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## ThinkPad X220 Top Options

Turning Desktops into Solutions  
Options and Accessories

February 2011

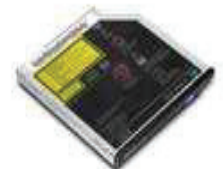


# ThinkPad X220 Top Options

Top Options	Part Number
ThinkPad Ultrabase Series 3	0A33932
ThinkPad Ultrabay Slim DVD Burner II (SATA)	43N3229
ThinkPad Port Replicator Series 3	433610W (Using the system adapter)
ThinkPad Mini Dock Series 3	433710U
ThinkPad Mini Dock Plus Series 3 90W	433810U
ThinkPad Mini Dock Plus Series 3 135W	433820U
ThinkPad Mini Dock Plus Series 3 170W	433830U
Lenovo 90W Ultraslim AC/DC Combo Adapter	41R4493
ThinkPad 90W AC Adapter	40Y7659
ThinkPad 65W AC Adapter	40Y7696
ThinkPad 65W AC Adapter with USB Hub	57Y4600
ThinkPad Battery 29 (4 cell), 29+ (6 cell), 29++ (9 cell)	0A36281, 0A36282, 0A36283
ThinkPad Battery 19+ (6 cell Slim External)*	0A36280 *
ThinkPad Ultraportable Case	41U5062
ThinkPad Executive Leather Case	43R2480
ThinkPad Business Backpack	43R2482
Wenger Slim Case for Lenovo	57Y4273
Wenger Deluxe Slim Case for Lenovo	57Y4272
Wenger Backpack for Lenovo	57Y4271
1GB, 2GB , 4GB PC3-10600 DDR3-1333 SODIMM Memory	55Y3709, 55Y3710, 55Y3711
Kensington Security Cable Lock by Lenovo	73P2582
Kensington Twin Head Cable Lock from Lenovo	45K1620
ThinkPad Gobi Mobile Broadband (US)	0A36185
ThinkPad Mobile Broadband (Canada)	0A36186
ThinkPad Bluetooth Laser Mouse, ThinkPad Travel Mouse	41U5008, 31P7410
ThinkPad In-Ear Headphones	57Y4488
Lenovo USB-to-DVI Monitor Adapter	45K5296
Lenovo USB Portable DVD Burner	43N3264

# ThinkPad Ultrabase Series 3

- Allows users to snap into an array of connectivity and expansion capabilities
- Ultrabay Slim Bay (SATA)
  - Can accept 43N3229 ThinkPad DVD Burner
- 4 USB 2.0 ports
- VGA analog and DisplayPort monitor port
  - Attach two Flat Panel monitors for multi-monitoring
    - Note: ThinkPad display becomes disabled, and is blank
  - VGA analog port supports 2048 x 1536 maximum resolution
  - DisplayPort supports 2560 x 1600 maximum resolution
  - Optional cables (maximum resolution 1920 x 1200):
    - 45J7915 - DisplayPort to Single-Link DVI-D (Digital) Monitor Cable
    - 57Y4393 - Lenovo DisplayPort to VGA Monitor Cable
- Communications Ports: RJ-45 Ethernet and modem
- Audio ports: Microphone in, headphone out
- Key lock and Cable Lock slot for physical security
- Note: Ultrabase Series 3 (0A33932) does not include a power adapter.
  - Supports attachment of 65W and 90W Adapters.



<b>ThinkPad Ultrabase Series 3</b>	<b>(0A33932)</b>
<b>ThinkPad DVD Burner Ultrabay Slim Drive II (SATA)</b>	<b>(43N3229)</b>

ThinkPad DVD Burner  
Ultrabay Slim Drive II  
(SATA) (43N3229)

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# ThinkPad Port Replicator Series 3

- Rear ports offers basic cable management and connectivity;
- Quick and easy access to peripherals
  - VGA analog video port
  - RJ-45 Gigabit Ethernet
  - 4 USB 2.0 ports
  - Cable Lock slot for physical security
  - Does not include AC Adapter
    - Compatible with 65W, 90W, and 135W AC Adapters



**ThinkPad Port Replicator Series 3**

**(433610W)**

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# ThinkPad Mini Dock Series 3

- Rear ports offers enhanced cable management for users who require convenient security, upgraded video capabilities, or quick and easy access to peripherals
  - Three video ports for multiple monitors:
    - VGA analog
    - Single-Link DVI-D digital
    - DisplayPort
    - Only 2 video ports can be active
  - RJ-45 Gigabit Ethernet
  - 6 USB 2.0 ports
  - Audio ports: Audio In, Audio Out
  - Key Lock and Cable Lock Slot for physical security
    - Includes two security keys



**ThinkPad Mini Dock Series 3**

**(433710U)**

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# ThinkPad Mini Dock Plus

- Rear ports offers advanced cable management for users who require Dual Digital Display, e-SATA storage, or quick and easy access to peripherals
  - Five video ports for multiple monitors:
    - VGA analog
    - 2 Single-Link DVI-D digital
    - 2 DisplayPort
    - Only 2 video ports can be active
  - RJ-45 Gigabit Ethernet
  - 6 USB 2.0 ports
  - eSATA port
  - Audio ports: Audio In, Audio Out
  - Key Lock and Cable Lock Slot for physical security
    - Includes two security keys



<b>ThinkPad Mini Dock Plus Series 3 90W</b>	<b>(433810U)</b>
<b>ThinkPad Mini Dock Plus Series 3 135W</b>	<b>(433820U)</b>
<b>ThinkPad Mini Dock Plus Series 3 170W</b>	<b>(433830U)</b>

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# Lenovo 90W Ultraslim AC/DC Combo Adapter

- Power your notebook in the office, at home, on the road, or in the air
- Simultaneously charge cell phones or PDA devices
- Small, lightweight: 400 grams (0.88lbs)



- Works with many ThinkPad and Lenovo notebooks
- Included 20V power tip (41R4484)
- Optional 16V (41R4343) and 19V (41R4319) power tips
- Includes Generic USB device tip and Dual Charging Cable (41R4345)



**AC Configuration**



**DC Configuration**

**Lenovo 90W Ultraslim AC/DC Combo Adapter**

**(41R4493)**



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# ThinkPad AC Adapters

- Have a spare power adapter at home, or your carry case
- 90W AC Adapter
  - More power, less time charging
  - 360 g (0.79lbs)
- 65W AC Adapter
  - Smallest adapter available from ThinkPad
  - 260 g (0.57lbs.)
- 135W AC Adapter
  - Required on T520 Quad Core Models
  - 830 g (1.83lbs)
- Note: 65W AC adapter supports Dual Core models with integrated graphics only  
Dual Core models with discrete should use the 90W AC Adapter



<b>ThinkPad and Lenovo 90W AC Adapter</b>	<b>(40Y7659)</b>
<b>ThinkPad and Lenovo 65W AC Adapter</b>	<b>(40Y7696)</b>

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# ThinkPad 65W AC Adapter with USB Hub

- Staying powered and connected to your workspace is now more convenient
- Combines a 65W notebook AC power adapter with a 4-port powered USB hub
  - 3 standard USB 2.0 ports
  - 1 power-only USB 2.0 port – Ideal for charging mobile phones
- For use at home or on the road
- Use the flexible Lenovo Power Hub to
  - Charge your notebook battery
  - Access USB accessories (mice, keyboards, memory keys) in your workspace
  - Charge those USB accessories even when your notebook is away



Connect to notebook for power

Connect to notebook for access to hubbed accessories



Connect 3 USB 2.0 devices

Connect 1 power-only USB 2.0 device (charge mobile phone)





**ThinkPad 65W AC Adapter  
With USB Hub**

**(57Y4600)**

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# ThinkPad Batteries

	ThinkPad Battery 29 (4 cell)	ThinkPad Battery 29+ (6 cell)	ThinkPad Battery 29++ (9 cell)	ThinkPad Battery 19+ (6 cell Slim External)
				
<b>Part Number</b>	0A36281	0A36282	0A36283	0A36280
<b>Cells</b>	4	6	9	6
<b>Battery Energy</b>	29 Watt-hours	63 Watt-hours	94Watt-hours	64 watt-hours
<b>Weight</b>	195 g (0.43 lb)	427 g (0.95 lb)	620 g (1.37 lb)	700 g (1.54 lb)
<b>Additional Information</b>	-----	-----	-----	<ul style="list-style-type: none"> <li>• Use along with system battery to provide an all-day computing experience, Adds battery runtime; up to 8.2 hrs</li> <li>• Attaches under ThinkPad using docking connectors; Not supported when using Ultrabase Series 3 or Series 3 docks</li> <li>• Charge:               <ul style="list-style-type: none"> <li>– Direct: Using 65W, 90W, 135W AC adapters</li> <li>– Simultaneous: Using 135W AC adapter</li> </ul> </li> </ul>
<b>ThinkPad External Battery Charger (40Y7625) compatible</b>	Yes	Yes	Yes	No

# ThinkPad Carrying Cases

- Easily transport and protect your ThinkPad against bumps and jostles

- **ThinkPad Ultraportable Case**

- Supports up to 13.3" Wide
- Top Grade Nylon, SafePORT Air Protection
- Gel Pad Shoulder Strap, Luggage Handle Attachment



- **ThinkPad Executive Leather Case**

- Supports up to 15.6" Wide
- Top Grain Leather, SafePORT Air Protection
- Gel Pad Shoulder Strap, Luggage Handle Attachment



- **ThinkPad Business Backpack**

- Supports up to 15.6" Wide
- Top Grade Nylon, SafePORT Air Protection System
- Padded mesh, breathable shoulder straps
- Hidden security pocket built into back padding of case



**ThinkPad Ultraportable Case**

**(41U5062)**

**ThinkPad Executive Leather Case**

**(43R2480)**

**ThinkPad Business Backpack**

**(43R2482)**

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# Wenger Carrying Cases for Lenovo

- Easily transport and protect your ThinkPad against bumps and jostles
- Wenger Slim Case for Lenovo
  - “Slim & Light” neoprene material for on-the-go traveling
  - Single compartment for your laptop
  - Trolley Strap
- Wenger Deluxe Slim Case for Lenovo
  - “Slim & Light” nylon material for on-the-go traveling
  - Separate notebook compartment and folder compartment
  - Trolley strap
- Wenger Backpack for Lenovo
  - Case Base stabilizing platform allows case to stand tall on the ground
  - Separate notebook compartment and folder compartment
  - Easy access pocket for quick access to: keys, plane tickets, MP3 player
  - Dual mesh side pocket
  - Trolley strap



**Wenger Slim Case for Lenovo**

**(57Y4273)**

**Wenger Deluxe Slim Case for Lenovo**

**(57Y4272)**

**Wenger Backpack for Lenovo**

**(57Y4271)**

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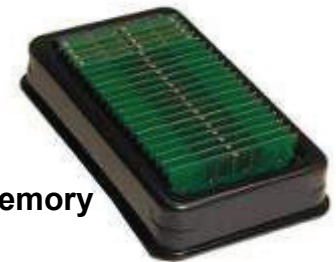
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# Lenovo Memory Options

- DDR3 SODIMM Memory
- Lowest-cost method to boost system performance
  - Enhance multi-tasking usability
  - Extend system useful life
  - Ensure systems compatibility
- 25-Pack Memory:
  - Reduced packaging: cardboard, plastic, publications
  - Lower, per unit, module cost



Single / Individual Pack



25-Pack Memory

<b>1GB PC3-10600 DDR3-1333 SODIMM Memory</b>	<b>(55Y3709)</b>
<b>2GB PC3-10600 DDR3-1333 SODIMM Memory</b>	<b>(55Y3710)</b>
<b>4GB PC3-10600 DDR3-1333 SODIMM Memory</b>	<b>(55Y3711)</b>
<b>1GB PC3-10600 DDR3-1333 SODIMM Memory – 25 pack</b>	<b>(57Y4415)</b>
<b>2GB PC3-10600 DDR3-1333 SODIMM Memory – 25 pack</b>	<b>(57Y4416)</b>
<b>ThinkPad X220 has 2 SODIMM slots for 8GB maximum memory</b>	

# Kensington Security Cable Locks by Lenovo

- Secure your ThinkCentre and ThinkVision monitor
- Easy to install and use for office environments
- Strong, steel composite cable with carbon tempered steel core:
  - MicroSaver: 6.0-feet, 5.5 mm thick cable
  - Twin Head: 7.0-feet, 5.5 mm thick cable
- Patented T-bar lock provides superior lock strength in the security slot and theft protection
- Sleek styling and design using a rotating head and pivoting cable allows you to easily connect and position the lock
- Attached rubber cable tie for cable management
- Twin Head Cable Lock to secure two devices
  - 2nd lock “floats”, “moves” along the cable for user preference
- Attaching the cable lock to any ThinkCentre form factor not only secures the machine to the work area, but it also prevents users from opening the chassis itself!



<b>Kensington Microsaver Security Cable Lock by Lenovo</b>	<b>(73P2582)</b>
<b>Kensington Twin Head Cable Lock from Lenovo</b>	<b>(45K1620)</b>

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# ThinkPad WWAN Options

- Work anywhere you want. Add WWAN to your WWAN ready ThinkPad
  - Note – Only selected ThinkPad models are WWAN ready
- ThinkPad Gobi Mobile Broadband – U.S.
- Gobi 3000
- ThinkPad Mobile Broadband – Canada
- Ericsson F5521gw



Requires service contract with the service provider; monthly service charges and airtime charges (based on data throughput) will apply. Roaming charges may also apply. Service may not be available in all areas.

<b>ThinkPad Gobi Mobile Broadband (US)</b>	<b>(0A36185)</b>
<b>ThinkPad Mobile Broadband (Canada)</b>	<b>(0A36186)</b>



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# ThinkPad Mice

- ThinkPad Bluetooth Laser Mouse
  - Portable, ambidextrous design for both right and left-hand usage
  - Unique soft-touch finish for the ultimate in all-day comfort
  - High definition Laser sensor resolution for precise control
  - Tilt wheel for 4-way scrolling
  - Quick and easy pairing with Lenovo's exclusive "EasyPair" Software
  - Advanced Power management system
    - Switches to low power mode during periods of inactivity
    - Also includes an On-Off Switch
  - Unique battery compartment with hinge design
    - Note: Requires a Bluetooth enabled system or an optional USB Bluetooth Receiver
- ThinkPad USB Travel Mouse
  - Portable, ambidextrous design for both right and left-hand usage
  - Unique soft-touch finish for the ultimate in all-day comfort
  - High definition optical sensor resolution for precise control
  - Programmable scroll wheel acts as a 3rd button



**ThinkPad Bluetooth Laser Mouse**

**(41U5008)**

**ThinkPad USB Travel Mouse**

**(31P7410)**

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# ThinkPad In-Ear Headphones

- High-quality voice and audio performance for internet voice conversations, multimedia applications
- Noise isolating in-ear design
- Well-balanced high and mid range sounds
- Discreet hands-free inline microphone for clear communications
- Three pairs (small, medium, large) of silicone sleeves tips for optimal fit and comfort
- 2 x 3.5mm Jack Adapter included for maximum laptop and desktop compatibility
- Protective carry pouch for storage



**ThinkPad In-Ear Headphones**

**(57Y4488)**

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# Lenovo USB-to-DVI Monitor Adapter

- Add another monitor by plugging into a USB port:
  - Maximum resolutions (@32-bit color):
    - 16:10 Wide – 1920 x 1200
    - 16:9 Wide – 2048 x 1152 (with 1920 x 1080 native HDTV support)
- Flexibility to add additional monitors to a system
  - Doubling or tripling your visual workspace increases productivity while lowering total cost of ownership
  - One Monitor Adapter is needed for each monitor
- DVI digital video output for sharpness and clarity
  - DVI-to-VGA adapter included
  - Supports HD video playback of non-encrypted content
- All monitors are independent:
  - Extended “stretch” desktop and mirror “clone” modes
  - Landscape, portrait viewing: 90°, 180°, 270° image rotation
- Does not require an external power adapter
- Windows XP, Vista 32/64bit, 7 support



1<sup>st</sup> Monitor: Active ThinkPad Display  
2<sup>nd</sup> Monitor: Attached to VGA port  
3<sup>rd</sup> Monitor: Attaches to 1<sup>st</sup> USB-to-DVI Adapter  
4<sup>th</sup> Monitor: Attaches to 2<sup>nd</sup> USB-to-DVI Adapter

**Note:** High-bandwidth Digital Content Protection (HDCP) is not supported

**Lenovo USB-to-DVI Monitor Adapter (45K5296)**

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# Lenovo USB Portable DVD Burner

- Slim, lightweight, economical DVD writer powered by 1 or 2 USB ports
- Reads and writes without an external power adapter
  - Includes Y-cable allowing connection to 1 or 2 system USB Ports
    - Connection to a 2nd USB port may be required to power the DVD burner
- Reads and writes to 7 DVD Formats & CD media:
  - DVD+R, DVD+RW, DVD-R , DVD-RW,
  - DVD-RAM, DVD+R Double Layer, DVD-R Dual Layer
  - CD-R, CD-RW
- Includes the following software:
  - WinDVD for playback of MPEG-2 files and DVD movies
  - Roxio Creator Business Edition burning software
    - For recording to CD and DVD supported media
  - My DVD for capturing, editing, and creating videos
- Fast data transfer via USB 2.0 (24X CD & 8X DVD)
- Stylish design






**Lenovo USB Portable DVD Burner**

**(43N3264)**

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# Multiple Monitor Configurations

Configuration	Hardware Requirements
<p>One monitor with ThinkPad VGA</p> 	<ul style="list-style-type: none"> <li>• Analog monitor attached to ThinkPad VGA port               <ul style="list-style-type: none"> <li>– Maximum VGA analog resolution: 2048 x 1536</li> </ul> </li> <li>• ThinkPad display is enabled.</li> </ul>
<p>Two monitors via UltraBase Series 3 or Series 3 dock</p> 	<ul style="list-style-type: none"> <li>• Two monitors attached to Ultrabase Series 3 or Series 3 dock VGA port and DisplayPort**               <ul style="list-style-type: none"> <li>– Maximum VGA analog resolution: 2048 x 1536</li> <li>– Maximum DisplayPort* resolution: 2560 x 1600</li> </ul> </li> <li>• ThinkPad display is disabled.</li> </ul>
<p>ThinkPad Display, three external monitors, no docking</p> 	<ul style="list-style-type: none"> <li>• ThinkPad display is enabled, and external monitor attached to ThinkPad VGA port</li> <li>• Two Lenovo USB-DVI Monitor Adapters (45K5296) attached to two USB ports               <ul style="list-style-type: none"> <li>• One analog or digital monitor attached to each USB-to-DVI adapter</li> <li>• Maximum resolution: 1920 x 1200</li> </ul> </li> </ul>

\*\* Support attachment of DisplayPort monitor cables (45J7915 or 57Y4393) with 1920 x 1200 maximum resolution.



**thank you** grazie **merci** danke **grazias** 謝謝 СПАСИБО  
gracias **obrigado** ありがとう **dank** takk **bedankt** dakujem

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