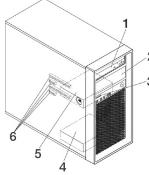
ThinkStation P310 Tower Platform Specifications

Components	Specification					
Chipset	Intel C236 Chipset					
Intel AMT			Technolo	av 11 sup	ported on Xeon models	
	One LGA1151 soc					
Processor	Xeon E3-1280 v5 Xeon E3-1275 v5 Xeon E3-1270 v5 Xeon E3-1245 v5 Xeon E3-1240 v5 Xeon E3-1230 v5 Xeon E3-1225 v5 Xeon E3-1220 v5 Core i7-6700 Core i5-6600 Core i5-6400 Core i3-6320 Core i3-6320 Core i3-6300	4C 4C 4C 4C 4C 4C 4C 4C 4C 4C 4C 4C 4C 4	7/3.7GHz/8 7/3.7GHz/8 7/3.6GHz/8 7/3.5GHz/8 7/3.5GHz/8 7/3.4GHz/8 7/3.3GHz/8 7/3.4GHz/8 7/3.4GHz/8 7/3.3GHz/6 7/3.2GHz/6 7/2.7GHz/6 7/3.9GHz/4	MB/80W/D MB/80W/D MB/80W/D MB/80W/D MB/80W/D MB/80W/D B/80W/D MB/65W/D MB/65W/D MB/65W/D MB/51W/D MB/51W/D	DR4-2133	
	Core i3-6100			MB/51W/D		
Memory DIMM slots					y controller in processor)	-
Memory type/capacity	Up to 64GB ECC/n	on-EC	C (4 x 16	GB), DDF	R4-2133, UDIMM	
Intel HD Graphics in processor	Core i7, i5, or i3 pre	ocesso es thro	ors. Works ee display	s along wi	5 processors; or Intel HD th discrete graphics to su ors (2 DP, 1 VGA) on rear	upport
	Two PCI Express 3.0 x16 slots for graphics adapters. Up to two Quadro K1200 on 250 watts models. Or up to two Quadro K2200, or up to one Quadro M4000 on 400 watts models. Supports the following NVIDIA graphics adapters:				ts models.	
	Adapter	Cores	,	Power	Connector	
	NVS 310	48	1GB	19.5W	2xDP	_
Discrete graphics	NVS 315	48	1GB	19.5W	2xDVI-I SL/2xDP	_
	NVS 510 Quadro K420	192 192	2GB 2GB	33.4W 41W	4xmini DP 1xDVI-I DL+1xDP	-
	Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP	-
	Quadro K1200	512	4GB	45W	4xminiDP	- I
	Quadro K2200	640	4GB	68W	1xDVI-I DL+2xDP	7
	Quadro M2000	768	4GB	75W	4xDP]
	Quadro M4000	1664	8GB	120W	4xDP	
Onboard drive	Five onboard SATA	6.0GI	o/s conne	ctors for c	optical and disk drives plu	us one
controller	SATA connector for					
Drive Bays	Two external 5.25" Up to one 9.5mm of				rive bays plus one M.2 N	IVMe SSD
Supporting disk drives	3.5" SATA HDD (7.2K 6Gbs) 500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid 128GB/180GB*/240GB*/25GGB*/480GB*/512GB/1TB*					
* Includes OPAL options Max internal storage 16TB (4 x 4TB 3.5" HDDs) plus 512GB M.2 NVMe SSD						
Max internal storage	`		<i>,</i> .			
Media reader				card rea	der on selected models	
Power supply	Supports one of the following: • 250 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified • 400 watts with variable speed fan, autosensing, 92% PSU, Climate Savers Computing Platinum, 80 PLUS Platinum qualified					
Onboard Ethernet	One onboard gigat	it ethe	rnet, Inte	l l219LM,	supports Wake-on-LAN	
HD Audio	Realtek ALC662 co	odec				
TPM	Standard, TCG 1.2		liant			
Front ports	Two USB 3.0, micro), headph	one (3.5mm)	
Rear ports	1 VGA and 2 Displa	ayPort JSB 3	(for Intel .0 (blue),	HD Graph one serial	nics models only), I (9-pin), one ethernet (R	J-45),

	Components	Specification		
	Additional ports	Supports the following optional ports: • Two IEEE 1394 (one on rear and one on front flex module) via PCle adpater, up to one adapter per system. Supports one of the following per system: • Two rear USB 3.0 per PCle adapter. • One rear Thunderbolt via PCle adapter. • One front eSATA (on flex module), or one rear eSATA via cable and PCle stot bracket, up to one eSATA port per system. • One additional serial port via cable. • One parallel port via cable		
	Mechanical	 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 6.1 qualified		
-	Limited warranty	3-year limited onsite service with 9x5/NBD. Some parts are Customer Replaceable Units.		



Drive Bays and PCIe Slots

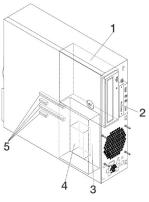
	Bay 1 and Bay 2	5.25", support one of the following: HH optical/flex module**/9.5mm optical+3.5" HDD bay/ 3.5" HDD bay/Front Access Storage Enclosure ** Flex module supports one or more of the following: 9.5mm optical/ 29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
		Optional 9-in-1 single slot reader
;	Bay 4	Standard 3.5" HDD bay
	Bay 5	Standard 3.5" HDD bay
	6 -Slots	Four PCIe slots (top-down): Slot 1: Half length, full height, PCIe 3.0 x16 (near CPU) Slot 2: Half length, full height, PCIe 3.0 x1 Slot 3: Half length, full height, PCIe 3.0 x16 (x4 elec) Slot 4: Half length, full height, PCIe 3.0 x1

For the list of ISV certifications, please visit <u>www.thinkworkstations.com/isv-certifications/</u>
For a list of all supported options, please visit <u>https://download.lenovo.com/pccbbs/options_iso/ocm_july_2016.xlsx</u> sheet

ThinkStation P310 SFF Platform Specifications

One LGA1151 so Xeon E3-1280 v5 Xeon E3-1275 v5 Xeon E3-1270 v5 Xeon E3-1240 v5 Xeon E3-1240 v5 Xeon E3-1240 v5 Xeon E3-1220 v5 Xeon E3-1220 v5 Core i7-6700 Core i5-6600 Core i5-6600 Core i5-6500 Core i5-6300 Core i3-6320 Core i3-6300 Core i3-6300 Core i3-6100	gemer cket, s 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	supports of Control of	one the folio /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D	DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 R4-2133	
One LGA1151 so Xeon E3-1280 v5 Xeon E3-1275 v5 Xeon E3-1270 v5 Xeon E3-1240 v5 Xeon E3-1240 v5 Xeon E3-1240 v5 Xeon E3-1220 v5 Xeon E3-1220 v5 Core i7-6700 Core i5-6600 Core i5-6600 Core i5-6500 Core i5-6300 Core i3-6320 Core i3-6300 Core i3-6300 Core i3-6100	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	supports of Control of	one the folio /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D	wing processors: DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 R4-2133 R4-2133	
Xeon E3-1280 v5 Xeon E3-1275 v5 Xeon E3-1270 v5 Xeon E3-1240 v5 Xeon E3-1240 v5 Xeon E3-1230 v5 Xeon E3-1220 v5 Core i7-6700 Core i5-6600 Core i5-6600 Core i5-6400 Core i5-6400 Core i3-6320 Core i3-6320 Core i3-6300 Core i3-6300	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	C/3.7GHz, IC/3.6GHz, IC/3.6GHz, IC/3.5GHz, IC/3.5GHz, IC/3.4GHz, IC/3.3GHz, IC/3.4GHz, IC/3.4GHz, IC/3.3GHz, IC/3.2GHz,	/8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/DDI /8MB/65W/D	DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 R4-2133	
Xeon E3-1275 v5 Xeon E3-1270 v5 Xeon E3-1240 v5 Xeon E3-1240 v5 Xeon E3-1230 v5 Xeon E3-1220 v5 Xeon E3-1220 v5 Core i7-6700 Core i5-6600 Core i5-6600 Core i5-6400 Core i3-6320 Core i3-6320 Core i3-6300 Core i3-6100	2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	IC/3.6GHz/ IC/3.6GHz/ IC/3.5GHz/ IC/3.5GHz/ IC/3.4GHz/ IC/3GHz/8 IC/3.4GHz/ IC/3.3GHz/ IC/3.2GHz/ IC/3.2GHz/	/8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D MB/80W/DDI /8MB/65W/D	DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 R4-2133	-
Xeon E3-1270 v5 Xeon E3-1245 v5 Xeon E3-1240 v5 Xeon E3-1230 v5 Xeon E3-1225 v5 Xeon E3-1220 v5 Core i5-6600 Core i5-6600 Core i5-6500 Core i5-6400 Core i3-6320 Core i3-6320 Core i3-6300 Core i3-6100	2 2 2 2 2 2 2 2 2 2	IC/3.6GHz IC/3.5GHz IC/3.5GHz IC/3.4GHz IC/3.3GHz/8 IC/3.4GHz/I IC/3.3GHz IC/3.2GHz	/8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D MB/80W/DDI /8MB/65W/D	DR4-2133 DR4-2133 DR4-2133 DR4-2133 DR4-2133 R4-2133	
Xeon E3-1245 v5 Xeon E3-1240 v5 Xeon E3-1230 v5 Xeon E3-1225 v5 Xeon E3-1220 v5 Core i7-6700 Core i5-6600 Core i5-6500 Core i5-6400 Core i3-6320 Core i3-6320 Core i3-6300 Core i3-6100	2 2 2 2 2 2 2 2	IC/3.5GHz IC/3.5GHz IC/3.4GHz IC/3.3GHz IC/3GHz/8 IC/3.4GHz IC/3.3GHz IC/3.2GHz	/8MB/80W/D /8MB/80W/D /8MB/80W/D /8MB/80W/D MB/80W/DDI /8MB/65W/D	DR4-2133 DR4-2133 DR4-2133 DR4-2133 R4-2133	-
Core i5-6500 Core i5-6500 Core i5-6500 Core i5-6400 Core i3-6320 Core i3-6300 Core i3-6100	2 2 2 2 2 2 2	IC/3.4GHz/ IC/3.3GHz/8/ IC/3.4GHz/ IC/3.3GHz/ IC/3.2GHz/	/8MB/80W/D /8MB/80W/D MB/80W/DDI /8MB/65W/D	DR4-2133 DR4-2133 R4-2133	
Core i5-6500 Core i5-6500 Core i5-6500 Core i5-6400 Core i3-6320 Core i3-6300 Core i3-6100	2 2 2 2 2	IC/3.3GHz/8 IC/3GHz/8 IC/3.4GHz/ IC/3.3GHz/ IC/3.2GHz/	/8MB/80W/D MB/80W/DDI /8MB/65W/D	DR4-2133 R4-2133	
Core i5-6500 Core i5-6500 Core i5-6500 Core i5-6400 Core i3-6320 Core i3-6300 Core i3-6100	4	IC/3GHz/8 IC/3.4GHz/ IC/3.3GHz/ IC/3.2GHz/	<u>MB/80W/DDI</u> /8MB/65W/D	R4-2133	
Core i5-6600 Core i5-6500 Core i5-6400 Core i3-6320 Core i3-6300 Core i3-6100	4	<u>IC/3.3GHz/</u> IC/3.2GHz/		D114-2100	
Core i5-6400 Core i3-6320 Core i3-6300 Core i3-6100	4	IC/3.2GHz/		DR4-2133	
Core i3-6320 Core i3-6300 Core i3-6100	2	LC/2 7GHz	/6MB/65W/D /6MB/65W/D	DR4-2133 DR4-2133	
Core 13-6100		C/3.9GHz/	/4MB/51W/D /4MB/51W/D	DR4-2133	
	2	2 <u>C/3.8GHz/</u> 2C/3.7GHz/	<u>/4MB/51W/D</u> /3MB/51W/D	DR4-2133 DR4-2133	
					-1"
Integrated Intel H	D P53	0 in Xeon	E3-12x5 v	5 processors: or Intel HD 530 in	-
Core i7, i5, or i3 p	roces	sors. Wor	ks along wi	th discrete graphics to support	
			ay connecto	ors (2 DP, 1 VGA) on rear.	I
				dente de la la la la la Constanti (400	
					0.
NVS 510	192	2GB	33.4W	4xmini DP	
Quadro K420	192	2GB	41W	1xDVI-I DL+1xDP	
		_			
<u> </u>					_
SATA connector for *** RAID 5 supports three	or opti 2.5" S	onal eSAT SDdrives only	TA. RAID 0,	1, 5* support	
Up to one 9.5mm	optica				.
3.5" SATA HDD (7.2K	6Gbs)				П
2.5" SATA SSD (6Gbs) 128GB/180GB*/240GB*/256GB*/480GB*/512GB/1TB*					
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Climate Savers C	omput	ing Bronz	ze, 80 PLUS	S Bronze qualified	
		nernet, Int	tel I219LM,	supports Wake-on-LAN	
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two USB 2.0, four	USB	3.0 (blue)	, one serial	(9-pin), one ethernet (RJ-45),	
Supports the following optional ports: • Two IEEE 1394 (one on rear and one on front flex module) via PCIe adpater, up to one adapter per system. Supports one of the following per system: • Two rear USB 3.0 per PCIe adapter. • One front eSATA (on flex module), or one rear eSATA via cable and PCIe slot bracket, up to one eSATA port per system. • One additional serial port via cable.					
	4 DIMM slots, 2-ci Up to 64GB ECC/ Integrated Intel HI Core i7, i5, or i3 p multi-display, enal Max Resolution: 4 Two PCI Express Supports the follo Adapter NVS 310 NVS 315 NVS 315 NVS 510 Quadro K420 Quadro K620 Quadro K620 Quadro K620 Quadro K620 Quadro K620 Supports three One external 5.25 Up to one 9.5mm one M.2 NVMe S3 3.5" SATA HDD (7.2K 2.5" SATA SSD (6Gbs M.2 NVMe SSD 9-in-1 card reader 210 watts with var Climate Savers Co One onboard giga Realtek ALC662 o Standard, TCG 1. Two USB 3.0, mic 1 VGA and 2 Disp two USB 2.0, four three analog audis Supports the follow - Two IEEE 1394 (adpater, up to on Supports one of the - Two rear USB 3.6 - One radditional se - One additional se - One additional se	4 DIMM slots, 2-channe Up to 64GB ECC/non-E Integrated Intel HD P53 Core i7, i5, or i3 process multi-display, enables th Max Resolution: 4096 x Two PCI Express 3.0 x1 Supports the following N Adapter Cores NVS 310 48 NVS 315 48 NVS 315 48 NVS 315 192 Quadro K420 192 Quadro K420 192 Quadro K620 384 Quadro K1200 512 Five onboard SATA 6.00 SATA connector for optiting the same shape of the	4 DIMM slots, 2-channel (integrated Up to 64GB ECC/non-ECC (4 x 1 Integrated Intel HD P530 in Xeon Core i7, i5, or i3 processors. Wormulti-display, enables three display Max Resolution: 4096 x 2304 Two PCI Express 3.0 x16 slots for Supports the following NVIDIA graph in the following Bronz (1) the following Display Port (function two USB 3.0, incrophone (3.5 minutes) and ports (1) the following per supports the following optional ports (1) the following per supports one of the following per supports one eSATA (on flex module slot bracket, up to one eSATA (on flex module slot bracket, up to one eSATA pot one eSATA (on flex module slot bracket, up to one eSATA pot one eSATA	4 DIMM slots, 2-channel (integrated memory Up to 64GB ECC/non-ECC (4 x 16GB), DDI Integrated Intel HD P530 in Xeon E3-12x5 v Core i7, i5, or i3 processors. Works along wimulti-display, enables three display connected Max Resolution: 4096 x 2304 Two PCI Express 3.0 x16 slots for graphics as Supports the following NVIDIA graphics ada Adapter Cores Memory Power NVS 310 48 1GB 19.5W NVS 315 48 1GB 19.5W NVS 315 48 1GB 19.5W NVS 315 48 1GB 19.5W NVS 510 192 2GB 33.4W Quadro K420 192 2GB 41W Quadro K620 384 2GB 45W Quadro K620 512 4GB 45W Quadro K620 512 4GB 45W Quadro K1200 512 4GB 45W Quadro	4 DIMM slots, 2-channel (integrated memory controller in processor) Up to 64GB ECC/non-ECC (4 x 16GB), DDR4-2133, UDIMM Integrated Intel HD P530 in Xeon E3-12x5 v5 processors; or Intel HD 530 in Core i7, i5, or i3 processors. Works along with discrete graphics to support multi-display, enables three display connectors (2 DP, 1 VGA) on rear. Max Resolution: 4096 x 2304 Two PCI Express 3.0 x16 slots for graphics adapters. Up to two Quadro K120 Supports the following NVIDIA graphics adapters: Adapter

	Components	Specification	
	Mechanical	 Raven black color; metal case 4.02"W x 15.53"D x 13.31"H 102mm W x 394.5mm D x 338mm H 17.2 lb (7.9kg) max configuration 12.9-liter 	
		GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ ENERGY STAR 6.1 qualified	
	Limited warranty	1 or 3-year limited onsite service with 9x5/NBD. Some parts are Customer Replaceable Units.	



Drive Bays and PCIe Slots

Bay 1	5.25", supports one of the following: HH optical/flex module***/9.5mm optical+3.5" HDD bay/ 3.5" HDD bay/Front Access Storage Enclosure *** Flex module supports one or more of the following: 9.5mm optical/ 29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
Bay 2	Optional 9-in-1 single slot reader
Bay 3	Standard 3.5" HDD bay
Bay 4	Optional 2.5" HDD bay (under Bay 3)
5 -Slots	Four PCIe slots (top-down): Slot 1: Low Profile, PCIe 3.0 x16 (near CPU) Slot 2: Low Profile, PCIe 3.0 x1 Slot 3: Low Profile, PCIe 3.0 x16 (x4 elec) Slot 4: Low Profile, PCIe 3.0 x1

For the list of ISV certifications, please visit <u>www.thinkworkstations.com/isv-certifications/</u>
For a list of all supported options, please visit <u>https://download.lenovo.com/pccbbs/options_iso/ocm_july_2016.xlsx_sheet</u>

Model	30AT005X++
Product	ThinkStation P310 Tower
Region	EMEA
Machine Type	30AT
TopSeller	TopSeller
Processor	Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133
Graphics	Intel HD 530
Memory	1x8GB UDIMM DDR4-2133 Non-ECC
Storage	1x256GB SSD 2.5" SATA6Gbs Opal
Optical	HH DVD±RW
Media Reader	9-in-1
Power Supply	250W 85%
Add-on Ports	None
Keyboard / Mouse	USB / USB Optical
Operating System	Windows 10 DG Windows 7 Pro 64
Warranty	3-year
Global	No
Ann Date (mm/yy)	09/16









