Access ThinkPage - Access Connect - Access Help											
Keyboard	85-key / ThinkPad B							- Access Suppor		ho models				
ThinkLight™ UltraPort™	ItraPort™ UltraPort connector on top of display for options such as digital UltraPort Camera								Mediamatics™ DVD (Combo models)     PC-Doctor™     ThinkPad Utilities     Veritas RecordNOW (Combo					
Case material	pproximate weight <sup>2</sup> with optical drive and battery: T4Ú (CD-ROM model): 5.13 lbs (2.33kg); TNU/2NU (Wi-Fi models): 5.42 lbs (2.46kg); 4U2/4Ú3 (SXGA+ models): 5.45 (2.47kg); Others: 5.37 lbs (2.43kg) Titanium Composite in the top and bottom covers for enhanced strength <sup>4</sup>							models)  • IBM Software Installer  • IBM Update Connector™.15  Downloadable  • IBM Rapid Restore™ PC						
Battery - type Battery - life <sup>10</sup>	3.1 hrs to 3.5 hrs dep	ending on mo	del	ique Zna batter	y iii Oili ab	ay 2000	•	IBM Data Transfer     IBM Director Agent						
Architecture  Docking Station PC Card Std slots Ports	lntel 830MP chipset / 82830MP Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, Low Pin Count (LPC) interface, USB) / E82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (TI® PCI1420 CardBus, Mini PCI, external expansion) / LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared) Optional ThinkPad Dock (includes Ultrabay 2000 and half-size PCI slot)								License (CD not included)  - Lotus® SmartSuite® Millennium and Lotus Notes® Client 5.0					
Video out Mini PCI CDC Modem 11b Wi Fi32/modem	S-video out port (TV One Mini PCI type III One Communication Some: Mini PCI 56K Some: Mini PCI 11b	slot (Commu s Daughter Ca V.90 (V.92-d	nication ard (CD esigned	s Bay) / custor C) socket / cus d <sup>29</sup> ) modem car	mer upgra stomer ac rd / Lucen	cessible t® chipset		I <b>ltrabay Plus</b> inte						
Ethernet Audio support Security		, Wi-Fi-certifie Communication 17 controller / S vatt / volume u ck (3.5 mm) / h	d / 56K <sup>6</sup> ns Daug SoundB ip, dowr ieadpho	V.90 modem of the V.90 modem o	combo, Lu el® 82562 ble / CS4 s / interna im) / line i	icent® chipset ETchipset 299 AC97 coded I microphone / n jack (3.5 mm)	c/ d D fu	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						
Security chip	None	ny - FacySont	M.19 opc	to nickup and	delivery	ourier convice	C	radle for the Worl						
128 MB SO DIMM 256 MB SO DIMM 512 MB SO DIMM SuperDisk (LS-24/ Zip 250MB Ultraba 24X-10X CD-ROM 8X/4X/24X Max CI Ultralight 8X Max I CD-RW/DVD Com Travel Bezel for Ul Second HDD Ada, IBM ThinkPad Ultr IBM ThinkPad Ultr ThinkPad Ultraba, ThinkPad Asset ID	ay 2000 Drive I Ultrabay 2000 Drive D-RW Ultrabay 2000 DVD Ultrabay 2000 abo III Ultrabay 2000 Itrabay 2000 Itrabay 2000 oter for Ultrabay 2000 abay Plus Carrier abay Plus c500 Cradl I Plus Numeric Keypa	AAM 19K4650 RAM 19K4652 RAM 19K4654 RAM 19K4654 O8K9616 00N8253 05K9233 22P9101 22P9102 22P6980 08K6070 08K6068 22P5737 e 22P5733 d 22P7330	Think Ultrab Think Think Think Multip Think Think Think Think Think Think Think Think Think A Think Think Think Think Think Think Torta  8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Pad T20 Serie pay 2000 Li-lor Pad 72W AC A Pad 72W DC A ple Li-lon/NiMP Pad Port Repli Pad Dock Pad Monitor S ble Drive Bay 3	s Li-Ion B h battery Adapter Auto Adap I Battery C cator tand 2001 2000 (acc od storage rt Module nal Cable mm (4200 9.5mm (5 0R 9x5 N	attery 02K6 02K6 02K6 02K6 01K6 02K6 02K6 02K6 02K6 2631 22P6 02K7 02K7 02K7 02K7 02K7 02K7 02K7 02K7	6649 U 6646 P 6699 C 8820 P 6719 W 3667 L 20U 5265 IE 1480 IE 9811 A 98816 Ir 18669 2	niversal 72 watt. C 99-compliant IIM and DMI 2.0-c XE 2.0-complian /ired for Manager ocal and remote a ment via the IBM Manageability so BM ImageUltra BM Rapid Restor protect software sset ID Merical Warr 4 hour x 7 day 18 to support during the	ompliant nent 2.0 usset ma I Univers lutions Services PC ava image a s RF tech o disk co	nage available ilable to nd data inology ver) ice <sup>17</sup> ardware				

Type-model Proce	Speed	I Memory	Screen	Disk	Optical	Mini PCI Comm Bay	CDC	Security Chip	P	reload	Small business software	Avail date		
2647-3HU Pentiur 2647-5GU Pentiur 2647-9GU Pentiur	n® III-M 1.0 n III-M 1.13	128MB 14	4.1" XGA 4.1" XGA	20GB <sup>8</sup> 30GB	DVD-ROM DVD-ROM DVD-ROM	Modem Modem	Etherne Etherne Etherne	t No t No	Wind	dows®2000 dows2000 dows XP Pro	Office XP SB <sup>28</sup> Office XP SB Office XP SB			
Positioning Processor L2 cache Memory	Mobile Inte enhanced In 512KB / on 128MB star	el® Pentium ntel SpeedS die (at prod ndard / 1GE	i® <b>III Proces</b> Step™ techr cessor spee 3 max <sup>7</sup> / SD	<b>ssor-M 1</b> . nology¹ a nd) / ECC PRAM / n	ntability; two 0 or 1.13Gh nd 133MHz on-parity / 1 mem in one	<b>Hz</b> with frontside bu 33MHz / P	ıs C 133 /	t availab	le	- Microsoft® Profession	sk Recovery			
Diskette drive DVD-ROM Ultrabay 2000 Disk	DVD-ROM One modul 20GB <sup>8</sup> or 30	/ 8X-3.3X° : ar bay for in <b>DGB</b> (4200	speed / boo iterchangea rpm) / upgra	otable / re able devi adable / \$	tach ext with emovable fro ces (right sions. S.M.A.R.T. / er in Ultraba	om Ultraba de)/ <b>Ultrab</b>	y 2000 <sup>'</sup>		′	(in hidden Service Partition)  Windows 2000 models  - Microsoft Windows 2000  Professional <sup>13</sup> • ConfigSafe®				
Display	<b>14.1</b> " (358. easy-open				lor / Active I one hand	Matrix /				♦ Disk-to-Dis		1)		
Graphics controller Graphics - external							Hz, 1600	x1200			SOFTWARE <sup>14</sup> (	all)		
Keyboard ThinkLight™ UltraPort™	85-key / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar³³ / pitch: 19mm; stroke: 2.7mm (standard-size keys) Illuminates the keyboard to improve visibility in low-light conditions UltraPort connector on top of display for options such as digital UltraPort Camera													
Dimensions <sup>3</sup> Approximate weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	Titanium C Lithium Ion	drive and b composite 6-cell / inte	oattery: 5.9 in the top a elligent / sup		<ul> <li>Access Support</li> <li>Mediamatics™ DVD (DVD models)</li> <li>PC-Doctor™</li> <li>ThinkPad Utilities</li> <li>IBM Software Installer</li> <li>IBM Update Connector™.15</li> </ul>									
Docking Station PC Card Std slots Ports	hitecture  Intel 830MP chipset / 82830MP Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, Low Pin Count (LPC) interface, USB) / E82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (TI® PCI1420 CardBus, Mini PCI, external expansion) / LPC bus 33MHz (PC87392 Super I/O for diskette, serial, parallel, infrared) Optional ThinkPad Dock (includes Ultrabay 2000 and half-size PCI slot) 2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1										Downloadable  • IBM Rapid Restore™ PC  • IBM Data Transfer  • Universal Manageability Services™  License  - Lotus®SmartSuite® Millennium and Lotus Notes® Client 5.0  Office XP Small Business			
Video out Mini PCI Modem CDC Ethernet Audio support	One Mini P Mini PCI 56 One Comm 10/100 ethe Soft audio / stereo spea	CI type III s K <sup>6</sup> V.90 (V. unications ernet on Co ICH AC97 akers / 1 wa	lot (Commu 92-designe Daughter C mmunicatio controller / att / volume	unication ed <sup>29</sup> ) mod Card (CD ons Daug SoundB up, dowr	andard conn s Bay) / cus dem card / L C) socket / o phter Card / l laster-comp n, mute butt one jack (3.5	tomer upgrucent® chip customer a Intel® 8256 patible / CS ons / intern	oset ccessible 2ETchips 4299 AC! al microp	set 97 codec bhone /	./	- Microsoft Office XP Small Business <sup>28</sup> (Word, Excel, Outlook, Publisher, Small Business Tools) \$\displaystyle Office XP Small Business CD				
Security Security chip					/ supervisor				)		s integrated mo most Ultrabay 2			
Limited warranty <sup>12</sup> Service options	Service upo from date o	grades <sup>22</sup> pro ThinkPad <sub>I</sub>	ovide up to f purchase (in	ive years ncluding	te pickup ar s of onsite or warranty pe	depot repa riod)	ir service	coverag		devices inclu Combo drive drive; the op Device Carri functionality	Iding CD-RW/Ď\ e, diskette drive, tional Ultrabay Per adds potentia by supporting the Numeric Keypa	VD or Zip Ilus I		
64 MB SODIMM 128 MB SO DIMM 256 MB SO DIMM	133MHz CL 133MHz CL	3 NP SDRA 3 NP SDRA	AM 19K465 AM 19K465	2 Ultrat 4 Think	Pad T20 Se bay 2000 Li- Pad 72W A	Ion battery C Adapter		02K6 02K6 02K6	646		e WorkPad® c50			
512 MB SO DIMM SuperDisk (LS-24) Zip 250MB Ultraba 24X-10X° CD-ROI 8X/4X/24X Max° C Ultralight 8X° Max CD-RW/DVD Com Travel Bezel for U Second HDD Adal IBM ThinkPad Ultrabay ThinkPad Ultrabay ThinkPad Asset IL IBM Optical 3-Butt IBM Optical 3-Butt IBM High Rate Wi Other options at ib	0) UltraBay 2 ay 2000 Drivy M Ultrabay 2 CD-RW Ultrab abo III Ultraba bo III Ultraba cter for Ultral abay Plus C abay Plus C Abay Plus C Tabay Plus	2000 e 0000 Drive pay 2000 ay 2000 pay	08K961 00N825 05K923 22P910 22P910 22P698 08K607 08K606 22P573 22P573 22P733 08K606 e 31P7410 31P740 8 09N990	6 Multir 3 Think 3 Think 1 Think 2 Porta 0 T Servi 8 Servi 9 S	Pad 72W Dole Li-lon/Nil Pad Port Re Pad Dock Pad Monito ble Drive Ba 2000 media ies FDD Ext 28MB USB cePac 3yr I cePac 4yr I cePac 5yr I cePac 5yr P cePac 5yr P Hard Disk I Hard Disk I	MH Battery eplicator  r Stand 200 ay 2000 (ac and storacternal Cabi 2.0 Memor yr IOR 9x5 NB OR 9x5 NB	Charger  Cha		719 667 20U 265 480 524 998 190 197 198 200 199 201 686	PC 99-comp CIM and DM PXE 2.0-con Wired for Ma Local and re ment via ti Manageal IBM ImageU IBM Rapid F protect so Asset ID <sup>TM</sup> w (via install Personalize Internationa 24 hour x 7 of	II 2.0-compliant	nage al available lable to nd data nology ver) upport ice <sup>17</sup> ardware		