

## IBM ThinkPad X Series notebooks

**IBM recommends  
Microsoft® Windows®  
XP Professional for  
Business**



### Highlights

- **Count on excellent wireless performance and extended battery life with Intel® Centrino® Mobile Technology (select models)**
- **NEW! Travel light. The IBM ThinkPad X40 notebook is only 1.2kg<sup>1</sup> and 2.1cm<sup>2</sup> thin – the lightest and thinnest IBM ultraportable ever**
- **NEW! Go long. The 8-cell system battery runs up to 7.5 hours on certain X40 models<sup>3</sup>. No leading notebook brand offers a longer standard battery life<sup>4</sup>**
- **Enjoy up to 10 hours of all-day computing with select models that feature the system battery and an optional extended-life battery<sup>5</sup>**
- **NEW! Expand your system in a snap with the optional IBM ThinkPad X3 or X4 UltraBase Dock and a choice of optical drives**
- **NEW! Guard data against drop damage. The IBM Active Protection System on X40 models provides the hard disk drive up to four times greater impact safety than in notebooks without it.**

### Tonnes of performance, light on weight

The thin, light, redesigned IBM ThinkPad X40 notebook with Intel Centrino Mobile Technology (select models) is perfect for mobile staff. It features long battery life and the optional ThinkPad X4 UltraBase Dock for a choice of drives and connections.

### The latest breakthrough

Like air bag technology, the new IBM Active Protection System features built-in motion sensors. When a fall is detected, this innovation helps protect the hard disk drive. This makes it less likely data on your hard disk drive will be lost from some crashes, such as being dropped or knocked off a desk.

### Business advantage – it's in here

To help decrease expenses, look inside for IBM ThinkVantage Technologies and ThinkVantage Design elements. You'll see how to work more confidently and efficiently – and gain more time to focus on strategic goals.

## Get the edge: IBM ThinkVantage Technologies and Designs

- **Deploy the most secure wireless notebooks in the industry** with the IBM Embedded Security Subsystem 2.0. It provides built-in hardware and downloadable software-based protection. Nobody offers stronger security as a standard feature.
- **Support your mobile workforce** with ThinkPad notebooks and IBM Access Connections software. It's the easiest way to switch between wired and wireless networks.
- **Improve signal reception** with the IBM UltraConnect Antenna. To maximise range, this antenna is built into the display of ThinkPad X Series notebooks. Plus, it supports multiple frequencies to optimise coverage and performance<sup>6</sup>.
- **Put online<sup>7</sup> and on-system information at your employees' fingertips** with Access IBM. With the push of a button, staff can obtain answers to common IT questions.
- **Type more comfortably** and efficiently with the full-size<sup>8</sup> keyboard – a big advantage on an ultraportable.
- **Work in the dark** or in the dim light of an airplane with the unique IBM ThinkLight. It's built right into the screen.
- **NEW! Help yourself** – meet IBM Rescue and Recovery with Rapid Restore software. With this enhanced, one-button solution, staff can restore systems by themselves – often without a call to the help desk (X31 models feature rapid restore ultra only). According to *Technology Business Research* (March 2003), using Rapid Restore can save up to \$400 per incident in IT support costs.

“... if an average corporation were to apply best operational practices and IBM's ThinkVantage Technologies as defined today, these customers would potentially see reduced ongoing operating costs greater than the cost of new PC or notebook computer hardware itself.”

– Aaron Goldberg, Vice-President,  
Ziff-Davis Market Experts



IBM ThinkPad X40 notebook with optional IBM ThinkPad X4 UltraBase Dock and DVD-ROM Ultrabay Slim Drive.

## Wireless Security made easy



**Control wireless access and strengthen network security** with select ThinkPad X Series notebooks that support Cisco Compatible Extensions. You'll get a PC that is tested to run at the highest levels of performance in a secure, Cisco wireless environment. This includes wireless network password protection and dynamic encryption capabilities available only to users connected to Cisco Aironet wireless networks.

The IBM ThinkPad X40 notebook with wireless has been tested in accordance with interoperability criteria set by Cisco Systems, Inc. and is compatible with Cisco Aironet access points running software versions 12.01, 12.02, 12.03, 12.2(8)JA, or 12.2(11)JA. For full disclaimer, see IBM ThinkPad X40 notebook product documentation or the following Web site: [ibm.com/thinkpad](http://ibm.com/thinkpad)

## Service in São Tomé? Sure

**Rely on award-winning IBM Service and Support.** Choose an IBM

ThinkPad X Series notebook. With just a few clicks, workers can enjoy a wealth of on-system and online resources. Plus, they'll have support in more than 160 countries<sup>9</sup> worldwide, from São Tomé to Saskatchewan.

## IBM ThinkPad X Series notebook specifications

Model	X40	X31
Machine type	2371	2672
Processor/Level 2 Cache <sup>10</sup>	Low Voltage Intel Pentium® Processor 1.2GHz <sup>11</sup> /1024KB	Intel Pentium Processor 1.4GHz or 1.6GHz/1024KB
Display/Resolution	12.1" TFT XGA/1024x768	12.1" TFT XGA/1024x768
Hard disk drive	40GB <sup>12</sup> 4200rpm	40GB <sup>13</sup> 4200rpm
Memory <sup>14</sup> (std./max)	256MB/1280MB or 512MB/1536MB PC2700 DDR SDRAM	256MB or 512MB/2GB PC2100 DDR SDRAM
Video graphics	Intel Extreme Graphics 2	Modem RADEON 16MB DDR 4X AGP
Integrated communications	Modem, Gigabit Ethernet	Modem, 10/100 or Gigabit Ethernet (select models)
	IBM 11b/g Wi-Fi wireless <sup>15</sup> (select models) IBM 11a/b/g Wi-Fi wireless (select models) Intel PRO/Wireless Network Connection 802.11b (select models) Cisco Aironet 802.11b wireless and IBM 11a/b (select X31 models only) Bluetooth <sup>16</sup> (select models) Wireless upgradeable with IBM accessories	
Li-Ion battery life <sup>3</sup>	up to 3.5hrs (4-cell); up to 7.5hrs (8-cell)	up to 6hrs
With optional Extended Life Battery	up to 6.8hrs (4-cell); up to 10hrs (8-cell)	up to 10.1hrs
Ports	Common ports: 2 USB 2.0; Infrared; external display; AC adapter; RJ-11; RJ-45; audio: headphone/line-out, external microphone	
	Expansion bus (for optional X4 UltraBase Dock or ThinkPad X40 Series Extended Life Battery)	IEEE 1394; dock/port replicator, line-in
Slots	Type I or II PC Card; 1 Secure Digital Card	Type I or 1 Type II PC Card; 1 Compact Flash Type II
IBM Embedded Security Subsystem 2.0	yes	yes
IBM Active Protection System	yes	no
Keyboard	Ergonomic keyboard (87 keys, 18.5mm vertical stroke and 18.2mm horizontal key pitch) with palm rest, TrackPoint pointing device with 'Press-to-Select', Internet Scroll Bar <sup>7</sup> , intuitive volume and Access IBM	
Dimensions <sup>2</sup>	26.8x21.1x2.1-2.7cm (4-cell) 26.8x23.7x2.1-2.7cm (8-cell)	27.3x22.3x2.5-3.0cm
Weight <sup>1</sup>	1.23kg (4-cell) or 1.43kg (8-cell)	1.64kg
Limited warranty <sup>17</sup>	3 year/1 year battery	3 year/1 year battery

For important warranty information, see page 4.

Wireless and Bluetooth models not available in all European countries.

## IBM recommends Microsoft Windows XP Professional for Business

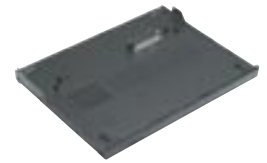
### IBM ThinkPad X Series software

Preloaded operating system	Microsoft Windows XP Professional or Windows 2000 Professional	
Supported operating systems <sup>18</sup>	Microsoft Windows XP Professional, Microsoft Windows XP Home Edition, Microsoft Windows 2000 Professional, Microsoft Windows NT® 4.0	
Included software <sup>19</sup> (preloaded)	<ul style="list-style-type: none"> <li>Access IBM</li> <li>Access Connections</li> <li>Adobe Acrobat Reader</li> <li>IBM RecordNOW and DLA (CD-RW models)</li> <li>IBM Rescue and Recovery with Rapid Restore (X40)</li> </ul>	<ul style="list-style-type: none"> <li>Rapid Restore Ultra (X31)</li> <li>InterVideo WinDVD (DVD models)</li> <li>Norton AntiVirus 2003 (OEM Edition)</li> <li>PC-Doctor</li> <li>ThinkPad Utilities</li> <li>Update Connector<sup>20</sup></li> </ul>
	(downloadable)	<ul style="list-style-type: none"> <li>Client Security Software</li> <li>IBM Director Agent</li> </ul>
(licence – CD not included)	<ul style="list-style-type: none"> <li>IBM Lotus Smartsuite Millennium</li> </ul>	<ul style="list-style-type: none"> <li>IBM Lotus Notes Stand-alone Client</li> </ul>

## Increase performance

### IBM ThinkPad X4 UltraBase Dock

92P3429



Lightweight (0.6kg) dock simplifies cable management and supports Ultrabay Slim options – even an Ultrabay Slim battery for extra unplugged hours. Includes 3-port USB 2.0 hub as well as Ethernet and external monitor connections. Key lock secures notebook to dock. To fasten to desks, there is a slot for an optional cable lock.

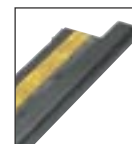
92P1006



### IBM ThinkPad X40 Series Extended Life Battery

Compute for up to 10 hours when combined with the 8-cell system battery on select models.

92P1005



### IBM ThinkPad X40 Series 8 Cell Li-Ion Battery

Provides up to 7.5 hours of battery life.

Visit [ibm.com/pc/europe/](http://ibm.com/pc/europe/) accessories to browse the complete selection of IBM accessories and upgrades.

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- <sup>1</sup> Includes battery. Weight may vary due to vendor components, manufacturing process and options.
- <sup>2</sup> Thinness may vary at certain points on the system.
- <sup>3</sup> These model numbers achieved the Ziff Davis Media Inc.'s Business Winstone 2002 BatteryMark Version 1.0, Battery Rundown Time of at least the time shown. This test was performed without independent verification by the VeriTest testing division of Lionbridge Technologies, Inc. ('VeriTest') nor Ziff Davis Media Inc.; neither Ziff Davis Media Inc. nor VeriTest makes any representations or warranties as to these test results. Winstone is a registered trademark and BatteryMark is a trademark of Ziff Davis Publishing Holdings Inc., in the U.S. and other countries. A description of the environment under which the test was performed is available at **ibm.com/pc/ww/thinkpad/batterylife**. Battery life (and recharge times) will vary based on

many factors including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Refer to **ibm.com/support** and enter your machine type and model number for more information.

- <sup>4</sup> Based on manufacturer's published figures for IDC data for top 5 vendors in 2003 notebook sales, as of 29/1/2004.

<sup>5</sup> The ThinkPad X40 supports only two batteries in use at one time. For 10.1hrs to be achieved on the X40, the 8-cell battery is required.

<sup>6</sup> Requires wireless-enabled options, sold separately.

<sup>7</sup> Requires separate Internet access account, not included.

<sup>8</sup> As defined by ISO/IEC 15412.

<sup>9</sup> International Warranty Service is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

<sup>10</sup> At processor speed.

<sup>11</sup> Mobile Intel Pentium Processors feature Intel SpeedStep® Technology. With Intel SpeedStep, processor speed may be reduced to conserve battery power.

<sup>12</sup> Delivered with Microsoft Windows XP preloaded and a Recovery Partition on the hard disk drive.

<sup>13</sup> For hard disk drive, GB equals one thousand million bytes. Accessible capacity is less; up to 4GB is service partition.

<sup>14</sup> For PCs without a separate video card, memory supports both system and video. Accessible system memory is up to 64MB less than the amount stated, depending on video mode.

<sup>15</sup> 11a, 11b and 11g wireless are based on IEEE 802.11a, 802.11b and 802.11g, respectively. An adapter with 11a/b, or 11a/b/g can communicate on any of its supported formats; the actual connection will be based on the access point to which it connects.

<sup>16</sup> The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by IBM is under licence.

<sup>17</sup> Support unrelated to a warranty issue may be subject to additional charges.

<sup>18</sup> Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to **ibm.com/pc/support** and enter your machine type and model number for more information.

<sup>19</sup> Some software may differ from its retail version (if available), and may not include user manuals or all program functionality. Software licence agreements may apply.

<sup>20</sup> Update Connector is available at no charge to registered ThinkPad customers during the limited warranty period. Line charges may apply.

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