

ThinkPad T450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i3 / i5 or 5th Generation Intel Core i3 / i5 / i7 Processor								Smart card reader	<i>Optional:</i> Smart card reader														
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Media reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)														
	i3-4030U	2	4	1.9 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 4400	Camera Audio support	HD720p resolution, low light sensitive, fixed focus HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack														
	i5-4300U			1.9 GHz	2.9 GHz			Intel HD Graphics 5500		Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch													
	i3-5010U			2.1 GHz	-				3MB		Security chip ThinkEngine	Power-on password, hard disk password, supervisor password, security keyhole Discrete TPM 1.2, TCG Certified Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures												
	i5-5200U			2.2 GHz	2.7 GHz	4MB						Intel vPro Technology												
	i5-5300U			2.3 GHz	2.9 GHz							vPro (<i>optional</i>) Fingerprint reader												
	i7-5500U			2.4 GHz	3 GHz			<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor																
	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)								Internal battery	<i>Optional:</i> Integrated Li-Ion or Li-Polymer 3-cell (23Wh)														
Chipset	Intel SoC (System on Chip) platform								External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)														
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Max battery life ¹⁰	<table><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><tr><td>Battery life</td><td>10.08 hr</td><td>14.78 hr</td><td>19.78 hr</td></tr></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			
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																					
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								AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter														
Multi-touch (<i>opt</i>)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit or Windows 10 Pro 64 • Lenovo Solution Center • Lenovo SHAREit • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • PC Device Stage • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions)														
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								<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <i>Some:</i> Windows 10 Pro 64 • Lenovo Solution Center • Lenovo SHAREit • Lenovo REACHit • Lenovo Companion • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions, Win8 w/o i5/i7 model) • McAfee® LiveSafe™ (30-day trial, Win8 i5/i7 and Win10 model)															
M.2 SSD (<i>opt</i>)	Single-sided M.2 SSD, via M.2 card slot																							
Optical	None																							
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)																							
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																							
WLAN ⁴	<i>One of the following, configurable by model:</i> • 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card																							
WWAN (<i>optional</i>)	<i>One of the following, configurable by model:</i> • Wireless WAN upgradable • Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card								Limited warranty ¹² <i>One of the following, configurable by model:</i> • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service ²⁴ • 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)															
SIM card (<i>opt</i>)	AT&T® or Verizon® LTE (4G), contract required with service provider								Mil-Spec test															
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								Environment															
Weight ²	<table><tr><th>Models</th><th>No + 3-cell</th><th>3-cell + 3-cell</th><th>3-cell + 6-cell</th></tr><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></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	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant			
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																					
Case material	<i>Display cover:</i> Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); <i>Bottom:</i> Glass-Fiber Reinforced Plastic																							

Model	20BV003V++
Product	ThinkPad T450
Region	WE
Machine Type	20BV
TopSeller	TopSeller
Processor	Core i7-5600U (2C, 2.6 / 3.2GHz, 4MB)
vPro	vPro
Graphics	Integrated Intel HD Graphics 5500
Memory	8GBx1
Display	14" HD+ (1600x900)
Multi-touch	None
Storage	256GB SSD Opal2
M.2 SSD	None
Optical	None
WLAN + Bluetooth	Intel 7265 ac, 2x2 + BT4.0
WWAN	Sierra EM7345
SIM Card	None
Smart Card Reader	Smart Card Reader
Camera	720p
Keyboard	Backlit
Fingerprint Reader	Fingerprint Reader
Battery	3-cell (23Wh) + 3-cell (23Wh)
Power Adapter	45W
Operating System	Windows 10 DG Windows 7 Pro 64
Warranty	3-year, Onsite
Global	No
Ann Date (mm/yy)	08/15



