ThinkServer TS140 Platform Specifications

Components	Specification
Dimensions	Tower or 4U rack. Height: 375 mm (14.76 in), width: 175 mm (6.89 in), depth: 431 mm (16.97 in)
Weight	Maximum configuration: 28.66 lb (13kg)
Processor	Supports one of the following Intel processors (code name: Haswell): • Xeon E3-1200 v3: up to 4C/3.7GHz/8MB/84W/1600MHz • Core i3: up to 2C/3.7GHz/4MB/54W/1600MHz • Pentium: up to 2C/3.4GHz/3MB/53W/1600MHz • Celeron: up to 2C/2.9GHz/2MB/53W/1333MHz
Chipset	Intel C226 Platform Controller Hub (PCH)
Memory DIMMs	4 DIMM sockets, 2-channel capable. UDIMM, DDR3, up to 1600MHz
Memory capacity	32GB
Memory protection	ECC
RAID controller	Supports one of the following onboard or PCIe RAID adapters • RAID 0, 1, 5, 10 with onboard RAID 100, 6Gb/s SATA. • RAID 0, 1, 10 with RAID 500, PCIe adapter, 6Gb/s SAS/SATA, optional key for RAID5. • RAID 0, 1, 5, 10 with RAID 700, PCIe adapter, 6Gb/s SAS/SATA
Disk drive bays	Two external 5.25" bays, two internal 3.5" bays (see right). Up to one 9.5mm optical plus 4 3.5" or 2.5" disk drives. Supports internal RDX tape drive, cosumes 5.25" bay, also support optional external USB RDX tape drive. All disk drive bays are direct cabled, non-hot swap
Maximum internal storage	Up to 24TB with 7.2K SATA HDD, up to 16TB with 7.2K SAS HDD, up to 1.92TB with SATA SSD
Optical drive	Two 5.25" bays for optical. DVD-ROM or DVD±RW. Half-height or 9.5mm
Network interfaces	One onboard gigabit ethernet, Intel I217, shared with AMT. Supports optional discrete network adapters via PCIe slots
Security features	Power-on and administrator password. TPM (TCG 1.2-compliant). Optional padlock loop, Kensington cable lock
Systems management	Intel Active Management Technology 9 on models with Xeon processors. Intel Standard Manageability on models with Core i3, Pentium, or Celeron processors. KVM is supported on models with Xeon E3-12x5 v3 processors
Operating systems supported	Microsoft Windows Server 2012 R2/2012/2008 R2. Windows Small Business Server 2011. Windows 8.1/8/7(except Home edition). Red Hat Enterprise Linux 6.5/6.7/7/7.1. SUSE Linux Enterprise Server 11 SP4. VMware vSphere (ESXi) 5.1 U2/5.5 U1/5.5 U2/5.5 U3 *Note: VMware requires processors with Intel HD, add-on network adapters, and PCIe RAID adapters*
Base warranty	1 or 3-year limited onsite service with 9x5/NBD.
Power supply	Supports one of the follwing: • One fixed 280 watts, autosensing, 85%, 80 PLUS Bronze qualified • One fixed 450 watts, autosensing, 92%, 80 PLUS Platinum qualified
Graphics	Integrated Intel HD Graphics on Xeon E3-12x6 v3, Xeon E3-12x5 v3, Core i3, Pentium, and Celeron processors. Uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DP, 1 VGA) on rear ports. Also supports the following optional discrete graphics adapters: • NVIDIA Quadro NVS 300, PCIe adapter, 512MB • NVIDIA Quadro K600, PCIe adapter, 1GB

Components	Specification
Front ports	Two USB 3.0 (blue)
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). Optional parallel or serial ports via PCI or PCIe adapters
Noise emissions	Operating: < 35 dB(A). Idle: < 34 dB(A) (Maximum configuration)

Components	Specification	
Environmental specification	GREENGUARD certified, Energy Star Server 1.1 qualified, RoHS-compliant	
	Temperature - operating	50 °F to 95 °F (10 °C to 35 °C)
	Temperature - storage (with package)	-40 o C to 70 o C
	Altitude - operating	Supported Altitude (unpressurized): 0-10000ft (0-3048m)
	Humidity - operating	10%~80%, non-condensing
	Humidity - storage (with package)	10%~90%, non-condensing
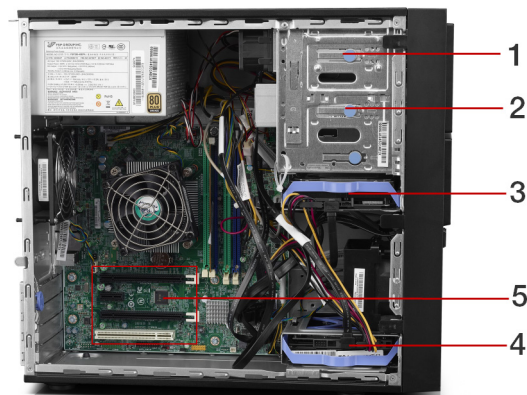
Drive Bays and PCIe Slots

Bay 1	5.25", supports one of the following: HH optical, 9.5mm optical+3.5"/2.5" drive
Bay 2	5.25", supports one of the following: 3.5"/2.5" drive, tape drive
Bay 3	Standard 3.5"/2.5" disk drive bay
Bay 4	Standard 3.5"/2.5" disk drive bay
5 -Slots	Four PCIe slots (top-down): Slot 1: PCIe 3.0 x16, full height, half length (near CPU) Slot 2: PCIe 2.0 x1, full height, half length Slot 3: PCIe 2.0 x16 (x4 elec), full height, half length Slot 4: PCI 2.3, full height, half length

Model	70A5001X++
Product	ThinkServer TS140
Region	EMEA
Machine Type	70A5
TopSeller	TopSeller
Processor	Xeon E3-1226 v3 4C/3.3GHz/8MB/84W/DDR3-1600
Memory	2x4GB UDIMM DDR3-1600 ECC
RAID Controller	RAID 100
Disk Bays	4x3.5" DC
Storage	2x1TB HDD 7.2K 3.5" SATA6Gbs
Optical	9.5mm DVD±RW
Add-on NIC	None
Add-on Ports	None
System Management	AMT
Operating System	2012 Foundations
Warranty	3-year
Power Supply	450W 92% Fixed
Ann Date (mm/yy)	09/14