### ThinkPad L530



Lenovo® ThinkPad L530





Lenovo ThinkPad L530



Lenovo ThinkPad L530



Lenovo ThinkPad L530



Lenovo Sport Backpack - Blue Lenovo Sport Backpack - Red 0B47298 0A33896 Lenovo Sport Backpack - Grey 0B47301

# ThinkPad L530 2481 (TopSeller)

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>8</sup> rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Card slot	Finger print reader	Blue- tooth		Preload	Ann Date (mm/yy)
2481-2RG	i3-2370M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	None	Finger	BT	6	Pro 64	06/12
2481-2SG	i5-3210M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	None	Finger	BT	6	Pro 64	06/12
2481-2TG	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	None	Finger	BT	6	Pro 64	06/12
2481-2VG	i3-2370M	4GBx1	15.6" HD+	720p	500G 7200	Intel 2200	WWAN upg	None	Finger	BT	6	Pro 64	07/12
2481-2WG	Cel B820	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	None	Finger	BT	6	Pro 64	07/12
2481-2UG	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	16GB mSATA	None	Finger	BT	6	Pro 64	07/12
2481-3AG	i3-2328M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Pro 64	09/12
2481-3NG	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	16GB mSATA	Express 54	Finger	BT	6	Pro 64	09/12
2481-3MG	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Pro 64	09/12
2481-3LG	i5-3210M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Pro 64	09/12
2481-3KG	i3-2370M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Pro 64	09/12

• Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

Positioning Processor	Mainstream business performance; two spindles Intel® Celeron® B820 processor (2 cores, 1.70GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1333MHz) Intel Core™ i3-2328M processor (2 cores, 2.20GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-2370M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology	Preloaded operating system <sup>20</sup> Genuine Windows® 7 Professional 64  Ready to install applications¹⁴ (only some listed)  • Rescue and Recovery™  • Password Manager  Preloaded applications¹⁴ (only some listed)
Memory	8GB max <sup>7</sup> / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	<ul><li>Lenovo Message Center Plus</li><li>ThinkVantage Product Recovery</li></ul>
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>Access Connections™</li> <li>Fingerprint Software (fingerprint models)</li> <li>ThinkVantage System Update</li> <li>ThinkVantage Power Manager</li> </ul>
mSATA™ SSD	Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot	<ul> <li>Microsoft® Öffice preloaded;</li> </ul>
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	purchase a product key to activate  Norton™ Internet Security 2012 (30 days of virus definitions)  Adobe® Reader®  Class™ SelVisadays
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	Skype™ for Windows     Windows Live™ Essentials
Graphics	Intel HD Graphics, Intel HD Graphics 3000, or Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display;  Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)	Corel® WinDVD® (DVD±RW)     Corel Burn.Now™ Lenovo Edition (DVD±RW)     Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None	Edition (BVB±HW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr	
Chipset ExpressCard Smart Card read Multicard Reader Ports	Mobile Intel HM76 Express Chipset Some: One slot (ExpressCard/34, ExpressCard/54) None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN <sup>4</sup>	Two PCI Express Mini Card slots  Some: 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1  Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2	
PCIe WWAN SIM card	Some: Wireless WAN upgradable None	Supports ThinkVantage® technologies
Modem Bluetooth™ Ethernet Intel AMT Audio support Security	None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	65-watt AC adapter EPEAT™ Gold rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) GREENGUARD® certified (except Celeron models)
Security chip Fingerprint reade	Trusted Platform Module, TCG 1.2-compliant r AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip  2 1-year - depot repair service / service upgrades <sup>22</sup> available	RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Card slot	Finger print reader	Blue- tooth	Bat- tery cells	Ann Date Preload (mm/yy)
2481-2QG	Pen B970	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	None	Finger	BT	6	DOS-Lic. 06/12

#### • Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

Positioning Processor	Mainstream business performance; two spindles Intel® Pentium® B970 processor (2 cores, 2.30GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1333MHz)	Preloaded operating system <sup>20</sup> - DOS-Lic.
Memory	8GB max <sup>7</sup> / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in  Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable  Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	
mSATA™ SSD	None	
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight,	
Camera	220 nits, 16:9 aspect ratio, 500:1 contrast ratio HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	
Graphics	Intel HD Graphics in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display;  Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)	
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None	
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr	
Chipset ExpressCard Smart Card read Multicard Reader Ports	Mobile Intel HM76 Express Chipset None None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet Intel AMT	Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Wireless WAN upgradable None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None	
Audio support	HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack	Supports ThinkVantage® technologies
	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, supports the security chip	65-watt AC adapter RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support
Limited warranty <sup>12</sup>	2 1-year - depot repair service / service upgrades <sup>22</sup> available	during the warranty period <sup>12</sup>

See footnotes for more detailed information

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# ThinkPad L530 2481 (TopSeller) - Windows 8

	_		Wide- screen	_	Disk SATA	PCIe Mini Card	PCle Mini Card		Finger print	Blue- tery			Ann Date
Type-model	Processor	Memory	display	Camera	GB <sup>8</sup> rpm	WLAN	WWAN/mSATA	Card slot	reader	tooth	cells	Preload	(mm/yy)
2481-35G	i3-3110M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64	10/12
2481-36G	i5-3210M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64	10/12
2481-37G	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64	10/12
2481-38G	i3-2328M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64	10/12
2481-39G	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	16GB mSATA	Express 54	Finger	BT	6	Win8 Pro64	10/12
2481-3TG	i3-2328M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	10/12
2481-3SG	i3-3110M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	10/12
2481-3RG	i5-3210M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	10/12
2481-3QG	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	10/12
2481-3PG	i5-3210M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	16GB mSATA	Express 54	Finger	BT	6	Win7 Pro64	10/12
2481-48G	i5-2520M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	01/13
2481-5EG	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	None	BT	6	Win7 Pro64	06/13
2481-5DG	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	None	BT	6	Win8 Pro64	06/13
2481-5AG	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	06/13
2481-59G	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64	06/13

	<ul> <li>Small and medium business (SMB) model(s), part of the WE TopSeller™ Program</li> </ul>	
Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i3-2328M processor (2 cores, 2.20GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system <sup>20</sup> - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications <sup>5</sup> (only some listed) - Windows 7 models • Lenovo® Message Center Plus
Memory	8GB max <sup>7</sup> / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	<ul> <li>ThinkVantage Product Recovery</li> <li>Access Connections™</li> <li>ThinkVantage Power Manager</li> </ul>
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>Lenovo SimpleTap</li> <li>Adobe® Reader®</li> <li>Windows Live™ Essentials</li> <li>Corel® WinDVD® (DVD±RW)</li> <li>Corel Burn.Now™ Lenovo Edition</li> </ul>
mSATA™ SSD	Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot	(DVD±RW)
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	Corel DVD MovieFactory® Lenovo Edition (DVD±RW)     Windows 8 models
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	Lenovo Support     Lenovo Companion
Graphics	Intel HD Graphics 3000 or 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display;  Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)	Lenovo QuickLaunch     AccuWeather     PC Device Stage     Cyberlink Power2Go (DVD±RW)     Cyberlink PowerProducer
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None	(DVD±RW)  - All models  • Lenovo Solution Center  • Password Manager
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr	<ul> <li>ThinkVantage System Update</li> <li>Fingerprint Software (fingerprint models)</li> <li>Lenovo Cloud Storage by SugarSync</li> </ul>
Chipset ExpressCard Smart Card read Multicard Reader Ports	Mobile Intel HM76 Express Chipset One slot (ExpressCard/34, ExpressCard/54) None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)	<ul> <li>Microsoft® Office preloaded; purchase a product key to activate</li> <li>Norton™ Internet Security (30 days of virus definitions)</li> </ul>
PCIe Mini Card PCIe WLAN <sup>4</sup> PCIe WWAN SIM card Modem	Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Some: Wireless WAN upgradable None None	
Bluetooth™ Ethernet	Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection	Supports ThinkVantage® technologies
Intel AMT Audio support Security Security chip Fingerprint reader	None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital 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 r Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support
Limited warranty <sup>12</sup>	<sup>2</sup> 1-year - depot repair service / service upgrades <sup>22</sup> available	during the warranty period <sup>12</sup>

# ThinkPad L530 2481 (TopSeller) - Windows 8 - II

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Card slot	Finger print reader	Blue- tooth		Preload	Ann Date (mm/yy)	
2481-52G	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	ВТ	6	Win7 Pro64		
	i5-3230M		15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64		
2481-4YG	i5-3230M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	03/13	
2481-4XG	i5-3230M	4GBx1	15.6" HD+	720p	500G 7200	TP 11b/g/n	16GB mSATA	Express 54	Finger	BT	6	Win7 Pro64	03/13	
2481-4WG	i5-2520M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64	03/13	
	i3-3120M		15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64		
	i5-3230M		15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64		
	i5-3230M		15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64		
	i5-3230M		15.6" HD+	720p	500G 7200	TP 11b/g/n	16GB mSATA	Express 54	Finger	BT	6	Win8 Pro64		
	i3-3120M i3-3120M		15.6" HD 15.6" HD	720p	500G 7200 500G 7200	TP 11b/g/n TP 11b/g/n	WWAN upg	Express 54 Express 54	None None	BT BT	6	Win7 Pro64 Win8 Pro64		
	i5-3230M		15.6" HD	720p 720p	500G 7200 500G 7200	TP 11b/g/n	WWAN upg WWAN upg	Express 54	None	BT	6	Win7 Pro64		
	i5-3230M		15.6" HD	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	None	BT	6	Win8 Pro64		
	i5-3230M		15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	None	BT	6	Win7 Pro64		
	i5-3230M		15.6" HD+	720p	500G 7200	TP 11b/g/n	WWAN upg	Express 54	None	BT.	6	Win8 Pro64		
	i5-3230M		15.6" HD+	720p	500G 7200	TP 11b/g/n	16GB mSATA	Express 54	None	BT	6	Win7 Pro64		
	i5-3230M			720p	500G 7200	TP 11b/g/n	16GB mSATA	Express 54	None	ВТ	6	Win8 Pro64		
	i5-3230M		15.6" HD+	720p	180G SSD	TP 11b/g/n	WWAN upg	Express 54	None	BT	6	Win7 Pro64	06/13	
2481-5FG	i5-3230M	4GBx1	15.6" HD+	720p	180G SSD	TP 11b/g/n	WWAN upg	Express 54	None	BT	6	Win8 Pro64	06/13	
2481-5CG	i5-3230M	4GBx1	15.6" HD+	720p	180G SSD	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win7 Pro64	06/13	
2481-5BG	i5-3230M	4GBx1	15.6" HD+	720p	180G SSD	TP 11b/g/n	WWAN upg	Express 54	Finger	BT	6	Win8 Pro64	06/13	
Processor	DDI Inte DDI Inte DDI	R3 memor Pl Core i5-1 R3 memor Pl Core i5-1 R3 memor	y controller (1 2520M proce y controller (1 3230M proce y controller (1	up to 16 essor (2 up to 13 essor (2 up to 16	600MHz), Hype 2 cores, 2.500 33MHz), Intel 2 cores, 2.600 600MHz), Intel	er-Threading t GHz, 3MB cac Turbo Boost 2 GHz, 3MB cac Turbo Boost 2	eache), Intel HD echnology he), Intel HD Gr. 2.0 (3.20GHz), H' he), Intel HD Gr. 2.0 (3.20GHz), H'	aphics 3000, T technology aphics 4000,	- So.	pı do W me: W	reinsta owngr /indov /indov	ws® 7 Professi alled through rade rights in ws 8 Pro 64-bi ws 8 Pro 64-bi cations⁵ (only	t t	
Memory	dua	I-channel	capable, two	204-pin	DDR3, non-pa SO-DIMM so on for processo	ckets	MHz DDR3 memo	ory controller	listed	l) ndows	 s 7 m	` .		
Optical					ot removable,							Product Reco		
SATA disk		<i>ne:</i> Hard I	Disk Drive / S	3.0 ATA		de, 7mm or 9.5	ım high, removab 5mm high,	le, upgradable	• Ac	cess C inkVar	Conne ntage	ctions™ Power Manag		
mSATA™ SS	SD Sor					e Mini Card sl	ot			novo S obe® F				
Widescreen display		220 ni <i>ne:</i> <b>15.6</b> "	its, 16:9 áspe (396mm) <b>HD</b>	ect ratio, 0 <b>+ (1600</b>	500:1 contras	anti-glare, LEI	•		• Wi • Co • Co	ndows rel® W	Live <sup>1</sup> inDVI rn.No	<sup>™</sup> Essentials O® (DVD±RW) w™ Lenovo E		
Camera	HD.						acking, fixed foci	JS				vieFactory® Le	enovo	
Graphics	sup sup <i>Ma:</i> 192	ports exter ports dual ximum exter 0x1200@6	independent ernal resoluti 60Hz (single-	nonitor v display on: 256 link DVI	via VGA DB-1 ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	lz (DisplayPor Mini DP cable	nonitor via Mini D t via optional Min e); 2048x1536@7	i DP cable);	- Wi	Edition (DVD±RW)  - Windows 8 models  - Lenovo Support  - Lenovo Companion  - Lenovo QuickLaunch  - AccuWeather				
Keyboard TrackPoint® Touch pad ThinkLight™	Trad Ultr	ckPoint® po aNav™, wi	inting device	, Interne	et Scroll Bar13,	nt, multimedia , magnifying g Zones, scrollir	Fn keys lass ng, multi-touch		<ul><li>PC</li><li>Cy</li><li>Cy</li></ul>	Device berlink	e Sta Pow Pow	ige er2Go (DVD± erProducer	RW)	
Dimensions <sup>3</sup> Weight <sup>2</sup> Case materia	6-c	<i>ell:</i> from 5.0	<i>xH):</i> 14.96" x 69 lb (2.58kg utadiene-Sty	); 9-c	ell: from 6.05		nm x 31.7–33.4m	m	- All	mode	ls	on Center		
Battery - type Battery - life	e Lith 6-ce	ium Ion 6- e <i>ll (57Whr)</i>	cell or 9-cell, ) <i>:</i> up to 7.5 hr	HW Àu ; <i>9-ce</i>	thentication ell (94Whr): up	to 12.3 hr			• Pa • Th	ssword inkVar	d Mar ntage	nager System Upda		
Chipset			IM76 Expres							igerpri idels)	iii 30	ftware (finger	וווונ	
ExpressCard			ressCard/34,	Expres	sCard/54)						Cloud	Storage		
Smart Card			MANAC CD C		DVO)				by	Sugar	Sync	Ü		
Multicard Re Ports						Δ DR-15 Min	i DisplayPort, eth	ernet (R I 45)	• Mic	crosoft	® Offi	ce preloaded;		
PCIe Mini Ca					powered), vo	וווואו ,כו -טט אוווו	i Dispiayroit, etti	omer (170-43)				oduct key to a	ctivate	
PCIe WLAN <sup>2</sup> PCIe WWAN SIM card Modem	4 11b	/g/n, PCle <i>ne:</i> Wirele ne	ess Mini Caro Half Mini Ca ess WAN upg	rd, Thin	kPad 11b/g/n,	, 1x1						net Security us definitions)		
Bluetooth™		etooth 4.0	wireless						-		la tra L N d		ala ::	
Ethernet	Rea	altek® RTL		it Netwo	ork Connection	n			Supp	orts I	ninkV	antage® techn	lologies	
Intel AMT	Nor		-H-I. A! 000	00	- Dalla ® A I	ana a al Arraltore	O / atau::-	leans d FMA C		att AC			7	
Audio suppo Security Security chip Fingerprint re	volu Pov Trus	ime up, dov ver-on pas sted Platfo	wn, mute butt sword, hard o rm Module, T	ons / mo disk pas CG 1.2	onaural digital i sword, superv -compliant	mic, mic mute visor password	v2 / stereo spea button, combo a d, security keyhol for. LED indicator	udio/mic jack e	ENEI GRE RoHs	ENGU S-com	STAR® IARD® pliant	5.0-complian certified		
90. 01.11.11	Fingerprint reader Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip									International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support				
Limited warra	supports the security chip Limited warranty <sup>12</sup> <b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available									ring th	e war	ranty period <sup>12</sup>	,011	

### ThinkPad L530 2478

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Smart Card Reader	Card slot	Finger print reader	Blue- tooth	tery	Workhors (W) Global (G	Pre-	Ann Date (mm/yy)
2478-25G	i5-3360M	4GBx1	15.6" HD+	720p	500G 7200	Intel 6205 <sup>28</sup>	WWAN upg	None	None	Finger	BT	9	G	Pro 64	06/12
2478-26G	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	None	None	Finger	BT	6	G	Pro 64	06/12
2478-27G	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	None	None	None	No	6	G	Pro 64	06/12
2478-28G	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 2200	WWAN upg	None	None	Finger	BT	6	G	Pro 64	06/12
2478-29G	i5-3320M	4GBx1	15.6" HD	None	320G 7200	Intel 2200	WWAN upg	None	None	None	BT	6	G	Pro 64	06/12
2478-2AG	i5-3360M	4GBx1	15.6" HD+	720p	320G 7200	Intel 6205	WWAN upg	None	None	Finger	BT	9	G	Pro 64	06/12
2478-2BG	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	None	None	Finger	BT	6	G	Pro 64	06/12
2478-2CG	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	None	None	None	No	6	G	Pro 64	06/12
2478-2XG	i5-3360M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	Smart	Exp 54	Finger	BT	9	G	Pro 64	06/12
2478-2YG	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	Smart	Exp 54	Finger	BT	6	G	Pro 64	06/12
2478-32G	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	Smart	Exp 54	Finger	BT	6	W G	Pro 64	06/12
2478-33G	i5-3360M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	Smart	Exp 54	Finger	BT	9	WG	Pro 64	06/12

#### • A depot repair service 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000,	Preloaded operating system <sup>20</sup>
FIOCESSOI	DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (2 cores, 2.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology	Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only
Memory	8GB max <sup>7</sup> / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	some listed) • Rescue and Recovery™ • Password Manager
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	Preloaded applications 14 (only some listed) Lenovo Message Center Plus ThinkVantage Product Recovery
mSATA™ SSD	None	<ul> <li>Access Connections™</li> <li>Fingerprint Software (fingerprint</li> </ul>
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	models) ThinkVantage System Update ThinkVantage Power Manager Microsoft® Office preloaded:
Camera	Some: HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	purchase a product key to activate
Graphics	Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display;  Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)	Norton™ Internet Security 2012     (30 days of virus definitions)     Adobe® Reader®     Skype™ for Windows     Windows Live™ Essentials     Corel® WinDVD® (DVD±RW)
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None	Corel Burn.Now™ Lenovo Edition (DVD±RW)     Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr	
Chipset ExpressCard Smart Card read Multicard Reader Ports	Mobile Intel HM76 Express Chipset  Some: One slot (ExpressCard/34, ExpressCard/54)  Some: Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN <sup>4</sup> PCIe WWAN SIM card Modem	Two PCI Express Mini Card slots  Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2  Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2  Wireless WAN upgradable  None  None	
Bluetooth™ Ethernet	Some: Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection	Supports ThinkVantage® technologies
Intel AMT Audio support	None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip	GREENGUARD® certified RoHS-compliant International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support
Limited warranty <sup>12</sup>	<sup>2</sup> 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	during the warranty period <sup>12</sup>

### ThinkPad L530 2478 - II

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	SIM card	Smart Card Reader	Card slot	Finger print I reader t	Blue-			Ann Date (mm/yy)
2478-5GG	i5-2520M	4GBx1	15.6" HD+	- 720p	128G SSD	Intel 2200	WWAN upg	None	None	Exp 54	Finger	ВТ	6	Pro 64	10/12
2478-5FG	i5-2520M	4GBx1	15.6" HD+	- 720p	128G SSD	Intel 2200	Ericsson	selectable	None	Exp 54	Finger	BT	6	Pro 64	10/12
2478-5EG	i5-2520M	4GBx1	15.6" HD+	- 720p	500G 7200	Intel 2200	Ericsson	selectable	None	Exp 54	Finger	BT	6	Pro 64	10/12
2478-5DG	i5-2520M	4GBx1	15.6" HD+	- 720p	500G 7200	Intel 2200	WWAN upg	None	Smart	Exp 54	Finger	BT	6	Pro 64	10/12
2478-5CG	i5-2520M	4GBx1	15.6" HD	720p	500G 7200	Intel 2200	WWAN upg	None	None	Exp 54	Finger	BT	6	Pro 64	10/12
2478-5BG	i5-2520M	4GBx1	15.6" HD	720p	320G 7200	Intel 2200	WWAN upg	None	None	Exp 54	Finger	BT	6	Pro 64	10/12
2478-5AG	i5-2520M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	None	None	None	Exp 54	Finger	BT	6	Pro 64	10/12
2478-59G	i5-2520M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	None	None	None	Exp 54	Finger	BT	6	Pro 64	10/12
2478-58G	i5-2520M	2GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	None	None	None	Exp 54	Finger	BT	6	Pro 64	10/12
2478-57G	i5-2520M	2GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	None	None	None	None	Finger	BT	6	Pro 64	10/12

### • A depot repair service 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i5-2520M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology	Preloaded operating system <sup>20</sup> Genuine Windows® 7 Professional 64
Memory	8GB max <sup>7</sup> / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	Ready to install applications¹⁴ (only some listed)  • Rescue and Recovery™
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>Password Manager</li> <li>Preloaded applications<sup>14</sup> (only some listed)</li> </ul>
mSATA™ SSD	None	Lenovo Message Center Plus     ThinkVantage Product Recovery
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	<ul> <li>Access Connections™</li> <li>Fingerprint Software (fingerprint models)</li> <li>ThinkVantage System Update</li> </ul>
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	ThinkVantage Power Manager
Graphics	Intel HD Graphics 3000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)	<ul> <li>Microsoft® Office preloaded; purchase a product key to activate</li> <li>Norton™ Internet Security 2012 (30 days of virus definitions)</li> <li>Adobe® Reader®</li> <li>Skype™ for Windows</li> </ul>
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None	<ul> <li>Windows Live™ Essentials</li> <li>Corel® WinDVD® (DVD±RW)</li> <li>Corel Burn.Now™ Lenovo Edition (DVD±RW)</li> </ul>
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr	Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
	Mobile Intel HM76 Express Chipset Some: One slot (ExpressCard/34, ExpressCard/54) Some: Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN <sup>4</sup>	Two PCI Express Mini Card slots  Some: 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1  Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2	
PCIe WWAN	Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS	
SIM card Modem Bluetooth™	Some: User selectable, contract required with service provider None Bluetooth 4.0 wireless	
Ethernet	Realtek® RTL8111F Gigabit Network Connection	Supports ThinkVantage® technologies
Intel AMT Audio support Security Security chip	None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital 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	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant
	r AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip  2 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>

# ThinkPad L530 2478 (Windows 8)

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	d SIM card		Blue-	tery	Global (G) GMP (P)		Ann Date (mm/yy)
2478-62G	i7-3520M	4GBx1	15.6" HD+	720p	500G 7200	Intel 6205 <sup>28</sup>	WWAN upg	None	Finger	ВТ	6	G	Win8 Pro64	10/12
2478-4NG	i5-3320M	4GBx1	15.6" HD	None	320G 7200	Intel 2200	WWAN upg	None	None	No	6	G	Win8 Pro64	10/12
2478-63G	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	None	Finger	BT	6	G	Win8 Pro64	10/12
2478-64G	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	None	Finger	BT	6	G	Win8 Pro64	10/12

#### • A depot repair service 3-year limited warranty

Memory  Memor	Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000,	Preloaded operating system <sup>20</sup> - Windows® 8 Pro 64-bit
Security of the security of t		Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000,	
Optical SATA disk Some: Some: Solid State Drive (SSD) / SATA, 6.05b/s, 2.5° wide, 7mm high, removable, upgradable   Some: Hard Disk Drive / SATA 3.05b/s, 2.5° wide, 7mm or 9.5mm high, removable, upgradable   None   Some: Hard Disk Drive / SATA 3.05b/s, 2.5° wide, 7mm or 9.5mm high, removable, upgradable   None   Some: Hard Disk Drive / SATA 3.05b/s, 2.5° wide, 7mm or 9.5mm high, removable, upgradable   None   Some: Horvovable, upgradable   None   None   Some: Horvovable, upgradable   None   None   Some: Horvovable, upgradable   None	Memory	dual-channel capable, two 204-pin SO-DIMM sockets	<ul> <li>Lenovo® Message Center Plus</li> <li>ThinkVantage Product Recovery</li> </ul>
Midescreen    Some: 15.6* (396mm) HD (1366x768) color, anti-glare, LED backlight,   220 nits, 16:9 aspect ratio, 500:1 contrast ratio   Some: 15.6* (396mm) HD (190x90) color, anti-glare, LED backlight,   220 nits, 16:9 aspect ratio, 500:1 contrast ratio   Some: 15.6* (396mm) HD (190x90) color, anti-glare, LED backlight,   220 nits, 16:9 aspect ratio, 500:1 contrast ratio   Some: HD/20p resolution, wide view angle, low light sensitive, face tracking, fixed focus   Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort, supports dual independent display;		Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high,	ThinkVantage Power Manager Lenovo SimpleTap Adobe® Reader®
Widescreen display Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16.9 aspect ratio, 500.1 contrast ratio Some: 15.6" (396mm) HD- (1600x900) color, anti-glare, LED backlight, 220 nits, 16.9 aspect ratio, 500.1 contrast ratio Camera Some: HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus Intel HD Graphics 4000 in processor, but year and the processor of the proces	mSATA™ SSD		Corel® WinDVD® (DVD±RW)
Intel HD Graphics 4000 in processor, supports external analog monitor via WGA DB-15 and digital monitor via Mini DisplayPort; supports external analog monitor via WGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 2048x1536@75Hz (VGA) (Porticing device, Internet Scroll Barrs, magnifying glass (UtraNav™, wide touchpad below keyboard, TackPoint* Ta		220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight,	Corel Burn.Now™ Lenovo Edition (DVD±RW)     Corel DVD MovieFactory® Lenovo
supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display;  Maximum external resolution: 2550x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2020x120x20x20cell international Mini DP cable); 2020x120x20x20x20x20x20x20x20x20x20x20x20x20x2	Camera		- Windows 8 models
TrackPoint® TrackPoint® TrackPoint® pointing device, Internet Scroll Bar®, magnifying glass  UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch  None  Dimensions³	Graphics	supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable);	Lenovo Companion Lenovo QuickLaunch AccuWeather PC Device Stage
Weight² G-cell: from 5.69 lb (2.58kg); g-cell: from 6.05 lb (2.75kg)  Case material Battery - type Battery - life¹o G-cell (g y y him of cell or 9-cell, HW Authentication  Battery - life¹o G-cell (57Whr): up to 7.5 hr; g-cell (g4Whr): up to 12.3 hr  Chipset ExpressCard Smart Card read Multicard Reader Ports  One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)  PCle Mini Card PCle WLAN⁴  PCle WWAN  Some: 11a/b/g/n, PCle Half Mini Card, Intel Centrino Wireless-N 2200, 2x2  Some: 11a/b/g/n, PCle Half Mini Card, Intel Centrino Advanced-N 6205, 2x2  Wireless WAN upgradable  Sluctooth⁴ Some: Bluetooth⁴ 4.0 wireless  Ethernet Realtek⁴ RTL8111F Gigabit Network Connection  Intel AMT  Audio support  Audio support  Power-on password, hard disk password, supervisor password, security keyhole  Fingerprint reader  Fingerprint reader  Acrylonitrile-Butadiene-Styrene (ABS) plastic  Lithium lon 6-cell or 9-cell, HW Authentication  Buetooth Sone: 11b/g/n, PCle Half Mini Card, Intel Centrino Wireless-N 2200, 2x2  Some: 11a/b/g/n, PCle Half Mini Card, Intel Centrino Advanced-N 6205, 2x2  Wireless WAN upgradable  Some: Bluetooth 4.0 wireless  Ethernet Realtek⁴ RTL8111F Gigabit Network Connection  Intel AMT  Audio support  Power-on password, hard disk password, supervisor password, security keyhole  Trusted Platform Module, TCG 1.2-compliant  Fingerprint reader  Fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip	TrackPoint® Touch pad	TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch	Cýberlink PowerProdùcer (DVD±RW)     All models
Chipset ExpressCard  Knone  None  Multicard Reader  Ports  None  Multicard Reader  Ports  Chipset  None  None  Alicrosoft® Office preloaded; purchase a product key to acti  Norton™ Internet Security  (30 days of virus definitions)  Two PCI Express Mini Card, Intel Centrino® Wireless-N 2200, 2x2  Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2  PCIe WWAN  SIM card  None  None  Bluetooth™  Some: Bluetooth 4.0 wireless  Ethernet  Realtek® RTL8111F Gigabit Network Connection  Intel AMT  None  HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack  Power-on password, hard disk password, supervisor password, security keyhole  Fingerprint reader  Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip  Fingerprint reader  None  None  AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip	Weight <sup>2</sup> Case material Battery - type	6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication	Password Manager     ThinkVantage System Update     Fingerprint Software (fingerprint models)
PCIe Mini Card PCIe WLAN⁴ Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2  PCIe WWAN Wireless WAN upgradable SIM card None Modem None Bluetooth™ Some: Bluetooth 4.0 wireless Ethernet Realtek® RTL8111F Gigabit Network Connection Intel AMT None Audio support HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Security Chip Fingerprint reader Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip 10 card solve.  Two PCI Express Mini Card slots Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2  Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2  Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2  PCIe WLANª Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2  Wireless WAN upgradable Supports ThinkVantage® technol 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹¹² 24 hour x 7 day¹® toll-free support	ExpressCard Smart Card read Multicard Reader	None None 4-in-1 reader (MMC, SD, SDHC, SDXC)	by SugarSync  • Microsoft® Office preloaded; purchase a product key to activate  • Norton™ Internet Security
Modem Bluetooth™ Some: Bluetooth 4.0 wireless Ethernet Realtek® RTL8111F Gigabit Network Connection None Audio support HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital mic, mic mute button, combo audio/mic jack Security Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Fingerprint reader Fingerprint reader Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip  Modem Some: Bluetooth 4.0 wireless Supports ThinkVantage® technol 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹ 24 hour x 7 day¹® toll-free support	PCIe WLAN <sup>4</sup> PCIe WWAN	Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2200, 2x2 Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6205, 2x2 Wireless WAN upgradable	(so days or virus deliminoris)
Bluetooth™ Ethernet Realtek® RTL8111F Gigabit Network Connection Intel AMT Audio support Security Security Security Chip Fingerprint reader Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip Some: Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection None Supports ThinkVantage® technol 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹¹ 24 hour x 7 day¹¹8 toll-free support			
Audio support Security Security chip Fingerprint reader Some:  HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital 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 Fingerprint reader Some: Advise ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / EPATT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹ 24 hour x 7 day¹® toll-free support	Bluetooth™ Ethernet	Some: Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection	Supports ThinkVantage® technologies
	Audio support Security Security chip Fingerprint reader	HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / volume up, down, mute buttons / monaural digital 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 r Some: AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant International Warranty Service¹7 24 hour x 7 day¹8 toll-free support
Limited warranty <sup>12</sup> <b>3-years</b> /1-yr battery - depot repair service / service upgrades <sup>22</sup> available during the warranty period <sup>12</sup>	Limited warranty <sup>12</sup>	<sup>4</sup> 3-years/1-yr battery - depot repair service / service upgrades <sup>22</sup> available	during the warranty period <sup>12</sup>

# ThinkPad L530 2479 (Onsite)

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Smart Card Reader	Card slot	Finger print reader	Blue- tooth		Workhorse (W) Global (G)		Ann Date (mm/yy)
2479-32G	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 620528	WWAN upg	Smart	Exp 54	Finger	ВТ	6	WGP	Pro 64	06/12
2479-33G	i5-3360M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	Smart	Exp 54	Finger	BT	9	WGP	Pro 64	06/12
2479-3BG	i5-3360M	4GBx1	15.6" HD+	720p	500G 7200	Intel 6205	WWAN upg	None	None	Finger	BT	9	GΡ	Pro 64	06/12
2479-3CG	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	None	None	Finger	BT	6	GΡ	Pro 64	06/12
2479-3DG	i5-3360M	4GBx1	15.6" HD+	720p	320G 7200	Intel 6205	WWAN upg	None	None	Finger	BT	9	GΡ	Pro 64	06/12
2479-3EG	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	None	None	Finger	BT	6	GΡ	Pro 64	06/12
2479-44G	i5-3360M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	Smart	Exp 54	Finger	BT	9		Pro 64	06/12
2479-45G	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	Smart	Exp 54	Finger	BT	6		Pro 64	06/12

• Some models are part of the Global Models Plus program with limited onsite service24 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i5-3360M processor (2 cores, 2.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology	Preloaded operating system <sup>20</sup> Genuine Windows® 7 Professional 64 Ready to install applications <sup>14</sup> (only
Memory	8GB max <sup>7</sup> / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	some listed)  • Rescue and Recovery™  • Password Manager
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in  Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable  Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	Preloaded applications <sup>14</sup> (only some listed)  • Lenovo Message Center Plus  • ThinkVantage Product Recovery
mSATA™ SSD	None	
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	models) • ThinkVantage System Update • ThinkVantage Power Manager • Microsoft® Office preloaded; purchase a product key to activate
Graphics	Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display;  Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)	Norton™ Internet Security 2012 (30 days of virus definitions)     Adobe® Reader®     Skype™ for Windows     Windows Live™ Essentials
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None	Corel® WinDVD® (DVD±RW)     Corel Burn.Now™ Lenovo Edition (DVD±RW)     Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr	
Chipset ExpressCard Smart Card read Multicard Reader Ports	Mobile Intel HM76 Express Chipset Some: One slot (ExpressCard/34, ExpressCard/54) Some: Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN⁴ PCIe WWAN SIM card Modem Bluetooth™ Ethernet	Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless Realtek® RTL8111F Gigabit Network Connection	
Intel AMT	None HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 /	Supports ThinkVantage® technologies
	volume up, down, mute buttons / monaural digital 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, supports the security chip	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant
Limited warranty <sup>12</sup>	<sup>2</sup> <b>3-years</b> /1-year battery, <b>limited onsite service</b> <sup>24</sup> , 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	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>

# ThinkPad L530 2479 (Onsite) - Windows 8

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB <sup>®</sup> rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	SIM card	Finger print reader	Blue-	tery	Global (G) GMP (P)	Preload	Ann Date (mm/yy)
2479-62G	i7-3520M	4GBx1	15.6" HD+	720p	500G 7200	Intel 6205 <sup>28</sup>	WWAN upg	None	Finger	BT	6	GΡ	Win8 Pro64	10/12
2479-63G	i5-3320M	4GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg	None	Finger	BT	6	GΡ	Win8 Pro64	10/12
2479-64G	i5-3320M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	WWAN upg	None	Finger	BT	6	GΡ	Win8 Pro64	10/12

• Part of the Global Models Plus program with limited onsite service<sup>24</sup> 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology	Preloaded operating system <sup>20</sup> - Windows® 8 Pro 64-bit Preloaded applications <sup>5</sup> (only some listed)
Memory	8GB max <sup>7</sup> / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	- Windows 7 models  • Lenovo® Message Center Plus  • ThinkVantage Product Recovery  • Access Connections™
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	<ul> <li>Access conflections:</li> <li>ThinkVantage Power Manager</li> <li>Lenovo SimpleTap</li> <li>Adobe® Reader®</li> <li>Windows Live™ Essentials</li> </ul>
mSATA™ SSD	None	Corel® WinDVD® (DVD±RW)
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio  Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	<ul> <li>Corel Burn.Now™ Lenovo Edition (DVD±RW)</li> <li>Corel DVD MovieFactory® Lenovo Edition (DVD±RW)</li> </ul>
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	- Windows 8 models
Graphics	Intel HD Graphics 4000 in processor, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports dual independent display; Maximum external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@75Hz (VGA)	<ul> <li>Lenovo Support</li> <li>Lenovo Companion</li> <li>Lenovo QuickLaunch</li> <li>AccuWeather</li> <li>PC Device Stage</li> </ul>
Keyboard TrackPoint® Touch pad ThinkLight™	6-row, 84-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch None	<ul> <li>Cyberlink Power2Go (DVD±RW)</li> <li>Cyberlink PowerProducer (DVD±RW)</li> <li>All models</li> </ul>
Dimensions <sup>3</sup> Weight <sup>2</sup> Case material Battery - type Battery - life <sup>10</sup>	15.6W" (WxDxH): 14.96" x 9.72" x 1.25–1.31"; 380mm x 247mm x 31.7–33.4mm 6-cell: from 5.69 lb (2.58kg); 9-cell: from 6.05 lb (2.75kg) Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell, HW Authentication 6-cell (57Whr): up to 7.5 hr; 9-cell (94Whr): up to 12.3 hr	<ul> <li>Lenovo Solution Center</li> <li>Password Manager</li> <li>ThinkVantage System Update</li> <li>Fingerprint Software (fingerprint models)</li> </ul>
Chipset ExpressCard Smart Card read Multicard Reader Ports	None None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, three USB 2.0 (one powered), VGA DB-15, Mini DisplayPort, ethernet (RJ-45)	Lenovo Cloud Storage     by SugarSync     Microsoft® Office preloaded;     purchase a product key to activate     Norton™ Internet Security     (30 days of virus definitions)
PCIe Mini Card PCIe WLAN⁴ PCIe WWAN SIM card Modem Bluetooth™	Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 4.0 wireless	(
Ethernet Intel AMT	Realtek® RTL8111F Gigabit Network Connection None	
Audio support	HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 /	Supports ThinkVantage® technologies
	volume up, down, mute buttons / monaural digital 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 r AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, supports the security chip	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant
Limited warranty <sup>12</sup>	<sup>2</sup> <b>3-years</b> /1-year battery, <b>limited onsite service</b> <sup>24</sup> , 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	International Warranty Service <sup>17</sup> 24 hour x 7 day <sup>18</sup> toll-free support during the warranty period <sup>12</sup>