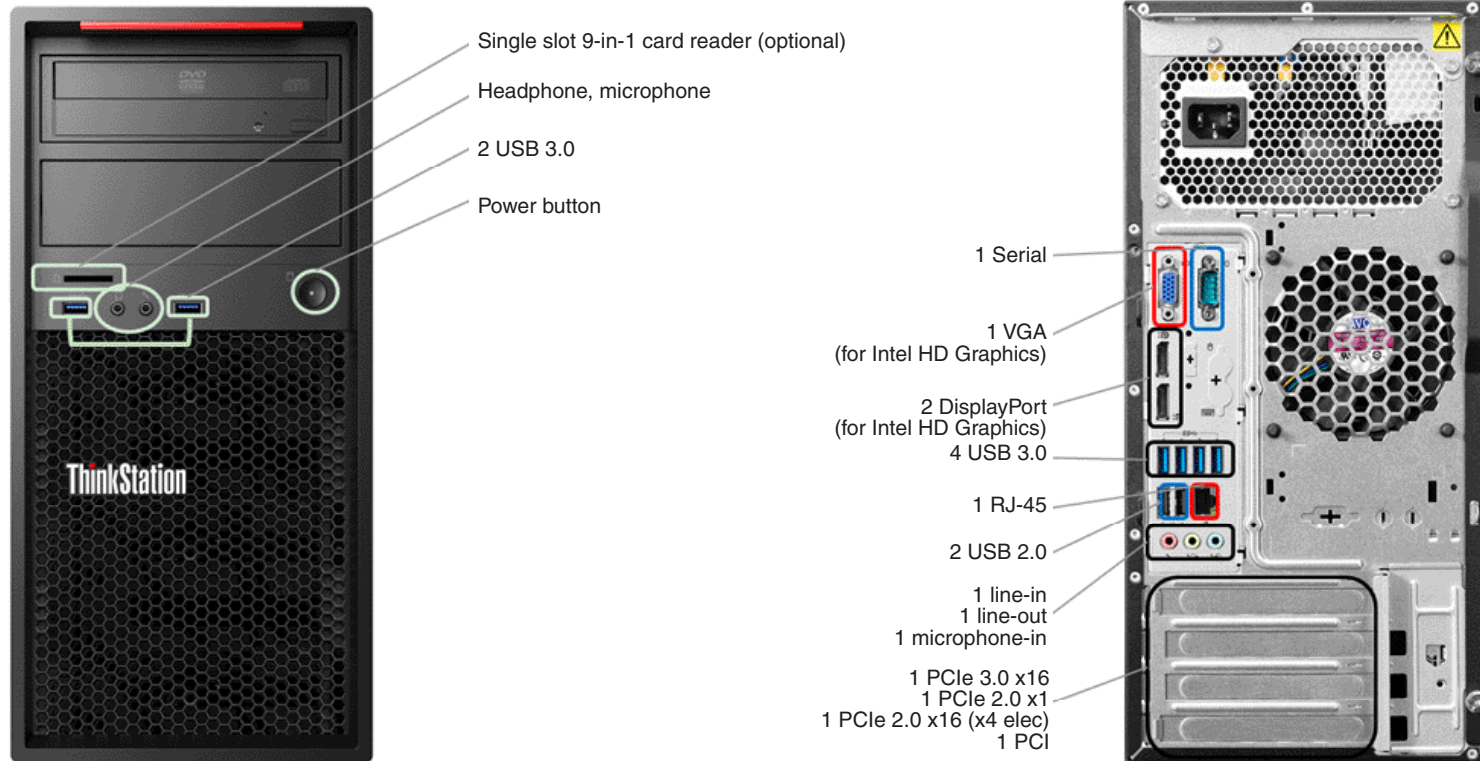


ThinkStation P300 Tower - Overview



Internal

- One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7, Core i5, Core i3, Pentium, and Celeron families
- 4 DIMM sockets, supports up to 32GB ECC or non-ECC UDIMM memory
- Up to four 3.5" disk drive bays, two 3.5" disk drive bays are standard

Mechanical

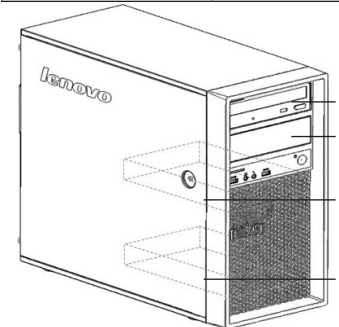
- Raven black color; metal case
- 6.89"W x 16.77"D x 14.8H
- 175mm W x 426mm D x 376mm H
- 28.66 lb (13kg) max configuration
- 25-liter

ThinkStation P300 Tower Platform Specifications

Product Specifications Reference (PSREF)

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600 Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600 Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600 Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600 Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600 Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section); up to two Quadro K2200 on 280 watts models, up to two Quadro K2200 or up to one Quadro K4200 on 450 watts models,
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1, 5, 10 support
Standard drive Bays	Two external 5.25" bays, two internal 3.5" bays (see right)
Maximum internal storage	Up to 8TB (4TB 3.5" x 2) with standard disk bay configuration, up to 16TB (4TB 3.5" x 4) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	Supports one of the following: <ul style="list-style-type: none"> 280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified 450 watts with variable speed fan, autosensing, 92% PSU, Climate Savers Computing Platinum, 80 PLUS Platinum qualified
Expansion slots	1: half-length, full-height, PCIe 3.0 x16 (near CPU) 2: half-length, full-height, PCIe 2.0 x1 3: half-length, full-height, PCIe 2.0 x16 (x4 elec) 4: half-length, full-height, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (for Intel HD Graphics models only), two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)
IEEE 1394 (optional)	1 front, 1 rear, via optional 1394 adapter

Components	Specification
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> Raven black color; metal case 6.89"W x 16.77"D x 14.8"H 175mm W x 426mm D x 376mm H 28.66 lb (13kg) max configuration 25-liter
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV



Drive Bays for ThinkStation P300 Tower

- Bay 1: Standard, 5.25", for half-high optical, or flex module*, or optional HDD bay**
- Bay 1: Standard, 5.25", for half-high optical, or flex module*, or optional HDD bay**
- Bay 3: Standard, 3.5" HDD bay
- Bay 4: Standard, 3.5" HDD bay

* Flex module supports one or more of the following options: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.

** The bracket of HDD bay is optional and comes with the corresponding drives.

Core Options for ThinkStation P300 SFF

For detailed information on supportable processors, graphics adapters, disk drives, and other optional configurations, please see [ThinkStation P300 Tower and SFF Optional Configurations Sheet](#)

Option	Description
0A65729	4GB DDR3 1600 (PC3 12800) Non-ECC UDIMM Memory
0A65730	8GB DDR3 1600 (PC3 12800) Non-ECC UDIMM Memory
0B47377	4GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory
0B47378	8GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory
4XB0F18667	ThinkStation 2TB 3.5" SATA 6Gbps Hard Drive
4XB0F18668	ThinkStation 3TB 3.5" SATA 6Gbps Hard Drive
4XB0F18669	ThinkStation 4TB 3.5" SATA 6Gbps Hard Drive
4XB0F18670	ThinkStation 128GB SATA 2.5" Solid State Drive
4XB0F18671	ThinkStation 256GB SATA 2.5" Solid State Drive
4XB0F22432	ThinkStation 256GB SATA 2.5" Solid State Drive - OPAL
0B47075	NVIDIA Quadro 410, 512MB Dual-Link DVI-I, DisplayPort Graphics Card
0B47394	NVIDIA Quadro K600 1GB Graphics Card by Lenovo
0B47392	NVIDIA Quadro K2000 2GB Graphics Card by Lenovo
0B47393	NVIDIA Quadro K4000 3GB Graphics Card by Lenovo (needs 450 watts power supply)

ThinkStation P300 Tower and SFF Optional Configurations

Partial list of core options supported on ThinkStation P300 Tower and SFF

Processors

Both ThinkStation P300 Tower and SFF support the following processors:

Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Speed	Cache	Memory Speed	ECC Memory Supported	Processor Graphics	Max TDP
Celeron G1840	2	2	2.8GHz		2MB	1333MHz	Yes	Intel HD	54 W
Celeron G1850	2	2	2.9GHz		2MB	1333MHz	Yes	Intel HD	54 W
Pentium G3240	2	2	3.1GHz		3MB	1333MHz	Yes	Intel HD	54 W
Pentium G3440	2	2	3.3GHz		3MB	1600MHz	Yes	Intel HD	54 W
Pentium G3450	2	2	3.4GHz		3MB	1600MHz	Yes	Intel HD	54 W
Core i3-4150	2	4	3.5GHz		3MB	1600MHz	Yes	Intel HD 4400	54 W
Core i3-4350	2	4	3.6GHz		4MB	1600MHz	Yes	Intel HD 4600	54 W
Core i3-4360	2	4	3.7GHz		4MB	1600MHz	Yes	Intel HD 4600	54 W
Core i5-4690	4	4	3.5GHz	3.9GHz	6MB	1600MHz	No	Intel HD 4600	84 W
Core i5-4590	4	4	3.3GHz	3.7GHz	6MB	1600MHz	No	Intel HD 4600	84 W
Core i5-4460	4	4	3.2GHz	3.4GHz	6MB	1600MHz	No	Intel HD 4600	84 W
Core i7-4790	4	8	3.6GHz	4GHz	8MB	1600MHz	No	Intel HD 4600	84 W
Xeon E3-1281 v3	4	8	3.7GHz	4.1GHz	8MB	1600MHz	Yes	None	82 W
Xeon E3-1271 v3	4	8	3.6GHz	4GHz	8MB	1600MHz	Yes	None	80 W
Xeon E3-1241 v3	4	8	3.5GHz	3.9GHz	8MB	1600MHz	Yes	None	80 W
Xeon E3-1231 v3	4	8	3.4GHz	3.8GHz	8MB	1600MHz	Yes	None	80 W
Xeon E3-1276 v3	4	8	3.6GHz	4GHz	8MB	1600MHz	Yes	Intel HD P4600	84 W
Xeon E3-1246 v3	4	8	3.5GHz	3.9GHz	8MB	1600MHz	Yes	Intel HD P4600	84 W
Xeon E3-1226 v3	4	4	3.3GHz	3.7GHz	8MB	1600MHz	Yes	Intel HD P4600	84 W
Core i3-4340	2	4	3.6 GHz		4MB	1600MHz	Yes	Intel HD 4600	54W
Core i3-4330	2	4	3.5 GHz		4MB	1600MHz	Yes	Intel HD 4600	54W
Core i3-4130	2	4	3.4 GHz		3MB	1600MHz	Yes	Intel HD 4400	54W
Core i5-4670	4	4	3.4 GHz	3.8GHz	6MB	1600MHz	No	Intel HD 4600	84W
Core i5-4570	4	4	3.2 GHz	3.6GHz	6MB	1600MHz	No	Intel HD 4600	84W
Core i7-4770	4	8	3.4 GHz	3.9GHz	8MB	1600MHz	No	Intel HD 4600	84W
Xeon E3-1275 v3	4	8	3.5 GHz	3.9GHz	8MB	1600MHz	Yes	Intel HD P4600	84W
Xeon E3-1245 v3	4	8	3.4 GHz	3.8GHz	8MB	1600MHz	Yes	Intel HD P4600	84W
Xeon E3-1225 v3	4	4	3.2 GHz	3.6GHz	8MB	1600MHz	Yes	Intel HD P4600	84W
Xeon E3-1280 v3	4	8	3.6 GHz	4GHz	8MB	1600MHz	Yes	None	82W
Xeon E3-1270 v3	4	8	3.5 GHz	3.9GHz	8MB	1600MHz	Yes	None	80W
Xeon E3-1240 v3	4	8	3.4 GHz	3.8GHz	8MB	1600MHz	Yes	None	80W
Xeon E3-1230 v3	4	8	3.3 GHz	3.7GHz	8MB	1600MHz	Yes	None	80W
Xeon E3-1220 v3	4	4	3.1 GHz	3.5GHz	8MB	1600MHz	Yes	None	80W

Notes:

All information is provided by Intel and may be changed at any time without notice.
The information herein is provided as-is. Intel may update this information in non-scheduled.
For latest information, please see <http://ark.intel.com/>

Memory Options	Option Number	P300 Tower	P300 SFF
4GB PC3-12800 DDR3-1600 UDIMM Desktop Memory	0A65729	Yes	Yes
8GB PC3-12800 DDR3-1600 UDIMM Desktop Memory	0A65730	Yes	Yes
4GB PC3-12800 DDR3-1600 ECC UDIMM Workstation Memory	0B47377	Yes	Yes
8GB PC3-12800 DDR3-1600 ECC UDIMM Workstation Memory	0B47378	Yes	Yes

Discrete Graphics Adapters

Graphics Adapter	Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	Power	Option Number	P300 Tower	P300 SFF
Quadro K4200	4GB	1344	1xDVI-I DL+2xDP	4 ³	108W	4X60G69026	Yes	
Quadro K2200	4GB	640	1xDVI-I DL+2xDP	4 ³	68W	4X60G69027	Yes	
Quadro K620	2GB	384	1xDVI-I DL+1xDP	4 ³	45W	4X60G69028	Yes	Yes
Quadro K420	1GB	192	1xDVI-I DL+1xDP	4 ³	41W	4X60G69029	Yes	Yes
Quadro K4000	3GB	768	1 dual-link DVI-I 2 DisplayPort	4 ³	80W	0B47393	Yes	
Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4 ³	51W	0B47392	Yes	
Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4 ³	51W		Yes	
Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	41W	0B47394	Yes	Yes
Quadro 410	512MB	192	1 dual-link DVI-I 1 DisplayPort	2	37W	0B47075	Yes	Yes
NVS 510	2GB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	35W	0B47077	Yes	Yes
NVS 315	1GB	48	DMS59 to dual single-link DVI-I or dual DisplayPort	2	19.5W	4X60F17422	Yes	Yes
NVS 310	512 MB	48	2 DisplayPort	2	19.5W	0B47074	Yes	Yes

Notes:

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The information herein is provided as-is. NVIDIA may update this information in non-scheduled.
For latest information, please see <http://www.nvidia.com/page/products.html#WorkstationsPC>
- NVIDIA Quadro K4000/K4200/Dual K2200 is supported on P300 Tower models with 450 watts power supply.
- 4 Displays requires a supported DisplayPort 1.2 Multi-Stream capable hub or displays

Internal Storage

Graphics Adapter	Option Number	P300 Tower	P300 SFF
Lenovo 1TB 7200 rpm Serial ATA Hard Drive	45J7918	Yes	Yes
ThinkStation 180GB Solid State Drive	0B47308	Yes	Yes
ThinkStation 1TB SATA 3.5 Hybrid HDD	4XB0F18665	Yes	Yes
ThinkStation 2TB SATA 3.5 Hybrid HDD	4XB0F18666	Yes	Yes
ThinkStation 128GB SATA 2.5 SSD	4XB0F18670	Yes	Yes
ThinkStation 256GB SATA 2.5 SSD	4XB0F18671	Yes	Yes
ThinkStation 256GB SATA 2.5 SSD - OPAL	4XB0F22432	Yes	Yes
ThinkStation 2TB 7200rpm 3.5" SATA 6Gbps Hard Drive	4XB0F18667	Yes	Yes
ThinkStation 3TB 7200rpm 3.5" SATA 6Gbps Hard Drive	4XB0F18668	Yes	Yes
ThinkStation 4TB 7200rpm 3.5" SATA 6Gbps Hard Drive	4XB0F18669	Yes	Yes

For more information on accessories:

www.lenovo.com/accessories

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Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems