Towns on the Co		and Berry C		Disk	0-4:1	Mini PCI Comm Bay	CDC	Ethernet on Securi	
Type-model Proc 2656-25U Celert 2656-A5U Celert 2656-AFU Celert 2656-AFU Celert 2656-AGU Celert 2656-BFU Pentit 2656-BFU Pentit 2656-EFU Pentit 2656-EFU Pentit 2656-EFU Pentit 2656-HFU Pentit 2656-HFU Pentit 2656-HGU Pentit	on™ 1 on	.06 128MB .06 128MB .06 128MB .06 128MB .00 128MB .13 128MB	13.3" XGA 2 13.3" XGA 2 13.3" XGA 2 13.3" XGA 2 14.1" XGA 2 13.3" XGA 2 13.3" XGA 2 14.1" XGA 3 14.1" XGA 3 14.1" XGA 3 14.1" XGA 3 14.1" XGA 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CD-ROM CD-ROM CD-ROM CD-ROM CD-ROM CD-RW CD-RW CD-RW CD-RW CD-RW CD-RW CD-ROM C	Open Open Wi-Fi ³² /mod Open Wi-Fi/mod Open Wi-Fi/mod Wi-Fi/mod Open Open Wi-Fi/mod Wi-Fi/mod Wi-Fi/mod Wi-Fi/mod Wi-Fi/mod	Modem Modem None Modem None Modem None Modem None None None None None	10/100 10/100 10/100 10/100 10/100 10/100 10/100 10/100 10/100	XP Pro W G Feb 2002 XP Pro Feb 2002 XP Pro Office XP SB Feb 2002
Positioning Processor L2 cache Memory Diskette drive CD-ROM CD-RW DVD-ROM DVD-ROM/CD-RV	Intel® Mc Pentium Celeron: 128MB s 3.3v / two None sta Some: C Some: C Some: D V Some: D		™ 1.06GHz 1.13GHz with ocessor spee 8 max ⁷ / SDF DIMM socke bitional Ultrab -10X ⁹ speed (/24X Max ⁹ / (-3.3X ⁹ speed -RW combo	with 1 h Speced; Pe RAM / ets / st Day™- / boot remod / rem	and the control of t	ntside bus or nnology¹ with ¹ ! KB / at proce 133MHz / PC e socket / one B-based disk able peed / remov	Intel Mo 133MHz essor spe 133 / e socket a ette drive	frontside bus ed available	SOFTWARE ¹⁴ Windows XP Home models - Microsoft® Windows® XP Home ²⁰ ♦ Disk-to-Disk Recovery (in hidden Service Partition) Windows XP Pro models - Microsoft® Windows® XP Professional® ♦ Disk-to-Disk Recovery (in hidden Service Partition)
Ultrabay 2000 Disk	20, 30, o supports	lular bay for in r 40GB ⁸ (4200 2nd disk with) rpm) / upgr optional HD	adable D Ada	e / S.M.Ă.R.ī apter in Ultrat	Г. <i>Í</i> рау		сотраные	INCLUDED SOFTWARE ¹⁴ (all)
Graphics - externative Seyboard	Some: 1 r Intel 830 controlle al External 87-key/	r dynamically SVGA to varion ThinkPad But	m) XGA (102 ed Direct AG allocates 8 to ous modes s ton / palm re	24x76 GP 3D o 32M uch as st / Tr	8) TFT color / Unified Me IB ¹¹ of systen s 16.7 million ackPoint®, "F	·/ Active Matr mory Archited in memory for in colors, 85Hz	ix cture / in graphics z, or 1600	;	Preloaded Access ThinkPad - Access Connections - Access Help - Access Support Adobe® Acrobat InterVideo WinDVD (DVD models)
ThinkLight™ Dimensions³ Approximateweigh Case material Battery - type Battery - life¹0	Illuminate 12.3" x 1 t² w/ batter <i>Color:</i> Bl Lithium le	Scroll Bar ¹³ / pes the keyboa 0.0" x 1.42" / 3 y and: <i>CD-RC</i> ack; <i>All:</i> ABS on 6-cell / inter models: 2.4 to	rd to improve 313mm x 25 0M: 5.8 lbs; L plastic lligent / no se	e visib 4mm 2 2VD: 5 econd	oility in low-lig x 36mm 5.8 lbs; <i>CD-F</i> battery in Ultr	RW: 6.1 lbs; <i>D</i>			Norton AntiVirus PC-Doctor™ ThinkPad Utilities IBM Update Connector™.15 Veritas RecordNOW (CD-RW mod) Downloadable IBM Donid Rector™ PC
Architecture Port Replicator PC Card Std slots Ports	Intel 830 82801 CA bus, ethe Firmware Optional One Type Two USE	MG chipset / AM ICH3-M I/O ernet, AC-Link e Hub / LPC ThinkPad Po e II or one Typ 3 (Version 1.1 nodem) / RJ-4	82830MG G O Controller I) / PCI bus 2 us 33MHz (N ort Replicato be III / CardB) / parallel / e	raphic Hub (A 1.2 32- NS PC or (no Bus 32 externa	cs Memory C ATA-100/66 I bit, 33MHz (87392VJG S ThinkPad Do bit / PCMCI al DB-15 mo	ontroller Hub EIDE, PCI bu TI® PCI1410, Super I/O for p ock support) A 2.1 / integra nitor / infrared	s, USB, L A CardBu parallel, in ated door d (4Mbps	Low Pin Coun is, Mini PCI) / nfrared)	IBM Rapid Restore™ PC IBM Data Transfer Veritas RecordNOW (CD-RW mod) License Lotus® SmartSuite® Millennium and Lotus Notes® Client 5.0 Microsoft Office XP Small Business® Models
Video out Mini PCI Wi-Fi ³² /modem	S-video d One Mini Some: N	out port (TV or i PCI type III s fini PCI Wi-Fi isplay and in t 6K ⁶ V.90 (V.9	ut) / one indu lot (Commur ³² wireless ⁴ , I pase), Wi-Fi-o	istry s nicatio ntersil certifie	tandard conr ons Bay) / not ® Prism 2.5 c ed /	nector customer up hipset, dual a	gradable Intennas	(in side of	- Microsoft Office XP Small Business ¹⁸ (Word, Excel, Outlook, Publisher, Small Business Tools) \$\displayset{Office XP Small Business CD}\$
CDC Modem Ethernet Audio support	One Con Some: 5 10/100 e Soft audi stereo sp micropho	nmunicatiòns 6K ⁶ V.90 (V.9 thernet on pla o / SoundBlas peakers / 1 wa one input jack n password / l	Daughter Ca 2-designed ^{2:} nar / Intel® 8: ster-compatil tt / volume u (3.5 mm) / h	ard (Cl) CD(2562E ble / A p, dov eadph	DC) socket (c C modem car ET chipset analog Device vn, mute butt none jack (3.5	open or moder rd / Lucent® cl es AD1881A a cons / no inter 5 mm)	n) / not ad hip set AC97 cod nal micro	dec/ 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
	Some: IE	BM Embedde uthentication	d Security S local file en	Subsy cryptic	r stem ³³ / hard on / enhance	dware key sto s VPN securi	rage / mı ty ¹⁶	ulti-factor	functionality by supporting the Ultrabay Plus Numeric Keypad and Cradle for the WorkPad® c500
Limited warranty ¹² 64 MB SO DIMN 128 MB SO DIMN 256 MB SO DIMN 512 MB SO DIMN SuperDisk (LS-2: Zip 250MB Ultrat 24X-10X CD-RO 8X/4X/24X Max (CD-RW/DVD Co Second HDD Ad: IBM ThinkPad Ul ThinkPad Ultraba See footnotes for in	M 133MHz M 133MHz M 133MHz M 133MHz M 133MHz M 1000 UltraBa DOP W Ultrabay CD-RW Ultr K DVD Ultr Mbo III Ultr Apter for Ultrabay Plus Ry Plus Ry Plus Ry Plus Ry Plus	NP SDRAM NP SDRAM NP SDRAM NP SDRAM Ay 2000 Irrive 1 2000 Drive rabay 2000 abay 2000 trabay 2000 trabay 2000 s Carrier s c500 Cradle meric Keypad	19K4650 19K4652 19K4654 19K4656 08K9616 00N8253 05K9233 22P9101 22P9102 22P6980 08K6068 22P5737 22P5738 22P7330	USB Thin Thin Thin Port: 20G 40G IBM Serv Serv Serv Serv	B Portable Dis kPad R30/R: kPad 72W A kPad Port Re able Drive B 2000 media B Hard Disk ! B HS Hard D Optical 3-But vicePac *22 r Iv vicePac 3yr Iv vicePac 3yr Iv	skette Drive 31 Li-Ion Batt C Adapter	ery epts Ultra devices) rpm) 400 rpm) heel Mou BD	05K9276 02K6821 02K6699 02K8667 bay 19K4480 08K9686 08K9816	Series Other options at ibm.com/pc/us/accessories Universal 72 watt AC adapter PC 2001-compliant 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 24 hour x 7 day¹8 toll-free hardware support during the warranty¹2 (R31) © IBM Corp. July 2003

	Mini PCI Ethernet Disk Comm Bay CDC on Secur	
Type-model Proce	ssor Speed Memory ¹¹ Screen GB ⁸ Optical wireless/modem modem planar Chi _l	Preload software model date
	m®III-M 1.13 128MB 14.1" XGA 30G DVD-ROM Open Modem 10/100	XP Pro Apr 2002
	mIII-M 1.13 128MB 14.1" XGA 30G CD-RW Open Modem 10/100 Yes	
	mIII-M 1.13 128MB 14.1" XGA 40G DVD/CD-RW Wi-Fi ³² /mod None 10/100 Yes mIII-M 1.13 256MB 14.1" XGA 30G DVD-ROM Open Modem 10/100	XP Pro Apr 2002 XP Pro Apr 2002
	mill-M 1.0 128MB 14.1" XGA 20G DVD-ROM Open Modem 10/100	XP Pro Apr 2002
	mIII-M 1.13 128MB 14.1" XGA 30G DVD-ROM Wi-Fi/mod None 10/100	XP Pro Office XP SB ¹⁸ Apr 2002
		XP Pro Office XP SB Apr 2002
	mIII-M 1.13 128MB 14.1" XGA 30G CD-RW Open Modem 10/100 Yes	
	mIII-M 1.13 128MB 14.1"XGA 40G DVD/CD-RW Wi-Fi/mod None 10/100 Yes mIII-M 1.13 128MB 14.1"XGA 30G DVD-ROM Open Modem 10/100	Windows 2000 Apr 2002 Windows 2000 Apr 2002
2656-FEU Pentiur	mill-M 1.13 256MB 14.1" XGA 30G DVD-ROM Open Modem 10/100	Windows 2000 Apr 2002 Windows 2000 Apr 2002
	mIII-M 1.0 128MB 14.1" XGA 20G DVD-ROM Open Modem 10/100	Windows 2000 Apr 2002
Positioning	Best blend of portability and essential features; two-spindle system	SOFTWARE ¹⁴
TAA-compliant	Trade Act Agreement-compliant	Windows XP Pro models
Processor	Intel® Mobile Pentium® III-M 1.0 or 1.13GHz with Speedstep™ technology¹ with 133MHz Front Side Bus	- Microsoft® Windows® XP
L2 cache	512 KB / at processor speed / ECC	Professional ²⁰
Memory	128 or 256MB standard / 1GB max ⁷ / SDRAM / non-parity / 133MHz / PC133 /	♦ Disk-to-Disk Recovery
,	3.3v / two 144-pin SO-DIMM sockets / std mem in one socket / one socket available	(in hidden Service Partition)
Diskette drive	None standard / use optional Ultrabay™-based or USB-based diskette drive	Windows 2000 models
CD-RW	Some: CD-RW / 8X/4X/24X Max ⁹ / removable	- Microsoft Windows 2000
DVD-ROM	Some: DVD-ROM / 8X-3.3X speed / removable	Professional ²⁰
	/ Some: DVD-ROM/CD-RW combo / 8X/8X/24X/8X ²¹ speed / removable	- ConfigSafe®
Ultrabay 2000 Disk	One modular bay for interchangeable devices (right side) / Ultrabay™ Plus -compatible 20, 30, or 40GB ⁸ (4200 rpm) / upgradeable / S.M.A.R.T. /	♦ Disk-to-Disk Recovery
DISK	supports 2nd disk with optional HDD Adapter in Ultrabay	(in hidden Service Partition)
Display	14.1 " (358.1mm) XGA (1024x768) TFT color / Active Matrix	INCLUDED SOFTWARE ¹⁴ (all)
Graphics controller	Intel 830MG Integrated Direct AGP 3D / Unified Memory Architecture / in GMCH /	Preloaded
Craphica autornal	controller dynamically allocates 8 to 32MB ¹¹ of system memory for graphics External SVGA to various modes such as 16.7 million colors, 85Hz, or 1600x1200	 Access ThinkPad Access Connections
	<u> </u>	- Access Help
Keyboard	87-key / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select,"	- Access Support
ThinkLight™	Internet Scroll Bar ¹³ / pitch: 19mm; stroke: 2.7mm Illuminates the keyboard to improve visibility in low-light conditions	Adobe® Acrobat
UltraPort™	None	InterVideo WinDVD (DVD models)
Dimensions ³	12.3" x 10.0" x 1.42" / 313mm x 254mm x 36mm	 Norton AntiVirus PC-Doctor™
	w/ battery and: DVD-ROM: 5.8 lbs; CD-RW: 6.1 lbs; DVD/CD-RW: 6.1 lbs	ThinkPad Utilities
Case material	Color: black; All: ABS plastic	IBM Update Connector™,15
Battery - type	Lithium Ion 6-cell / intelligent / no second battery in Ultrabay Plus	 Veritas RecordNOW (CD-RW mod)
Battery - life ¹⁰	802.11b models: 2.9 hrs; Others: 3.1 hrs	- Downloadable
Architecture	Intel 830MG chipset / 82830MG Graphics Memory Controller Hub (GMCH-M) /	IBM Rapid Restore™ PC
	82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, USB, Low Pin Coulbus, ethernet, AC-Link) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1410A CardBus, Mini PCI)	, Bill Bata Transisi
	Firmware Hub / LPC bus 33MHz (NS PC87392VJG Super I/O for parallel, infrared)	IBM Director Agent IBM Client Security Software (for
Port Replicator	Optional ThinkPad Port Replicator (no ThinkPad Dock support)	security chip)
PC Card Std slots	One Type II or one Type III / CardBus 32-bit / PCMCIA 2.1 / no Zoomed Video	License
Ports	Two USB (Version 1.1) / parallel / external DB-15 monitor / infrared (4Mbps) /	- Lotus® SmartSuite® Millennium
Video out	RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port	and Lotus Notes® Client 5.0
Mini PCI	S-video out port (TV out) / one industry standard connector One Mini PCI type III slot (Communications Bay) / not customer upgradeable	Microsoft Office XP Small
Wi-Fi ³² /modem	Some: Mini PCI Wi-Fi ³² wireless ⁴ , Intersil [®] Prism 2.5 chipset, dual antennas (in side of	Business ¹⁸ Models (H6U and H9U)
	display and in base), Wi-Fi-certified /	- Microsoft Office XP Small
000	56K ⁶ V.90 (V.92-designed ²⁹) modem combo, Lucent® chipset	Business ²⁸ (Word, Excel, Outlook,
CDC Modem	One Communications Daughter Card (CDC) socket (open or modem) / not accessible Some: 56K ⁶ V.90 (V.92-designed ²⁹) CDC modem card / Lucent [®] chip set	Publisher, Small Business Tools)
Ethernet	10/100 ethernet on planar / Intel® 82562ET chipset	♦ Office XP Small Business CD
Audio support	Soft audio / SoundBlaster-compatible / Analog Devices AD1881A AC97 codec /	Ultrabay Plus integrated modular bay supports most Ultrabay 2000
	stereo speakers / 1 watt / volume up, down, mute buttons / no internal microphone /	devices including CD-RW/DVD
Socurity.	microphone input jack (3.5 mm) / headphone jack (3.5 mm)	Combo drive, diskette drive, or Zip
Security	Power-on password / hard disk password / supervisor password / security keyhole Some: IBM Embedded Security Subsystem ³³ / hardware key storage / multi-factor	drive; the optional Ultrabay Plus
	authentication / local file encryption / enhances VPN security 16	Device Carrier adds potential functionality by supporting the
Limited warranty ¹²	1 year - EasyServ ^{TM,19} onsite pickup and delivery / warranty service upgrades ²²	Ultrabay Plus Numeric Keypad and Cradle for the WorkPad® c500
64MR CO DIMAN	122MHz ND CDDAM 10K4650 LICE Datable Diskate Drive 05K0076	Series Series
	133MHz NP SDRAM 19K4650 USB Portable Diskette Drive 05K9276 133MHz NP SDRAM 19K4652 ThinkPad R30/R31 Li-lon Battery 02K6821	Universal 72 watt AC adapter
	133MHz NP SDRAM 19K4654 ThinkPad 72W AC Adapter 02K6699	PC 2001-compliant
512 MB SO DIMM	133MHz NP SDRAM 19K4656 ThinkPad Port Replicator 02K8667	CIM and DMI 2.0-compliant
SuperDisk (LS-24		IBM ImageUltra Services available IBM Rapid Restore PC available to
Zip 250MB Ultrab	ay 2000 Drive 00N8253 2000 media and storage devices) 19K4480 #Ultrabay 2000 Drive 05K9233 20GB HDD 08K9686	protect software image and data
	D-RW Ultrabay 2000 Drive 05K9233 20GB HDD 06K9667	Personalized Web-based support ³¹
	DVD Ultrabay 2000 22P9102 60GB HS Hard Disk 9.5mm (5400 rpm) 08K9688	Setup Guide, Service and Trouble-
CD-RW/DVD Con	nbo II Ultrabay 2000 08K9701 ServicePac ^{®, 22} 1yr IOR 9x5 NBD 30L9188	shooting Guide, Windows manual
	pter for Ultrabay 2000 08K6068 ServicePac 2yr IOR 9x5 NBD 30L9189 rabay Plus Carrier 22P5737 ServicePac 3yr IOR 9x5 NBD 30L9195	International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free hardware
	rabay Plus Carrier 22P5737 ServicePac 3yr IOR 9x5 NBD 30L9195 rabay Plus c500 Cradle 22P5738 ServicePac 2yr P&L P/U Depot 30L9191	support during the warranty ¹²
	y Plus Numeric Keypad 22P7330 ServicePac 3yr P&L P/U Depot 30L9192	3
I ninkPad Ultrana		1

							Mini PCI	CDC	Ethernet		Workhorse (W) rity or Global (G) Ava			
Type-model Proce	essor	GHz	Memory ¹¹	Screen	Disk	Optical	Comm Bay		planar	Securit Chip	y or Global (G) Avail Preload model date			
2657-F4U Pentiur 2657-FEU Pentiur 2657-F5U Pentiur 2657-FGU Pentiur	m III-M m III-M	1.13 1.13	256MB 128MB	14.1" XGA	30GB 30GB	DVD-ROM DVD-ROM DVD-ROM DVD-ROM	Open Open	Modem Modem Modem Modem	10/100 10/100	No No No No	Windows® 2000 Apr 2002 Windows 2000 Apr 2002 Windows XP Pro Apr 2002 Windows XP Pro Apr 2002			
	 2657 models have a 3 year limited warranty (other 2656 ThinkPad R31 systems have a 1 year limited warranty) Trade Act Agreement (TAA)-compliant models 													
Positioning Best blend of portability and essential features; two-spindle system TAA-compliant Trade Act Agreement-compliant										SOFTWARE ¹⁴				
Processor L2 cache Memory Diskette drive CD-RW Ultrabay 2000 Disk Display Graphics controller	AA-compliant rocessor Intel® Mobile Pentium® III Processor-M 1.13GHz with Speedstep™ technology¹ with 133MHz Front Side Bus 2 cache lemory Items or 256MB standard / 1GB maximum³ / SDRAM / non-parity / 133MHz / PC133 / 3.3v / two 144-pin SO-DIMM sockets / std mem in one socket / one socket available None standard / use optional Ultrabay™-based or USB-based diskette drive DVD-ROM / 8X-3.3X® speed / removable One modular bay for interchangeable devices (right side) / Ultrabay™ Plus-compatible 30GB® (4200 rpm) / upgradeable / S.M.A.R.T. / supports 2nd disk with optional HDD Adapter in Ultrabay 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix Iraphics controller Intel 830MG Integrated Direct AGP 3D / Unified Memory Architecture / in GMCH / controller dynamically allocates 8 to 32MB¹¹ of system memory for graphics External SVGA to various modes such as 16.7 million colors, 85Hz, or 1600x1200 87-key / ThinkPad Button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar¹³ / pitch: 19mm; stroke: 2.7mm										Windows XP Pro models - Microsoft® Windows® XP Professional® ◆ Disk-to-Disk Recovery (in hidden Service Partition) Windows 2000 models - Microsoft Windows 2000 Professional® - ConfigSafe® ◆ Disk-to-Disk Recovery (in hidden Service Partition) INCLUDED SOFTWARE¹⁴ (all) Preloaded • Access ThinkPad - Access Help			
Dimensions ³	nensions ³ 12.3" x 10.0" x 1.42" / 313mm x 254mm x 36mm proximateweight ² w/ battery and DVD: 5.8 lbs (2.6 kg) se material Color: black; All: ABS plastic tery - type Lithium Ion 6-cell / intelligent / no second battery in Ultrabay Plus										- Access Help - Access Support • Adobe® Acrobat • InterVideo WinDVD (DVD models) • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • IBM Update Connector™.15 Downloadable • IBM Rapid Restore™ PC • IBM Papid Restore™ PC • IBM Director Agent • IBM Client Security Software (for security chip) License - Lotus® SmartSuite® Millennium and Lotus Notes® Client 5.0			
Port Replicator PC Card Std slots Ports	Architecture Intel 830MG chipset / 82830MG Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, USB, Low Pin Count bus, ethernet, AC-Link) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1410A CardBus, Mini PCI) / Firmware Hub / LPC bus 33MHz (NS PC87392VJG Super I/O for parallel, infrared) Port Replicator PC Card Std slots Ports Intel 830MG chipset / 82830MG Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3													
Video out Mini PCI WI-Fi³² wireless CDC Modem Bluetooth™	lini PCI WI-Fi ³² wireless DC Modem One Mini PCI type III slot (Communications Bay) / not customer upgradeable None One Communications Daughter Card (CDC) socket / not accessible 56K ⁶ V.90 (V.92-designed ²⁹) CDC modem card / Lucent® chip set													
Ethernet Audio support Security	luetooth™ thernet udio support Soft audio / SoundBlaster-compatible / Analog Devices AD1881A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm)										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			
Limited warranty ¹² 3 years /1 year battery - EasyServ ^{TM,19} onsite pickup and delivery / warranty service upgrades ²²										functionality by supporting the Ultrabay Plus Numeric Keypad and Cradle for the WorkPad® c500 Series Other options at ibm.com/pc/us/accessories				
128 MB SO DIMM 256 MB SO DIMM 512 MB SO DIMM IBM 32MB USB M SuperDisk (LS-24 Zip 250MB Ultraba 24X-10X CD-ROM 8X/4X/24X Max C Ultralight 8X Max CD-RW/DVD Con Second HDD Ada IBM ThinkPad Ultr ThinkPad Ultraba	19K4650										Universal 72 watt AC adapter PC 2001-compliant CIM and DMI 2.0-compliant IBM ImageUltra Services available IBM Rapid Restore PC available to protect software image and data Personalized Web-based support ³¹ Setup Guide, Service and Troubleshooting Guide, Windows manual International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free hardware support during the warranty ¹²			

T I.I. B	Oll Married Course Birl Collins		Workhorse (W) Security or Global (G) Avail				
Type-model Proces 2656-A4U Celeror	<u>-</u>	wireless/modem Modem planar Open Modem 10/100	Chip Preload model date Windows® 2000 Feb 2002				
2656-AEU Celeror		Wi-Fi ³² /mod None 10/100	Windows 2000 Feb 2002				
2656-FFU Pentiur	n®III-M 1.00 128MB 14.1" XGA 20GB DVD-ROM	Open Modem 10/100	Windows 2000 G Mar 2002				
	III-M 1.13 128MB 13.3" XGA 20GB CD-RW	Wi-Fi/modem None 10/100	Windows 2000 Feb 2002				
2656-EEU Pentiur 2656-E4U Pentiur	niii-m 1.13 128MB 14.1"XGA 30GB DVD-ROM niii-m 1.13 128MB 14.1"XGA 30GB DVD-ROM	Wi-Fi/modem None 10/100 Open Modem 10/100	Windows 2000 W G Feb 2002 Windows 2000 W G Feb 2002				
2656-E40 Pentiur		Open Modem 10/100 Open Modem 10/100	Yes Windows 2000 Feb 2002				
	IIII-M 1.13 128MB 14.1" XGA 40GB DVD/CD-R		Yes Windows 2000 Feb 2002				
Positioning	Best blend of portability and essential features; two-	spindle system	SOFTWARE ¹⁴				
Processor	Intel® Mobile Celeron™ 1.06GHz with 133MHz Fro	ont Side Bus or					
	Intel Mobile Pentium® III-M 1.0 or 1.13GHz with S	peedstep™ technology¹ with	Windows 2000 models				
L2 cache	133MHz Front Side Bus Celeron: 256KB / at processor speed; Pentium III: 51	2 KB / at processor speed	- Microsoft Windows 2000				
Memory	128MB ⁹ standard / 1GB maximum / SDRAM / non-p		Professional ²⁰ - ConfigSafe®				
	144-pin SO-DIMM sockets / std mem in one socket /	one socket available	♦ Disk-to-Disk Recovery				
Diskette drive	None standard / use optional Ultrabay™-based or US		(in hidden Service Partition)				
CD-ROM	Some: CD-ROM / 24X-10X9 speed / bootable / remo	vable					
CD-RW DVD-ROM	Some: CD-RW / 8X/4X/24X Max ⁹ / removable Some: DVD-ROM / 8X-3.3X ⁹ speed / removable		INCLUDED SOFTWARE ¹⁴				
	Some: DVD-ROM/CD-RW combo / 8X/8X/24X/8X ²¹	speed / removable	Preloaded				
Ultrabay 2000	One modular bay for interchangeable devices (rights	side) / Ultrabay™ Plus -compatible	Access ThinkPad				
Disk	20, 30, or 40GB ⁸ (4200 rpm) / upgradeable / S.M.A.F	R.T./	- Access Connections				
	supports 2nd disk with optional HDD Adapter in Ultra	ıbay	- Access Help				
Display	Some: 13.3" (337.8mm) XGA (1024x768) TFT cold	r / Active Matrix	- Access Support				
	Some: 14.1" (358.1mm) XGA (1024x768) TFT cold		Adobe® Acrobat InterVideo WinDVD (DVD models)				
Graphics controller	Intel 830MG Integrated Direct AGP 3D / Unified Mo	emory Architecture / in GMCH /	Norton AntiVirus				
Granhice - avtornal	controller dynamically allocates 8 to 32MB ¹¹ of syste External SVGA to various modes such as 16.7 millio		PC-Doctor™ Third-Data Marketing Thir				
		<u> </u>	 ThinkPad Utilities IBM Update Connector™,15 				
Keyboard	87-key / ThinkPad Button / palm rest / TrackPoint®, " Internet Scroll Bar ¹³ / pitch: 19mm; stroke: 2.7mm	Press-to-Select,	Veritas RecordNOW (CD-RW mod)				
ThinkLight™	Illuminates the keyboard to improve visibility in low-li	aht conditions	Ventas riccordive vv (eb rivv mod)				
UltraPort™	None	<u> </u>	Downloadable				
Dimensions ³	12.3" x 10.0" x 1.42" / 313mm x 254mm x 36mm		 IBM Rapid Restore™ PC IBM Data Transfer 				
Approximate weight ²	w/ battery and: CD-ROM: 5.8 lbs; DVD: 5.8 lbs; CD-	RW with 13.3": 6.0 lbs;	 Universal Manageability Services™ IBM Client Security Software (for security chip) License				
Casamatarial	CD-RW with 14.1:6.1 lbs; DVD/CD-RW:6.1 lbs						
Case material Battery - type	Color: black; All: ABS plastic Lithium Ion 6-cell / intelligent / no second battery in Ul	trahay Plus					
Battery - life ¹⁰	Celeron models: 2.4 to 2.6 hrs; Pentium III models:	2.9 to 3.1 hrs					
Architecture	Intel 830MG chipset / 82830MG Graphics Memory C		- Lotus® SmartSuite® Millennium				
	82801CAM ICH3-M I/O Controller Hub (ATA-100/66	EIDE, PCI bus, USB, Low Pin	and Lotus Notes® Client 5.0				
	Count bus, ethernet, AC-Link) / PCI bus 2.2 32-bit, 3						
Port Replicator	PCI) /Firmware Hub / LPC bus 33MHz (NS PC87392 Optional ThinkPad Port Replicator (no ThinkPad D	1)					
PC Card Std slots	One Type II or one Type III / CardBus 32-bit / PCMC	IA 2.1 / no Zoomed Video					
Ports	Two USB (Version 1.1) / parallel / external DB-15 mg						
	RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or r						
Video out	S-video out port (TV out) / one industry standard cor						
Mini PCI	One Mini PCI type III slot (Communications Bay) / no						
Wi-Fi ³² /modem	Some: Mini PCI Wi-Fi ³² wireless ⁴ , Intersil [®] Prism 2.5 display and in base), Wi-Fi-certified /	chipset, dual antennas (in side of					
	56K ⁶ V.90 (V.92-designed ²⁹) modem combo,	Lucent® chipset	Illtrohov Plug integrated modules				
CDC	One Communications Daughter Card (CDC) socket (open or modem) / not accessible	Ultrabay Plus integrated modular bay supports most Ultrabay 2000				
Modem	Some: 56K ⁶ V.90 (V.92-designed ²⁹) CDC modem ca	ard / Lucent® chip set	devices including CD-RW/DVD				
Bluetooth™ Ethernet	None 10/100 ethernet on planar / Intel® 82562ET chipset		Combo drive, diskette drive, or Zip				
Audio support	Soft audio / SoundBlaster-compatible / Analog Device	ces AD1881A AC97 codec /	drive; the optional Ultrabay Plus				
	stereo speakers / 1 watt / volume up, down, mute bu	ttons / no internal microphone /	Device Carrier adds potential functionality by supporting the				
o	microphone input jack (3.5 mm) / headphone jack (3	.5 mm)	Ultrabay Plus Numeric Keypad and				
Security	Power-on password / hard disk password / supervise Some: IBM Embedded Security Subsystem33 / hard		Cradle for the WorkPad® c500				
	authentication / local file encryption / enhance		Series				
Limited warrantv12	1 year - EasyServ ^{TM.19} onsite pickup and delivery / ser	,	†				
			Universal 72 watt AC adapter				
	133MHz NP SDRAM 19K4650 USB Portable D 133MHz NP SDRAM 19K4652 ThinkPad Remo	skette Drive 05K9276 vable Diskette Drive 08K9603	PC 2001-compliant				
256 MB SO DIMM	133MHz NP SDRAM 19K4654 ThinkPad R30/F	31 Li-Ion Battery 02K6821	CIM and DMI 2.0-compliant				
	133MHz NP SDRAM 19K4656 ThinkPad 72W A		IBM ImageUltra Services available IBM Rapid Restore PC available to				
IBM 32MB USB M SuperDisk (LS-24)		eplicator 02K8667 ay 2000 (accepts Ultrabay	protect software image and data				
Zip 250MB Ultraba		a and storage devices) 19K4480	Personalized Web-based support ³¹				
24X-10X CD-ROM	Ultrabay 2000 Drive 05K9233 20GB Hard Disk	9.5mm (4200 rpm) 08K9686	Setup Guide, Service and Trouble-				
		Disk 9.5mm (5400 rpm) 08K9816	shooting Guide, Windows manual				
		Disk 12.5mm (5400 rpm) 08K9688 Lyr IOR 9x5 NBD 30L9188	International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free hardware				
	bo III Ultrabay 2000 22P6980 ServicePac 2yr ter for Ultrabay 2000 08K6068 ServicePac 2yr	IOR 9x5 NBD 30L9188	support during the warranty ¹²				
IBM ThinkPad Ultr	abay Plus Carrier 22P5737 ServicePac 3yr	IOR 9x5 NBD 30L9195					
IBM ThinkPad Ultr	abay Plus c500 Cradle 22P5738 ServicePac 2yr						
ThinkPad Ultrabay	Plus Numeric Keypad 22P7330 ServicePac 3yr	P&L P/U Dmpot 30L9192					
Other options at ib	m.com/pc/us/accessories						
			(DO4MOK) @ IDM Comp. December 00				

				Mini PCI		Ethernet on Sec			_imited	Avail		
	···· - - - - - - - - -		sk Optical	Comm Bay	CDC	planar C	-		arranty	date		
	ո® III-M 1.06 128MB 13. ոIII-M 1.06 128MB 14.		GB®CD-RW	Wi-Fi ³² /modem				lows® XP Pro lows XP Pro		pr 2002 pr 2002		
	nIII-M 1.06 128MB 14.			Wi-Fi/modem				lows XP Pro		ug 2002		
2657-99U Pentiun	nIII-M 1.06 128MB 13.	3" XGA 20	GB CD-RW	Wi-Fi/modem	None	10/100	No Wind	lows XP Pro	3 ýr A	pr 2002		
	nIII-M 1.06 128MB 14. nIII-M 1.06 128MB 14.			Wi-Fi/modem Wi-Fi/modem				lows XP Pro lows XP Pro		pr 2002 ug 2002		
									3 yı A	uy 2002		
Qualifie	These educational models of the ThinkPad R31 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.											
	del or models for education						ual.					
Positioning Processor	Best blend of portability a Intel® Mobile Pentium®				th			SOFTW	ARE ¹⁴			
1 10063301	133MHz frontside bus	111-W 1.00C	III Z Willi Opecusio	p teerinology wi	uı			ws XP Pro m				
L2 cache	512 KB / at processor spe		AM / non novity / 1	22MU- / DC122	a man li a	mt /	- Microsoft® Windows® XP Professional ²⁰					
Memory	128MB standard / 1GB r 3.3v / two 144-pin SO-D							to-Disk Reco	verv			
Diskette drive	None standard / use opti							dden Service)		
CD-RW	Some: CD-RW / 8X/4X/2	24X Max9/	removable									
DVD-ROM/CD-RW Ultrabay 2000	<i>I Some:</i> DVD-ROM/CD-R One modular bay for inte	W combo /	8X/8X/24X/8X ²¹ S	peed / removable do) / I litrabav™ Pi	IIE-COM	natihla		DED SOFTW	ARE ¹⁴ (8	all)		
Disk	20 or 30GB8 (4200 rpm)	/ upgrädea	ble / S.M.A.R.T. /	,	45 0011	ιρατισίο	• Acces	ded ss ThinkPad				
	supports 2nd disk with o			,			- Acc	ess Connecti	ons			
Display	Some: 13.3 " (337.8mm) Some: 14.1 " (358.1mm)	XGA (102 XGA (102	4x768) TFT color 4x768) TFT color	/ Active Matrix / Active Matrix			- Access Help - Access Support					
Graphics controller	Intel 830MG Integrated controller dynamically al					ICH /	Adobe® Acrobat InterVideo WinDVD (DVD models)					
Graphics - externa	External SVGA to variou	200	 Norto 	n AntiVirus	`	,						
Keyboard	87-key / ThinkPad Butto Internet Scroll Bar ¹³ / pito			Press-to-Select,"			 PC-Doctor™ ThinkPad Utilities IBM Update Connector™.15 Veritas RecordNOW Downloadable					
ThinkLight™ UltraPort™	Illuminates the keyboard None	to improve	visibility in low-lig	ht conditions								
Dimensions ³	12.3" x 10.0" x 1.42" / 31			6 1 lba (0 7kg)			• IBM F	Rapid Restore				
Case material	w/ battery and: 13.3" TF Color: black; All: ABS pl		/kg); 14.1 1F1:	6.1 IDS (2.7Kg)				Data Transfer Director Agen				
Battery - type	ttery - type Lithium Ion 6-cell / intelligent / no second battery in Ultrabay Plus											
Battery - life ¹⁰	2.9 hrs	License - Lotus® SmartSuite® Millennium										
Architecture	Intel 830MG chipset / 82 82801CAM ICH3-M I/O						andl	otus Notes® (
	bus, ethernet, AC-Link)	PCI bus 2.	2 32-bit, 33MHz (*	TI® PCI1410A Cai	dBus,	Mini PCI) /						
Dort Donlington	Firmware Hub / LPC bus Optional ThinkPad Port				el, infra	ared)						
Port Replicator PC Card Std slots	One Type II or one Type				l Video							
Ports	Two USB (Version 1.1)/	parallel / ex	xternal DB-15 mor	nitor / infrared (4N	lbps)/							
V	RJ-11 (modem) / RJ-45	· ,	<u> </u>	<u> </u>	t		4					
Video out Mini PCI	S-video out port (TV out) One Mini PCI type III slo				eable							
Wi-Fi ³² /modem	Mini PCI Wi-Fi ³² wireless	:⁴, Intersil® F	Prism 2.5 chipset, o	dual antennas (in s	side of							
	display and in base), Wi- 56K ⁶ V.90 (V.92-designe	Fi-certified	/ namba Lugant® a	hipaat								
CDC	One Communications D	aughter Ca	rd (CDC) socket / r	not accessible			Liltraha	y Plus integra	ated mod	lular		
Open	One Communications Da	aughter Ca	rd (CDC) socket o	pen			bay sup	ports most Ul	trabay 20	000		
Ethernet Audio support	10/100 ethernet on plana Soft audio / SoundBlaste				codec	:/	devices	including CD	-RW/DV	D		
radio capport	stereo speakers / 1 watt	/ volume up	o, down, mute butt	ons / no internal n				drive, diskette le optional Ult				
Security	microphone input jack (3 Power-on password / ha				rity kov	hole	Device	Carrier adds p	otential			
Limited warranty ¹²	2656: 1 year - EasySen			•				nality by suppo y Plus Numeri				
Limited warranty	2657: 3 years/1 year ba	ttery - Easy	Serv onsite picku	and delivery / se	rvice up	ogrades	Cradle f	or the WorkP	ad® c500)		
04440 00 00444	available	101/1050		5 :		051/0070	Series					
64 MB SO DIMM	I 133MHz NP SDRAM I 133MHz NP SDRAM	19K4650 19K4652	USB Portable Dis ThinkPad R30/R3			05K9276 02K6821						
256 MB SO DIMM	133MHz NP SDRAM	19K4654	ThinkPad 72W A	C Adapter		02K6699	Univers	al 72 watt AC	adante	r		
	1 133MHz NP SDRAM	19K4656	ThinkPad Port Re		Iltraha	02K8667	PC 200	1-compliant				
SuperDisk (LS-24 Zip 250MB Ultrab		08K9616 00N8253	Portable Drive Ba 2000 media	and storage devi		19K4480	IBM Im	d DMI 2.0-cor ageUltra Ser <u>v</u>	npliant	ailahle		
24X-10X CD-RON	M Ultrabay 2000 Drive	05K9233	20GB Hard Disk 9	9.5mm (4200 rpm)		08K9686	IBM Ra	pid Restore F	C availa	able to		
	D-RW Ultrabay 2000 DVD Ultrabay 2000	22P9101 22P9102	60GB HS Hard Di	isk 9.5mm (5400 r isk 12.5mm (5400		08K9816 08K9688		ct software in alized Web-b				
CD-RW/DVD Con	nbo III Ultrabay 2000	22P6980	2656: ServicePac	c ^{®, 22} 1yr IOR 9x5 N	IBD´	30L9188	Setup C	Guide, Service	e and Tr	ouble-		
Second HDD Ada	pter for Ultrabay 2000 rabay Plus Carrier	08K6068 22P5737		: 2yr IOR 9x5 NBC : 3yr IOR 9x5 NBC		30L9189 30L9195	shoot	ting Guide, W	indows	manual		
IBM ThinkPad Ult	rabay Plus c500 Cradle	22P5738	2656: ServicePac	2yr P&L P/U Dep	ot	30L9191		tional Warran x 7 day¹8 toll				
	y Plus Numeric Keypad	22P7330	2656: ServicePac	: 3yr P&L P/U Dep : 2yr IOR 9x5 NBD		30L9192 30L9190		ort during the				
Outer options at ib	m.com/pc/us/accessories			3yr IOR 9x5 NBC		30L9190						
				•								

	Speed	Disk		Mini PCI Comm Bay	CDC	Ethernet	IEEE	Workhorse (W) or Global (G) Avail				
Type-model Processor	r GHz Memory ¹¹ Scre		Optical	wireless/modem		on planar	1394	Preload model date				
2656-2VU Celeron 2656-1FU Celeron 2656-1GU Celeron	1.13 128MB 14.1" 1.13 128MB 13.3" 1.13 128MB 14.1" 1.13 128MB 14.1" 1.13 128MB 13.3"	XGA 20GB	CD-ROM CD-ROM CD-RW DVD CD-ROM	Open Wi-Fi ³² /modem Open Open Open	Modem Modem Open Modem Modem Modem Modem	10/100 10/100 10/100 10/100	1394	Windows® XP Pro No Jun 2002 Windows XP Home No Windows XP Home No Aug 2002				
Positioning Processor L2 cache Memory	Best blend of portabili Intel® Mobile Celeror 256KB / at processor 128MB standard / 1G 3.3v / two 144-pin SO	n [®] 1.13GHz speed / ECC B max ⁷ / SDF -DIMM socke	ıble	SOFTWARE ¹⁴ Windows XP Home models - Microsoft® Windows® XP Home ²⁰ Disk-to-Disk Recovery (in hidden Sortion Portition)								
Diskette drive CD-ROM CD-RW DVD-ROM Ultrabay 2000 Disk	None standard / use of Some: CD-ROM / 24) Some: CD-RW / 8X/4 Some: DVD-ROM / 8. One modular bay for in 20GB* (4200 rpm) / usupports 2nd disk with	X-10X ⁹ speed X/24X Max ⁹ X-3.3X Max ⁹ nterchangeal ogradeable /	d / removab / removable / removable ble devices S.M.A.R.T.	le from Ultrabay 2 e from Ultrabay 2 e from Ultrabay 2 (right side) / Ultra /	2000 000 000		atible	(in hidden Service Partition) Windows XP Pro models - Microsoft® Windows® XP Professional ²⁰ ⇒ Disk-to-Disk Recovery (in hidden Service Partition)				
Display	Some: 13.3 " (337.8m Some: 14.1 " (358.1m							INCLUDED SOFTWARE14 (all)				
Graphics controller Graphics - external Keyboard	Intel 830MG Integrat controller dynamically External SVGA to vari 87-key / ThinkPad Bu Internet Scroll Bar ¹³ /	ed Direct AC allocates 8 to ous modes ston / palm repitch: 19mm;		Preloaded Access ThinkPad - Access Connections - Access Help - Access Support Adobe® Acrobat Reader								
ThinkLight™ UltraPort™	Illuminates the keyboo	ard to improv	e visibility ir	1 low-light conditi	ons			InterVideo WinDVD (DVD models)Norton AntiVirus				
Dimensions ³ Approximate weight ² Case material Battery - type Battery - life ¹⁰	12.3" x 10.0" x 1.42" / 313mm x 254mm x 36mm w/ battery and: <i>CD-ROM</i> : 5.8lb (2.62kg); <i>DVD</i> : 5.75lb (2.61kg); <i>CD-RW</i> : 6.05lb(2.73kg <i>Color</i> : black; <i>All</i> : ABS plastic Lithium Ion 6-cell / intelligent / no second battery in Ultrabay Plus 2VU: 2.4 hrs; <i>Others</i> : 2.6 hrs							Veritas RecordNOW (CD-RW mod Downloadable				
Port Replicator PC Card Std slots Ports Video out IEEE 1394 (FireWire) Mini PCI	Intel 830MG chipset / 82830MG Graphics Memory Controller Hub (GMCH-M) / 82801CAM ICH3-M I/O Controller Hub (ATA-100/66 EIDE, PCI bus, USB, Low Pin Count bus, ethernet, AC-Link) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1410A CardBus, Mini PCI, TI TSB43AB22 IEEE 1394) / Firmware Hub / LPC bus 33MHz (NS PC87392VJG Super I/O for parallel, infrared) Optional ThinkPad Port Replicator (no ThinkPad Dock support)							 IBM Rapid Restore™ PC IBM Data Transfer IBM Director Agent License (CD not included) Lotus® SmartSuite® Millennium and Lotus Notes® Stand Alone Client 				
Wi-Fi ³² /modem		³² wireless⁴, base), Wi-Fi-	Intersil® Pris certified /	sm 2.5 chipset, du	ual anteni	eable nas (in sic	de of	Illerahay Plus intograted modular				
CDC Modem Ethernet Audio support	display and in base), Wi-Fi-certified / 56K ⁶ V.90 (V.92-designed ²⁹) modem combo, Lucent [®] chipset One Communications Daughter Card (CDC) socket (open or modem) / not accessible Some: 56K ⁶ V.90 (V.92-designed ²⁹) CDC modem card / Lucent [®] chip set 10/100 ethernet on planar / Intel [®] 82562ET chipset Soft audio / SoundBlaster-compatible / Analog Devices AD1881A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm)							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				
Security Limited warranty ¹²	Power-on password /	hard disk pa	ssword / sú	pervisor passwo			ole	Ultrabay Plus Numeric Keypad and Cradle for the WorkPad® c500				
128 MB SO DIMM 13		19K4650 19K4652	BM USB P	ortable Diskette I USB 2.0 Memory	Drive	05k 22F	K9276 P8998 P2698	Series				
256 MB SO DIMM 133MHz NP SDRAM 512 MB SO DIMM 133MHz NP SDRAM SuperDisk (LS-240) UltraBay 2000 Zip 250MB Ultrabay 2000 Drive 24X-10X CD-ROM Ultrabay 2000 Ultralight 8X Max DVD Ultrabay 2000 CD-RW/DVD Combo III Ultrabay 2000 Second HDD Adapter for Ultrabay 2000 IBM ThinkPad Ultrabay Plus Carrier IBM ThinkPad Disk 9.5mm (5400 r 60GB HS Hard Disk 9.5mm (5400 r 60GB HS Hard Disk 9.5mm (5400 r 60GB HS Hard Disk 12.5mm (5400 r 60GB HS Hard Disk 12.5mm (5400 r 60GB HS Hard Disk 9.5mm (5400 r 60GB HS Hard Disk						22F 92F 02F 02F 02F 08F 08F 08F 30L 30L 30L 30L 30L	75297 75298 75298 76821 76699 79686 79686 79688 9189 9189 9195 9191 9192	Universal 72 watt AC adapter PC 2001-compliant CIM and DMI 2.0-compliant IBM ImageUltra Services available IBM Rapid Restore PC available to protect software image and data Personalized Web-based support ³¹ Proactive e-mail updates ³¹ Setup Guide, Service and Trouble-shooting Guide, Windows manual International Warranty Service ¹⁷ 24x7 ¹⁸ toll-free support for warranty-related issues during the warranty period ¹²				

2000 media and storage devices) ThinkPad Port Replicator

19K4480 02K8667

Type-model Proces	Speed sor GHz M	lemory ¹¹ Scre	Disk en GB ⁸	Optical in Ultrabay 2000	Mini PCI Comm Bay wireless/modem	CDC modem	Ethernet on IEE planar 13			
2656-L2U Celerc 2656-M2U Celerc 2656-N2U Celerc 2656-L1U Celerc 2656-LBU Celerc 2656-NAU Celerc	on 1.2 12 on 1.2 12 on 1.2 12 on 1.2 12 on 1.2 25	28MB 13.3" 28MB 13.3" 28MB 14.1" 28MB 14.1" 28MB 13.3" 28MB 14.1" 28MB 14.1" 28MB 14.1" 28MB 14.1" 28MB 14.1"	XGA 20GB XGA 20GB XGA 20GB XGA 20GB XGA 30GB	CD-ROM CD-ROM Combo III CD-ROM None (open	Open Wi-Fi ³² /modem Open Open Open Open Open Open	Modem Open Modem Modem Modem Modem Modem	10/100 10/100 10/100 10/100	Windows® XP Pro No Sep 2002 Windows XP Home No Sep 2002 Windows XP Home No Sep 2002 Windows XP Home No Sep 2002		
Positioning					wo-spindle syster	n		SOFTWARE ¹⁴		
Processor L2 cache Memory	256KB / at 128MB or 3.3v / two	t processor sp 256MB stand 144-pin SO-D	eed / ECC lard / 1GB n IMM socke	nax ⁷ / SDRAN ts / std mem i	frontside bus I / non-parity / 13 n one socket / on r USB-based disk	e socket	available	Windows XP Home models - Microsoft® Windows® XP Home²0 ⇒ Disk-to-Disk Recovery (in hidden Service Partition)		
Diskette drive CD-ROM Combo DVD-ROM Ultrabay 2000 Disk	Windows XP Pro models - Microsoft® Windows® XP Professional® Disk-to-Disk Recovery (in hidden Service Partition)									
Display					color / Active Mat color / Active Mat			INCLUDED SOFTWARE ¹⁴ (all)		
Graphics controlle	controller of External S	dynamically a VGA to vario	llocates 8 to us modes su	32MB ¹¹ of sy uch as 16.7 m	ystem memory for hillion colors, 85H	r graphics z, or 1600	;	Preloaded Access ThinkPad Access Connections Access Help		
Keyboard ThinkLight™ Dimensions³	Internet So Illuminates	croll Bar ¹³ / pit	ch: 19mm; s d to improve	stroke: 2.7mn visibility in lo	tt®, "Press-to-Sele n ow-light conditions		aPort™	- Access Support - Adobe® Acrobat Reader InterVideo WinDVD (DVD models) Norton AntiVirus (OEM Edition) PC-Doctor™ ThinkPad Utilities		
Approximate weight		and: CD-ROI	1:5.8 lb (2.6	(2kg); <i>DVD:</i> 5	5.75 lb (2.61kg); 3 <i>U:</i> 5.3 lb (2.41kg))				
Case material Battery - type Battery - life ¹⁰	Color: blac Lithium Ior Wireless L	IBM Update Connector™.15 IBM RecordNOW and DLA by Veritas® (combo models) IBM Rapid Restore™ PC								
Architecture	82801CAN Count bus Mini PCI, T LPC bus 3	И ICH3-M I/O , ethernet, AC ГI TSB43AB2 3MHz (NS PC	Controller F C-Link) / PCI 2 IEEE 139 287392VJG	łub (ATA-100 bus 2.2 32-b 4) / Firmware Super I/O foi	r parallel, infrared	is, USB, L 011410A (ow Pin	Downloadable IBM Director Agent Software Delivery Assistant System Migration Assistant		
PC Card Std slots Ports	Port Replicator PC Card Std slots Ports Ports Ports Ports Optional ThinkPad Port Replicator (no ThinkPad Dock support) One Type II or one Type III / CardBus 32-bit / PCMCIA 2.1 Two USB (Version 1.1) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no keyboard or mouse or serial port									
Video out IEEE 1394 Mini PCI Wi-Fi ³² /modem	Some: IEE One Mini F Some: Min	ni PCI Wi-Fi ³²	Ŵire) Port (₄ ot (Commun wireless⁴, Ir	1-pin) ications Bay) itersil® Prism	/ not customer up 2.5 chipset, dual a	ogradable antennas	(in side of	Ultrabay Plus integrated modular		
display and in base), Wi-Fi-certified / 56K ⁶ V.90 (V.92-designed ²⁹) modem combo, Lucent® chipset CDC One Communications Daughter Card (CDC) socket (open or modem) / not accessible Some: 56K ⁶ V.90 (V.92-designed ²⁹) CDC modem card / Lucent® chip set Ethernet 10/100 ethernet on planar / Intel® 82562ET chipset Audio support Soft audio / SoundBlaster-compatible / Analog Devices AD1881A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) Security Power-on password / hard disk password / supervisor password / security keyhole								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		
Limited warranty ¹²	1 year - Ea	asyServ ^{TM,19} o	nsite pickup	and delivery	service upgrades	s ²² availat	ole	Genes		
64 MB SO DIMN 128 MB SO DIMN 256 MB SO DIMN 512 MB SO DIMN	Л 133MHz N Л 133MHz N Л 133MHz N	NP SDRAM NP SDRAM NP SDRAM	19K4650 19K4652 19K4654 19K4656	IBM 128MB IBM USB 2. IBM ThinkP	USB 2.0 Memory 0 Portable CD-R\ ad USB 2.0 Cardl erial Parallel Adap	Key V Drive Bus Adap	22P899 22P529	97 5		
ThinkPad Remov Zip 250MB Ultrab 24X-10X CD-RO Ultralight 8X Max CD-RW/DVD Col Second HDD Ada IBM ThinkPad Ult IBM ThinkPad Ultraba Portable Drive Ba 2000 media ThinkPad Port Re IBM High Rate W IBM USB Portabl	rable Disket pay 2000 Dri M Ultrabay is a DVD Ultra mbo III Ultra pater for Ultr trabay Plus trabay Plus pay Plus Num ay 2000 (acc and storag eplicator fireless LAN e Diskette E	te Drive ive 2000 Drive bay 2000 abay 2000 rabay 2000 Carrier c500 Cradle heric Keypad cepts Ultraba e devices) I PC Card 120 Drive	08K9603 00N8253 05K9233 22P9102 22P6980 08K6068 22P5737 22P5738 22P7330 y 19K4480 02K8667 09N9904 05K9276	ThinkPad R ThinkPad 7: 20GB Hard 40GB HS Hi 60GB HS Hi ServicePac ServicePac ServicePac ServicePac ServicePac ServicePac ServicePac ServicePac ServicePac ServicePac ServicePac	30 Series Li-Ion È 2W AC Adapter Disk Drive Disk Drive ard Disk 9.5mm (5 ard Disk 12.5mm (6 0.22 1yr IOR 9x5 NBE 3yr IOR 9x5 NBE 4yr IOR 9x5 NBE 4yr IOR 9x5 NBE 2yr IOR 9x5 NBE 2yr P&L P/U Dep 4yr P&L P/U Dep 4yr P&L P/U Dep	8attery 5400 rpm) 5400 rpm NBD))))) oot oot	02K682 02K669 08K968 08K968 08K981 08K968 30L918 30L918 30L919 69P919 30L919 30L919	Universal 72 watt AC adapter PC 2001-compliant CIM and DMI 2.0-compliant ACPI 1.0b and 2.0-compliant IBM ImageUltra™ Services available IBM Rapid Restore PC available to protect software image and data Personalized Web-based support³¹ Proactive e-mail updates³¹ Setup Guide, Service and Trouble- shooting Guide, Windows manua International Warranty Service¹² 24x7¹⁵ toll-free support for warranty related issues during the warranty		
Other options at it	nn.com/pc/t	us/accessorie	5	Servicerac	5yr P&L P/U Dep	υι	69P919	97 period ¹²		