

ThinkPad T450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i3 / i5 or 5th Generation Intel Core i3 / i5 / i7 Processor							Dimensions ³	14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm																
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Non-touch</td> <td>3.58 lb / 1.63 kg</td> <td>3.81 lb / 1.73 kg</td> <td>4.21 lb / 1.91 kg</td> </tr> <tr> <td>Multi-touch</td> <td>3.89 lb / 1.76 kg</td> <td>4.11 lb / 1.87 kg</td> <td>4.52 lb / 2.05 kg</td> </tr> </tbody> </table>				Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell	Non-touch	3.58 lb / 1.63 kg	3.81 lb / 1.73 kg	4.21 lb / 1.91 kg	Multi-touch	3.89 lb / 1.76 kg	4.11 lb / 1.87 kg	4.52 lb / 2.05 kg
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	i3-4030U	2	4	1.9 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 4400	Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic															
	i5-4300U			1.9 GHz	2.9 GHz			3MB	Intel HD Graphics 5500																
	i3-5010U			2.1 GHz	-																				
	i5-5200U			2.2 GHz	2.7 GHz			3MB																	
	i5-5300U			2.3 GHz	2.9 GHz																				
	i7-5500U			2.4 GHz	3 GHz	4MB																			
	i7-5600U			2.6 GHz	3.2 GHz																				
Graphics	Intel HD Graphics 4400 or 5500 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)							Smart card reader	Optional: Smart card reader																
Chipset	Intel SoC (System on Chip) platform							Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)																
Display	<i>Some:</i> 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS							Camera	HD720p resolution, low light sensitive, fixed focus																
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits							Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory							Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight																
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot							UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																
Optical	None							Security	Power-on password, hard disk password, supervisor password, security keyhole																
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)							Security chip	Trusted Platform Module, TCG 1.2-compliant																
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures																
WLAN ⁴	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card (WE only) 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card (WE only) 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 							vPro (optional)	Intel vPro Technology																
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE only) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card 							Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider							Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)																
								External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																
								Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>10.08 hr</td> <td>14.78 hr</td> <td>19.78 hr</td> </tr> </tbody> </table>				Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	10.08 hr	14.78 hr	19.78 hr					
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Battery life	10.08 hr	14.78 hr	19.78 hr																						
								AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter																
								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit														
									<ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader⁵ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 		<ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage System Update PC Device Stage Norton Studio Microsoft Office preloaded; purchase a product key to activate (30 days of virus definitions) Norton Internet Security (30 days of virus definitions) 														
								Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery) 																
								Environment	EPEAT™ Gold (US) or EPEAT™ Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant																

