

# IBM ThinkPad Power Series 820 - withdrawn

IBM® ThinkPad®: <div>≧ 820</div> <div>PowerPC - TFT color - CD-ROM</div>		ThinkPad Power Series 820 strengths:						
Processor type	<b>Power PC 603e</b> / 100/33 MHz / 32 KB L1 cache	<div>⚡ <b>PowerPC performance</b></div> <div>⚡ <b>AIX or NT preloaded (or no operating sys)</b></div> <div>⚡ <b>Removable, double speed, 5.25" CD-ROM</b></div> <div>⚡ <b>Standard or optional Video Card (acceleration, composite video in/out)</b></div>						
L2 cache	256 KB / write through / 2 way associative / 32 bit transfers							
Processor / L2 upgrade	None							
Removable diskette	Internal or external 3.5" 1.44 MB ○ / external diskette drive connector Can use diskette and CD-ROM simultaneously as diskette drive ships with an external case with cable							
Removable CD-ROM	<b>5.25" CD-ROM</b> ○ / double speed / multi-session / XA / SCSI-2 / bootable The middle bay supports either the standard diskette drive or standard CD-ROM	Operating System preloads:						
Type - model	6040-xxx (listed below)	<div>① IBM AIX Version 4 for Clients 4.1.3</div> <div>- Ultima Services Ver 2.1.2</div> <div>- Insignia SoftWindows Ver 1.1</div> <div>- Speech Dictation</div> <div>- Personal Conferencing for AIX (some mod)</div> <div>- Essentials! (catalogs and support)</div> <div>- Power, Performance, Potential multimedia presentation</div> <div>- CD-ROMs included: Program Pack, AIX backup, Pers Conferencing for AIX (some)</div> <div>- Black 3 button mouse</div> <div>② Microsoft Windows NT 3.51 Workstation</div> <div>- Essentials! (catalogs and support)</div> <div>- Power, Performance, Potential presenta</div> <div>- Compuserve WinCIM Power Series Ed</div> <div>- Introducing ThinkPad Power Series 820</div> <div>- CD-ROMs included: Program Pack, NT backup</div> <div>③ No preloaded operating system</div> <div>- CD-ROMs included: Program Pack, Pers Conferencing for AIX (some mod)</div> <div>④ IBM OS/2 Warp Connect (when available)</div> <div>⑤ Solaris (when available)</div> <div>G10 Graphics with Motion Video Adapter (some models) provides:</div> <div>- <b>Acceleration</b> of motion video with scaling (no interpolation) of image. Video may be scaled up to full screen without frame rate degradation</div> <div>- <b>Composite in</b> (from camcorder, TV, VCR) for video capture (capture and digitize video), still image capture (capture and digitize still photo images), and overlay (view video on LCD without capturing it to disk). Uses NTSC or PAL</div> <div>- <b>Composite out</b> (to camcorder, TV, VCR) in NTSC.</div> <div>- Includes a cable with in/out RCA jacks to connect to the "integrated video connector" on back of unit</div>						
Available date	July 1995 or later (listed below)							
Disk controller	SCSI-2 Fast (for disk, CD-ROM) / external SCSI-2 50 pin connector							
Removable disk - size	<i>Choice:</i> <b>540 MB</b> 14 ms □ ○ / <b>810 MB</b> 14 ms □ ○ / <b>1.2 GB</b> 12 ms ○							
Display - type	<i>Choice:</i> Color 640 x 480 or Color 800 x 600 (listed below)							
Display - technology	<b>Black Matrix TFT - active matrix / up to 65,536 simultaneous colors</b>							
Display - diagonal size	10.4 inch / 100 to 1 contrast ratio for 640 x 480 / 110 to 1 for 800 x 600							
Graphics - controller	WD90C24A Rev C with 1 MB DRAM (called G10 Graphics Adapter)							
Graphics - vendor	Western Digital / External SVGA to 1024 x 768 w/ 256 colors (up to 75 Hz)							
Graph - arch/data path	PCI 2.0 / 32 bit / Simultaneous LCD and CRT / 180 degree tilt							
Video function	<i>Some:</i> <b>Video acceleration / composite in/out</b> (called G10 Graphics with Motion Video Adapter) with Personal Conferencing for AIX CD-ROM							
Memory - std / max	16 or 32 MB / 48 MB 70 ns / <b>parity</b> / 5 volt / 32 bit transfers	<b>ALL 820 MODELS</b> <b>Liftable (pop-up) keyboard to access and remove CD-ROM, diskette drive, disk, battery, and memory</b>						
Mem - sockets	Standard: 1 or 2 SO DIMMs; available: 2 or 1 SO DIMM sockets (16 MB							
Mem-options available	8, 16 MB JEDEC 72 pin SO DIMMs DIMM(s) std)							
Keyboard / # of keys	Full size alp/num / 84 (no Fn key)							
Keyboard slope	<b>Palm rest space</b>							
Mouse/pointing	<b>TrackPoint III™</b>							
Ext keyboard support	Yes (with option cable)							
Dimensions	11.7 x 8.3 x 2.2" (213 cubic inches)							
Color	Black							
Weight (with battery)	7.5 pounds (with CD-ROM)							
Battery - type	Nickel hydride (NiMH) / intelligent							
Battery - life	2 to 5 hours							
Charge time - on / off	2.0 hrs / 1.5 hrs							
Architecture	PCI 2.0 / 32 bit / 33 MHz / 5 volt (SCSI, motion video) ISA (audio, PCMCIA, diskette, serial, parallel, 120-pin external expansion) VL-Bus 2.0 / 32 bit (graphics via PCI-to-VL Bridge)							
Docking Station	None							
Port replicator	None							
PCMCIA™ 2.1 slots	2 Type I or 2 Type II or 1 Type III							
Serial / parallel ports	One 9 pin; 16550A / Enhanced Parallel Port (EPP and IEEE 1284)							
Other features	Universal AC adapter, 50 watts, not wallmount / Drive Startup Sequence							
Data/fax modem	None (use PCMCIA)							
Audio support	<b>CD quality audio (44.1 kHz, 16 bit, stereo)</b> / Crystal Semiconductor™ CS4231 Internal stereo speakers (.5 watt each) / dial volume control Internal microphone / IBM Personal Microphone (earphone and headset)							
Audio in/out jacks	Input jack / output jack							
Infrared ports	None							
Security	Power-on password / Supervisor password / Hardware security loop (locking lever) / Keyboard lock / Locking device keyhole (Kensington™ MicroSaver™ cable lock) / PCMCIA card lock							
Preinstalled software	<i>Choice:</i> none or select a supported operating system (listed on side)							
Warranty	<b>3 year</b> - ThinkPad EasyServ							
Warranty options	ThinkPad EasyServ Overnight Repair Option							
<b>Type-Model</b>	<b>Part</b>	<b>Mem</b>	<b>Disk</b>	<b>LCD</b>	<b>Graphics</b>	<b>Op Sys</b>	<b>Price</b>	<b>Avail</b>
≧ 6040-OCD30H1553		<b>32 MB</b>	1.2 GB	800x600	G10	None	\$ 7,999	Aug 95
≧ 6040-ODD30H1554		<b>32 MB</b>	1.2 GB	800x600	G10	AIX	8,799	Aug 95
≧ 6040-OED30H1555		<b>32 MB</b>	1.2 GB	800x600	G10	NT	8,299	Aug 95
≧ 6040-06D	30H1477	32 MB	810 MB	800x600	G10	None	7,549	Jul 95
≧ 6040-07D	30H1478	32 MB	810 MB	800x600	G10	AIX	8,399	Jul 95
≧ 6040-08D	30H1480	32 MB	810 MB	800x600	G10	NT	7,849	Jul 95
≧ 6040-966	30H1482	16 MB	810 MB	640x480	G10 w/ Motion	None	6,449	Jul 95
≧ 6040-986	30H1484	16 MB	810 MB	640x480	G10 w/ Motion	NT	6,749	Jul 95
≧ 6040-977	30H1486	<b>32 MB</b>	810 MB	640x480	G10 w/ Motion	AIX	8,399	Jul 95
≧ 6040-006	30H1487	16 MB	540 MB	640x480	G10	None	5,699	Jul 95
≧ 6040-026	30H1489	16 MB	540 MB	640x480	G10	NT	5,999	Jul 95
≧ 6040-017	30H1491	<b>32 MB</b>	540 MB	640x480	G10	AIX	7,649	Jul 95

**ThinkPad EasyServ™:** customer calls 1-800-772-2227, courier service picks up ThinkPad at any location, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). Overnight repair option in US available for \$99  
 □ = Upgradeable; ○ = Removable; ≧ = Withdrawn effective March 20, 1996

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 (820) Compiled by Roger Dodson, IBM. February 1996