## ThinkPad W530 2438 (Optimus) - TopSeller (Windows 8)

### Positioning
- Mobile workstation; two spindles
- Intel Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache)
- Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology

### Processor
- Intel Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache)
- Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology

### Memory
- Dual-core model: 16GB max, two 204-pin SO-DIMM sockets
- Quad-core model: 32GB max, four 204-pin SO-DIMM sockets
- All: PC3-12800 1600MHz DDR3, non-parity, dual-channel capable

### Optical Ultrabay
- DVD burner, 12.7mm Ultrabay Enhanced, removable
- One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access

### SATA disk
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high
- Some: HD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ All: removable, upgradeable, supports the second disk, Shock Mounted Hard Drive

### mSATA™ SSD
- None

### Widescreen display
- Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio
- Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut
- Some: 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut

### Color calibration
- Camera: None
- Display: HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus

### Graphics
- NVIDIA™ Optimus™ technology, auto-switch between discrete and integrated graphics
- Intel HD Graphics 4000 in processor, and Intel HD Quadro® K1000M or K2000M
- PCI Express® x16, 2GB memory, supports three independent displays;
- Maximum external resolution: 3840x2160@60Hz (DisplayPort via optional Mini DP cable);
- 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA)

### Keyboard
- TrackPoint®
- Touchpad: 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight

### ThinkLight™
- UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch
- Illuminates the keyboard to improve visibility in low-light conditions

### Dimensions³
- 15.6" (WXDH): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm
- 6-cell: starting at 5.76 lb (2.62kg); 9-cell: starting at 6.19 lb (2.81kg)

### Weight³
- 6-cell: starting at 5.76 lb (2.62kg); 9-cell: starting at 6.19 lb (2.81kg)
- Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Glass-fiber reinforced plastic without paint

### Battery
- Lithium ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication 6-cell (57Whr): up to 7.7 hr; 9-cell (94Whr): up to 12.8 hr; 9-cell plus 9-cell Slice battery (94Whr, 9A26304): up to 25.6 hr

### Chipset
- Mobile Intel QM77 Express Chipset
- One slot (ExpressCard/34)
- 4-in-1 reader (MMC, SD, SDHC, SDXC)

### Ports
- Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)

### PClé Mini Card
- Two PCI Express Mini Card slots
- 11a/b/g/n, PClé Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2

### PClé WWAN
- Wireless WAN upgradeable

### SIM card
- None

### Modem
- None

### Bluetooth™
- Bluetooth 4.0 wireless

### Ethernet
- Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PClé x1

### Audio support
- HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack

### Security
- Power-on authentication, hard disk password, supervisor password, security keyhole

### Security chip
- Trusted Platform Module, TCG 1.2-compliant

### Fingerprint reader
- AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip

### Limited warranty¹
- 3-years / 1-year battery - depot repair service / service upgrades² available

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¹ Small and medium business (SMB) model(s), part of the WE TopSeller™ Program
² A depot repair service 3-year limited warranty
³ Power-packed engineering with Open GL graphics and ISV certifications

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### Preloaded operating system²
- Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit

### Preloaded applications³ (only some listed)
- Windows 7 models
  - Lenovo Message Center Plus
  - ThinkVantage Product Recovery
  - Access Connections™
  - ThinkVantage Power Manager
  - Lenovo SimpleTap
  - Adobe® Reader®

  - Windows Live™ Essentials
  - Corel® WinDVD® (DVD:RW)
  - Corel® Burn:Now™ Lenovo Edition (DVD:RW)
  - Corel® DVD MovieFactory® Lenovo Edition (DVD:RW)

### Windows 8 models
- Lenovo Support
- Lenovo Companion
- Lenovo QuickLaunch
- AccuWeather
- PC Device Stage
- Cyberlink Power2Go (DVD:RW)
- Cyberlink PowerProducer (DVD:RW)

### All models
- Lenovo Cloud Storage by SugarSync
- Microsoft® Office preloaded: purchase a product key to activate
- Norton™ Internet Security (30 days of virus definitions)

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See footnotes for more detailed information

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### ThinkPad W530 (Optimus)

**Type-model** | **Processor** | **Memory** | **Wide-screen display** | **Discrete graphics** | **Disk** | **Backlit keyboard** | **PCle Mini Card** | **PCle Mini WAN*/mSATA** | **Finger print reader** | **Battery** | **Global (G) Product ID (in P/N)** | **Ann Date** |
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<td>02/13</td>
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<td>Finger 9</td>
<td>vPro G Pro 64 02/13</td>
<td>02/13</td>
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- **Positioning**
  - Mobile workstation; two spindles
- **Processor**
  - Intel Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache)
  - Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz)
- **Memory**
  - Dual-core model: 16GB max, two 204-pin SO-DIMM sockets
  - Quad-core model: 32GB max, four 204-pin SO-DIMM sockets
- **Graphics**
  - NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics
- **Keyboard**
  - TrackPoint® pointing device
  - 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight
  - UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch
- **Chipset**
  - Mobile Intel QM77 Express Chipset
  - 170-watt AC adapter
  - Supports ThinkVantage® technologies

*See footnotes for more detailed information*
## ThinkPad W530 2441 (Optimus) - Windows 8

### Product Specifications Reference (PSREF)

### Type-model  Processor  Memory  Display  Disk  RAID  Card  Card  Card  Card  Battery  Global (G)  Ann Date
2441-45G  I7-3820QM  4GBx2  15.6" FHD  K2000M  1x500G 7200  No  None  Intel 6205  WWAN upg  Finger  9  vPro  G  Win8 Pro64  10/12
2441-46G  I7-3720QM  4GBx2  15.6" HD+  K1000M  1x500G 7200  No  None  Intel 6205  WWAN upg  Finger  9  vPro  G  Win8 Pro64  10/12

- A depot repair service 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

### Positioning/Processor

<table>
<thead>
<tr>
<th>Mobile workstation; two spindles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Core™ I7-3720QM processor (4 cores, 2.60GHz, 6MB cache)</td>
</tr>
<tr>
<td>Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology</td>
</tr>
<tr>
<td>Intel Core i7-3820QM processor (4 cores, 2.70GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology</td>
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</table>

### Optical

<table>
<thead>
<tr>
<th>Optical burner, 12.7mm Ultrabay Enhanced, removable</th>
</tr>
</thead>
<tbody>
<tr>
<td>One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access</td>
</tr>
<tr>
<td>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5&quot; wide, 7mm high</td>
</tr>
<tr>
<td>Some: HDD / SATA 3.0Gb/s, 2.5&quot; wide, 7mm or 9.5mm high, Active Protection System Technology</td>
</tr>
<tr>
<td>All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive</td>
</tr>
<tr>
<td>None:</td>
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</tbody>
</table>

### Memory

| dual-core model: 16GB max, 2 too 204-pin SO-DIMM sockets |
| quad-core model: 32GB max, 4 too 204-pin SO-DIMM sockets |
| All: |
| PCI-12800 1600MHz DDR3, non-parity, dual-channel capable |

### Widescreen Display

| Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut |
| Some: 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut |
| Some: Color calibration sensor in palm rest, LED indicator HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus |

### Graphics

| NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M, PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort, supports three independent displays, Maximum external resolution: 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA) |

### Dimensions

| 15.6" (WXHD): 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm |
| 6-cell: starting at 5.76 lb (2.62kg); 9-cell: starting at 6.19 lb (2.81kg) |
| Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Glass-fiber reinforced plastic without paint |
| Battery: Lithium Ion 6-cell or 9-cell, supports optional Slicey battery as 2nd battery, HW Authentication |
| HD 5767W: up to 7.7 hr; 9-cell (974Whr): up to 12.8 hr; 9-cell plus 9-cell Slicey battery (974Whr, 0A36304): up to 25.6 hr |

### Chipset

| Mobile Intel QM77 Express Chipset |

### Express Card

| One slot (ExpressCard/34) |

### Smart Card Reader

| None |

### Multicard Reader

| 4-in-1 reader (MMC, SD, SDHC, SDXC) |

### Ports

| Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) |
| Two PCI Mini Card |
| PCIc W LAN® 11a/b/g/n, PCIc Half Mini Card, Intel Centrirno® Advanced-N 6205, 2x2 |
| PCIc WWAN® Wireless WAN upgradable |
| SIM card None |
| None |
| None |
| HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack |
| Power-on password, hard disk password, supervisor password, security keyhole |
| Trusted Platform Module, TCG 1.2-compliant |
| AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip |

### Limited warranty

| 3-years 1-yr battery - depot repair service / service upgrades available | SupportS ThinkVantage® technologies |

170-watt AC adapter
ThinkPad Roll Cage (one-piece magnesium frame)
EPET® Gold rating
ENERGY STAR® 5.0-compliant
GREENGUARD® certified
RoHS-compliant
International Warranty Service 24 hour x 7 day toll-free support during the warranty period

See footnotes for more detailed information © Lenovo (G-KN4W-5) October 2012
ThinkPad W530 2447 (Optimus) - Onsite

### Product Specifications Reference (PSREF)

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<tr>
<th>Type-model</th>
<th>Processor</th>
<th>Memory</th>
<th>Wide-screen Discrete graphics</th>
<th>Disk</th>
<th>SATA</th>
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<th>Bluetooth</th>
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<th>SIM card</th>
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### Preloaded operating system
Genuine Windows® 7 Professional 64

### Ready to install applications
- Rescue and Recovery™
- Password Manager

### Preloaded applications
- Lenovo® Solution Center
- Lenovo Message Center Plus
- ThinkVantage Productivity Center
- Access Connections™
- FingerPrint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- Lenovo Cloud Storage by SugarSync
- Lenovo SimpleTap
- Microsoft® Office preloaded: purchase a product key to activate
- Norton™ Internet Security 2012 (30 days of virus definitions)
- Adobe® Reader®
- Skype™ for Windows
- Evernote
- Intel Small Business Advantage
- RapidBoot HDD Accelerator
- Symantec™ VIP
- Windows Live™ Essentials
- Corel® WinDVD® (DVD+RW)
- Corel DVD MovieFactory™ Lenovo Edition (DVD+RW)
- X-Rite® Pantone® Color Calibrator (color calibration models)

See footnotes for more detailed information

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ThinkPad W530 2447 (Optimus) - Onsite - II

Product Specifications Reference (PSREF)

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<th>Discrete graphics</th>
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<th>PClé Mini Card</th>
<th>PClé Mini Card WWAN/ mSATA</th>
<th>Smart Card Reader</th>
<th>Battery</th>
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+ Power-packed engineering with Open GL graphics and ISV certifications

Positioning
- Mobile workstation: two spindles

Processor
- Intel® Core™ i7-3720QM processor (4 cores, 2.6GHz, 6MB cache)
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Memory
- dual-core model: 16GB max, two 204-pin SO-DIMM sockets
- quad-core model: 32GB max, four 204-pin SO-DIMM sockets
- All: 12800-1600MHz DDR3, non-parity, dual-channel capable

Optical
- Ultrabay mSATA SSD

Display
- 15.6” (396mm) HD+ (1600x900) color, anti-glide, LED backlight, 220 nits, 16.9 aspect ratio, 500:1 contrast ratio, 60% Gamut
- 15.6” (396mm) Full HD (1920x1080) color, anti-glide, LED backlight, 270 nits, 16.9 aspect ratio, 500:1 contrast ratio, 95% Gamut

Color calibration
- Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator

Graphics
- NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M
- PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort;
- supports three independent displays;
- Maximum external resolution: 3840x2160@60Hz (DisplayPort via optional Mini DP cable);
- 1920x1200 @ 60Hz (single-link DVI-I via optional Mini DP cable);
- 2048x1536@85Hz (VGA)

Keyboard
- 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight

Touchpad
- TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar®13, magnifying glass

Dimensions
- 15.6”Wx(H)xD): 14.68” x 9.65” x 1.25-1.40”;
- 372.8mm x 245.1mm x 31.8-35.6mm

Weight
- 6-cell: starting at 5.76 lb (2.62kg);
- 9-cell: starting at 6.19 lb (2.81kg)

Case Material
- Carbon fiber / Glass-fiber hybrid;
- Bottom: Glass-fiber reinforced plastic without paint

Battery - type
- Lithium lon 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication

Battery - life
- 6-cell (57Whr): up to 7.7 hr;
- 9-cell (94Whr): up to 12.8 hr;
- 9-cell plus 9-cell Slice battery (94Whr): up to 25.6 hr

Chipset
- Mobile Intel QM77 Express Chipset

ExpressCard
- One slot (ExpressCard/34)

Multicard Reader
- 4-in-1 reader (MMC, SD, SDHC, SDXC)

Ports
- Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 Firewire 400 (4-pin connector; 1394a-2000 standard)

Preloaded operating system
- Genuine Windows® 7 Professional 64

Ready to install applications
- Rescue and Recovery™
- Password Manager

Preloaded applications
- Lenovo® Solution Center
- Lenovo Message Center Plus
- ThinkVantage Product Recovery
- Access Connections™
- Lenovo System Update
- Lenovo Smart Card reader
- Lenovo SimpleTap
- Microsoft® Office preloaded;
- purchase a product key to activate
- Norton™ Internet Security 2012 (30 days of virus definitions)
- Adobe® Reader
- Adobe® Flash for Windows
- Evernote®
- Lenovo Cloud Storage by SugarSync
- Lenovo Mobile Broadband Module, PCIe Half Mini Card, 3G/4G-HSPA+/HSPA+, GPS

Operating Systems
- Windows 7 Professional Operating System (32-bit or 64-bit)

Preloaded operating system
- Windows 7 Professional 64-bit

Limited warranty
- 3-years/1-year battery, limited onsite service®️, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available

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See footnotes for more detailed information
**ThinkPad W530 2447 (Optimus) - Onsite (Windows 8)**

**Product Specifications Reference (PSREF)**

<table>
<thead>
<tr>
<th>Type-model</th>
<th>Processor</th>
<th>Memory</th>
<th>Display</th>
<th>Discrete graphics</th>
<th>Disk</th>
<th>Mini Card</th>
<th>Mini Card</th>
<th>Battery</th>
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<td>vPro Win8 Pro64</td>
<td>10/12</td>
<td></td>
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</tr>
</tbody>
</table>

- Some models are part of the Global Models Plus program with limited onsite servicea 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

**Positioning Processor**

- Mobile workstation; two spindles
- Intel® Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache)

**Memory**

- dual-core model: 16GB max, 204-pin SO-DIMM sockets
- quad-core model: 32GB max, four 204-pin SO-DIMM sockets

**Optical Ultrabay**

- DVD burner, 12.7mm Ultrabay Enhanced, removable
- One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access

**Display**

- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high
- Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high

**SATA disk**

- Active Protection System™ Auto-removable, removable, supports the second disk, Shock Mounted Hard Drive
- mSATA SSD (Solid State Drive), via PCIe Mini Card slot

- Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16.9 aspect ratio, 50:1 contrast ratio, 60% Gamut
- Some: 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 ratio, 50:1 aspect ratio, 95% Gamut

**Graphics**

- NVIDIA® OptiVue™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro K1000M or K2000M
- PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays;
- Maximum external resolution: 3840x2160@60Hz (DisplayPort vs Intel Mini DP Cable);
- 15-in-1 reader (MMC, SD, SDHC, SDXC)
- Some: 15-in-1 reader (MMC, SD, SDHC, SDXC)
- Some: 7-in-1 reader (MMC, SD, SDHC, SDXC)
- Some: 3-in-1 reader (MMC, SD, SDHC, SDXC)

**Keyboard TrackPoint® Touchpad**

- 6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight
- TrackPoint® pointing device, “Press-to-Select,” Internet Scroll Bar13, magnifying glass

**Battery - life 15**

- 15.6W* (WX/DXH): 14.68" x 9.65" x 1.25-1.40; 372.8mm x 245.1mm x 31.8-35.6mm
- 6-cell starting at 5.76 lb (2.62kg); 9-cell (94Whr): up to 12.8 hr;
- 9-cell plus 9-cell Slice battery (94Whr, 0A36304): up to 25.6 hr

**Chipset ExpressCard Smart Card Read Multi Card Reader Ports**

- Mobile Intel QM77 Express Chipset
- One slot (ExpressCard/34)
- Some: Smart Card reader
- Multi Card Reader (MMC, SD, SDHC, SDXC)
- Two USB 3.0, two USB 2.0 (powered), VIA DB-15, Mini DisplayPort, (RU-45), IEEE 1394 FireWire (4-pin connector; 1394a-2000 standard)

**Power**

- Two PCI Express Mini Card sockets
- Some: 11a/b/g/n, PCMCIA Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2
- Some: 11a/b/g/n, PCMCIA Half Mini Card, Intel Centrino Ultimate-3650, 3x0
- Some: Wireless WAN upgradable

- Intel 82579ML Gigabit Network Connection (Lewisville), PHY, PCI x1
- Intel Active Management Technology (IATM)
- HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack
- Security: Power-on password, hard disk password, supervisor password, security keyhole
- Security chip: Trusted Platform Module, TCG 1.2-compliant
- FingerPrint reader: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Pointing stick on Authentication, supports the security chip

**Limited warranty**

- 3-years/1-year battery, limited onsite service21: 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available

**Preloaded operating system**

- Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
- Some: Windows 8 Pro 64-bit

**Preloaded applications** (only some listed)

- Windows 7 models
  - Lenovo® Message Center Plus
  - ThinkVantage Product Recovery
  - Access Connections™
  - ThinkVantage Power Manager
  - Lenovo SimpleTap
  - Adobe® Reader
  - Windows Live™ Essentials
  - Corel® WinDVD® (DVD+RW)
  - Corel DVD MovieFactory® Lenovo Edition (DVD+RW)

**Windows 8 models**

- Lenovo Support
- Lenovo Companion
- Lenovo QuickLaunch
- AccuWeather
- PC Device Stage
- Cyberlink PowerGo (DVD+RW)
- Cyberlink PowerProducer (DVD+RW)

**All models**

- Lenovo Solution Center
- Password Manager
- ThinkVantage System Update
- FingerPrint Software (fingerprint models)
- Lenovo Cloud Storage by SugarSync
- Microsoft® Office preloaded; purchase a product key to activate
- Norton™ Internet Security (30 days of virus definitions)

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See footnotes for more detailed information

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Footnotes:

1. Some:
2. Some:
3. Some:
4. All:
5. All:
6. All:
7. All:
8. All:
9. Some:
10. Some:
11. Some:
12. Some: 3-year limited warranty
13. Some:
14. All:
15. All:
16. All:
17. All:
18. All:
19. All:
20. Some:
21. Some:
## Product Specifications Reference (PSREF)

### Type-model  Processor  Memory  Wide-screen display  Discrete graphics  Disk SATA rpm  RAID  Backlit keyboard  PCle Mini Card Color calib cells  Battery watt  Power Adapter watt  Intel AMT  Global (G) Intel vPro  (P)  Preload  Ann Date (mm/y)

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<tr>
<th>Type-model</th>
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<th>Wide-screen display</th>
<th>Discrete graphics</th>
<th>Disk SATA rpm</th>
<th>RAID</th>
<th>Backlit keyboard</th>
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### Preloaded operating system
- Windows 7 models
- Lenovo™ Message Center Plus
- ThinkVantage Product Recovery
- Access Connections™
- ThinkVantage Power Manager
- Lenovo SimpleTap
- Adobe® Reader
- Windows Live™ Essentials
- Corel® WinDVD® (DV:R:W)

### Preloaded applications
- Windows 8 models
- Lenovo Support
- Lenovo Companion
- Lenovo QuickLaunch
- AccuWeather
- Cyberlink Power2Go® (DV:R:W)
- Cyberlink PowerProducer® (DV:R:W)
- All models
- Lenovo Solution Center
- Password Manager
- ThinkVantage System Update
- FingerPrint Software (fingerprint models)
- Lenovo Cloud Storage by SugarSync
- Microsoft® Office preloaded; purchase a product key to activate
- Norton™ Internet Security (30 days of virus definitions)

### Limited warranty
- 3-years/1-year battery, limited onsite service®: 8 am - 5 pm, Mon - Fri covering exchange of public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available

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**See footnotes for more detailed information**

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(G-KN4W-7) May 2013
ThinkPad W530 2447 (Optimus) - Onsite (Windows 8) - III

Product Specifications Reference (PSREF)

Type-model | Processor | Memory | Wide-screen graphics | Discrete graphics | Disk SATA | RAID | SATA optical | Pcie Mini Card | Smart Card | Battery Adapter | Power | Intel | Ann Date
---|---|---|---|---|---|---|---|---|---|---|---|---|---
2447-59G | I7-3840QM | 8GBx1 | 15.6" FHD | K2000M | 1T 5400 + 240G FDE SSD | No | None | Backlit WWAN upg | None | 170W vPro 03/13
2447-58G | I7-3840QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | None | Backlit WWAN upg | Smart | 135W vPro 03/13
2447-57G | I7-3740QM | 8GBx1 | 15.6" FHD | K2000M | 1x240G FDE SSD | No | None | Backlit WWAN upg | Smart | 170W vPro 03/13
2447-54G | I7-3740QM | 8GBx1 | 15.6" FHD | K2000M | 1x500G 7200 | No | None | Backlit WWAN upg | Smart | 170W vPro 03/13
2447-58G | I7-3840QM | 4GBx1 | 15.6" HD+ | K1000M | 1x500G 7200 | No | None | Backlit WWAN upg | Smart | 170W vPro 06/13

*Power-packed engineering with Open GL graphics and ISV certifications*

Positioning Processor
Mobile workstation: two spindles
Intel® Core™ i7-3740QM processor (4 cores, 2.70GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology

Memory
** dual-core model:**
16GB max, two 204-pin SO-DIMM sockets
** quad-core model:**
32GB max, four 204-pin SO-DIMM sockets
All: PC3-12800 1600MHz DDR3, non-parity, dual-channel capable

Optical Ultrabay
Some: DVD burner, 12.7mm Ultraday Enhanced, removable
One bay for removable devices, Ultraday Slim-compatible, 12.7mm high, bottom access
Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high
Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™
Some: HDD, upgradeable, supports the second disk, Shock, Hard Drived Hand (HDD)
Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot

Widescreen display
Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut
Some: 15.6" (396mm) Full HD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut

Color calibration
Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator
HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus

Graphics
NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics,
Intel HD Graphics 4000, Intel AMT, Ethernet

Keyboard TrackPoint®
6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys, optional LED backlight

ThinkLight™
UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch
Illuminates the keyboard to improve visibility in low-light conditions

Dimensions³ Weight³
15.6" ([WxDxH]: 14.68" x 9.65" x 1.25-1.40")
372.8mm x 245.1mm x 31.8-35.6mm

Battery - type Battery - life¹⁰
Lithium Ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication
6-cell (57Whr): up to 7.7 hr;
9-cell (94Whr): up to 12.8 hr;
9-cell plus 9-cell Slice battery (94Whr), 0A36304: up to 25.6 hr

Chips
Mobile Intel QM77 Express Chipset

ExpressCard Smart Card Reader
One slot (ExpressCard/34)

Multicard Reader
Some: Smart Card reader

Ports
Two USB 3.0, two USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45), IEEE 1394 Firewire 400 (4-pin connector; 1394a-2000 standard)

Preloaded operating system®
- Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
- Windows 8 models
- Lenovo Support
- Lenovo Companion
- Lenovo QuickLaunch
- AccuWeather
- PC Device Stage
- Cyberlink Power2Go (DVD:RW)
- Cyberlink PowerProducer (DVD:RW)
- All models
- Lenovo Solution Center
- Password Manager
- ThinkVantage System Update
- Fingerprint Software (fingerprint modules)
- Lenovo Cloud Storage by SugarSync
- Microsoft® Office preloaded: purchase a product key to activate
- Norton™ Internet Security (30 days of virus definitions)

Preloaded applications² (only some listed)
- Windows 7 models
- Lenovo® Message Center Plus
- ThinkVantage Product Recovery
- Access Connections²
- ThinkVantage Power Manager
- Lenovo SimpleTap
- Adobe® Reader
- Windows Live™ Essentials
- Corel® WinDVD® (DVD:RW)
- Corel DVD MovieFactory® Lenovo Edition (DVD:RW)

See footnotes for more detailed information © Lenovo (G-KN4W-8) June 2013