Lenovo K450e Tower Platform Specifications

Processor	4th Generation Intel® Core™ i3, i5, i7 processors or Pentium® processors

Processor	Cores / Threads	Frequency (Base/Max)	Cache	Memory Types	Integrated Graphics
Core i5-4460	4 / 4	3.2 GHz / 3.4 GHz	6 MB	DDR3-1600	HD 4600
Core i7-4790	4 / 8	3.6 GHz / 4 GHz	8 MB	DDR3-1600	HD 4600

Memory
32GB max, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets, supports dual channel

Disk
Some: Hard Disk Drive, SATA 6.0Gb/s, 3.5" wide, 7200 rpm
Some: Solid State Hybrid Drive (SSHD) with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide, 7200 rpm

Optical
Some: Super Multi-Burner, DVD disk recordable
Some: Blu-ray™ burner, Blu-ray and DVD disk recordable

Onboard SATA
SATA 6.0Gb/s controller (in chipset), four SATA connectors (SATA 6.0Gb/s), one eSATA connector (SATA 3.0Gb/s)

Media reader
Optional 7-in-1 media reader (SD, SDHC, SDXC, MMC, MMC plus, MS, MS Pro)

Graphics
Intel HD Graphics or **Intel HD Graphics 4400/4600** in processor, uses main memory, DirectX® 11, one VGA, one HDMI, supports two independent displays;
Some: **NVIDIA® Geforce® GT 720**, **2GB DDR3**, PCIe 3.0 x16 adapter, DirectX 11, one VGA, one HDMI
Some: **NVIDIA Geforce GTX 750**, **2GB GDDR5**, PCIe 3.0 x16 adapter, occupies two slots, DirectX 11, one DVI-I, one HDMI

Chipset
Intel B85 Chipset

Front ports
Two USB 3.0 (one is always on charging), microphone (3.5mm), headphone (3.5mm)

Rear ports
Two USB 3.0, two USB 2.0, ethernet (RJ-45), one VGA, one HDMI, additional VGA, DVI-D, DisplayPort, or HDMI on discrete graphics on some models
*Onboard VGA and HDMI are unavailable on discrete models

Rear audio ports
Line-in (3.5mm), line-out (3.5mm), microphone-in (3.5mm), cneter/low frequency output (3.5mm), rear surround (3.5mm), S/PDIF out

IEEE 1394
None

Audio support
High Definition (HD) Audio, Realtek ALC892, supports 7.1 surround sound

WLAN
Some: 11/b/g/n wireless, PCIe Half Mini Card, 1x1
Some: 11ac wireless, PCIe Half Mini Card, Wi-Fi + Bluetooth 4.0 combo, 1x1

Bluetooth™
Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter

Ethernet
One gigabit ethernet port, Realtek RTL8111F-VB

Modem
None

Security features
● Power-on password
● Administrator password

Keyboard
Full-size keyboard (USB connector), Fn keys, black

Mouse
Lenovo Optical Mouse (USB connector)

Mechanical
● Mini Tower 25L (chassis), Metal Gray (metal brush effect)
● Dimensions (WxDxH): 9.4" x 23.2" x 21.9"; 240 mm x 590 mm x 555 mm
● Weights (net weight): from 24.6 lb (11.2 kg), vary by configuration
● Tool-free for cover, disk, optical drive removal
Bay 1: 5.25", 1.6" high, access, optical
Bay 2: 3.5", 1" high, no access, standard disk
Bay 3: 3.5", 1" high, no access, optional disk
Slot 1: half-length, full-height, PCIe x16 (Version 3.0)
Slot 2: half-length, full-height, PCIe x1 (Version 2.0)*
Slot 3: half-length, full-height, PCIe x1 (Version 2.0)
Slot 4: half-length, full-height, PCIe x1 (Version 2.0)
Slot 5: PCIe Mini Card x1 (Version 2.0, for optional WLAN)
* Some dual slot desgin graphics adapters may occupy adjacent PCIe x1 slot

Power supply
Some: 280 watts, manual switch, universal
Some: 280 watts, EnergyStar 6.0, autosensing, universal
Some: 450 watts, autosensing, universal
Some: 450 watts, EnergyStar 6.0, autosensing, universal

Limited warranty
1-year, **limited onsite service** / service upgrades available

Preload
Preloaded operating system
Windows® 8.1 64-bit
Preloaded applications (only some listed)
● Lenovo® Rescue System
● Driver and Application Installation
● Lenovo Support
● Lenovo Solution Center
● Lenovo Companion
● McAfee® LiveSafe™ (30 days of virus definitions)
● Adobe® Reader®
● Microsoft Office preloaded; purchase a product key to activate
● Cyberlink PowerDVD (DVD±RW)
● Cyberlink Power2Go (DVD±RW)
● Nitro Pro

Environment
RoHS-compliant

See footnotes for more detailed information