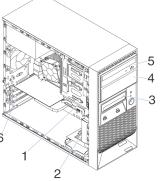# ThinkServer TS150 Platform Specifications

| Components | Specification |
|---|---|
| Dimensions | Tower or 4U rack.<br>Height: 375 mm (14.76 in), width: 175 mm (6.89 in), depth: 431 mm (16.97 in) |
| Weight | Maximum configuration: 27.6 lb (12.5kg) |
| Processor | Up to one **Intel Xeon E3-1200 v5**, **Core i3**, **Pentium**, **or Celeron** family processor. |

| Processor model | Specification |
|---|---|
| Xeon E3-1280 v5 | 4C/3.7GHz/8MB/80W/DDR4-2133 |
| Xeon E3-1270 v5 | 4C/3.6GHz/8MB/80W/DDR4-2133 |
| Xeon E3-1240 v5 | 4C/3.5GHz/8MB/80W/DDR4-2133 |
| Xeon E3-1230 v5 | 4C/3.4GHz/8MB/80W/DDR4-2133 |
| Xeon E3-1220 v5 | 4C/3GHz/8MB/80W/DDR4-2133 |
| Xeon E3-1275 v5 | 4C/3.6GHz/8MB/80W/DDR4-2133 |
| Xeon E3-1245 v5 | 4C/3.5GHz/8MB/80W/DDR4-2133 |
| Xeon E3-1225 v5 | 4C/3.3GHz/8MB/80W/DDR4-2133 |
| Core i3-6320 | 2C/3.9GHz/4MB/51W/DDR4-2133 |
| Core i3-6300 | 2C/3.8GHz/4MB/51W/DDR4-2133 |
| Core i3-6300T | 2C/3.3GHz/4MB/35W/DDR4-2133 |
| Core i3-6100 | 2C/3.7GHz/3MB/51W/DDR4-2133 |
| Core i3-6100T | 2C/3.2GHz/3MB/35W/DDR4-2133 |
| Pentium G4520 | 2C/3.6GHz/3MB/51W/DDR4-2133 |
| Pentium G4500 | 2C/3.5GHz/3MB/51W/DDR4-2133 |
| Pentium G4500T | 2C/3GHz/3MB/35W/DDR4-2133 |
| Pentium G4400 | 2C/3.3GHz/3MB/54W/DDR4-2133 |
| Pentium G4400T | 2C/2.9GHz/3MB/35W/DDR4-2133 |
| Celeron G3920 | 2C/2.9GHz/2MB/51W/DDR4-2133 |
| Celeron G3900 | 2C/2.8GHz/2MB/51W/DDR4-2133 |
| Celeron G3900T | 2C/2.6GHz/2MB/35W/DDR4-2133 |

| Components | Specification |
|---|---|
| Chipset | Intel C236 Platform Controller Hub (PCH) |
| Memory DIMMs | 4 DIMM sockets with 2 channels, 2 DIMMs per channel. **UDIMM**. DDR4-2133 |
| Memory capacity | 64GB (16GB x 4) |
| Memory protection | ECC |

**RAID controller**

| RAID controller | Drive type | RAID support |
|---|---|---|
| Onboard RAID121i | 6Gbs SATA | 0/1/5/10 |
| RAID520i PCIe | 12Gbs SAS/SATA | 0/1/10, 5 with optional key |

| Components | Specification |
|---|---|
| Disk bays | Supports up to four 3.5" or hybrid 3.5" + 2.5" disk drives , or up to five 2.5" disk drives. one 9.5mm optical (see right). Non-hot swap. Cables are connected to onboard SATA connectors or PCIe RAID controller. Supports one optional internal USB RDX Tape drive |

**Supporting storage**

| Drive | Capacities |
|---|---|
| 3.5" HDD, 7.2K SATA6Gbs | 500GB/1TB/2TB/3TB/4TB/5TB/6TB |
| 2.5" HDD, 7.2K SATA6Gbs | 500GB/1TB/2TB |
| 2.5" SSD, SATA6Gbs | 120GB/240GB/480GB/600GB/800GB/960GB |

| Components | Specification |
|---|---|
| SD module | Optional. Up to 2 SDHC flash cards via SD module, 8GB each |
| Optical drive | Up to two half-height optical drives or one 9.5mm optical. DVD-ROM or DVD±RW |
| Network interfaces | One Gigabit Ethernet port, Intel i219LM. Supports optional discrete network adapters via PCIe slots |
| Security features | Power-on and administrator password. TPM (TCG 1.2-compliant) |
| Systems management | UEFI, system LEDs, EasyStartup, EasyUpdate, Power Planner, and Diagnostics. Intel Active Management Technology 11 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 v5 processors. |
| Operating systems | Microsoft Windows Server 2016/2012 R2/2012, Windows MultiPoint Server 2012, Windows 10 Pro. Red Hat Enterprise Linux 6.7/7.2.  SUSE Linux Enterprise Server 11/12. VMware vSphere (ESXi) 5.5U3/6.0U2 |
| Base warranty | 1 or 3-year limited onsite service with 9x5/NBD |
| Power supply | Supports one of the follwing:<br>• One fixed 250 watts, autosensing, 85%, 80 PLUS Bronze qualified<br>• One fixed 400 watts, autosensing, 92%, 80 PLUS Platinum qualified |

| CPU | | Up to 80W | | |
|---|---|---|---|---|
| Discrete graphics adapter | | Not supported | Support | |
| Disk drives | 2 x 3.5" | 4 x 3.5" + 1 x 2.5" | 2 x 3.5" | 4 x 3.5" + 1 x 2.5" |
| 250W fixed PSU | • | • | | |
| 400W fixed PSU | • | • | • | • |

| Components | Specification |
|---|---|
| Graphics | Integrated Intel HD Graphics on Xeon E3-12x5 v5, Core i3, Pentium, and Celeron processors. Uses main memory, works along with discrete graphics to support multi-display, enables two display connectors (1 DP, 1 VGA) on rear ports.<br>Also supports the following discrete graphics adapter options:<br>• NVIDIA Quadro NVS 315, 1GB<br>• NVIDIA Quadro K620, 2GB |
| HD Audio | Realtek ALC662 codec |
| Front ports | Two USB 3.0 |
| Rear ports | One VGA, one DisplayPort, six USB 3.0, one RJ-45, one serial (9-pin), three analog audio ports (line-in, line-out, mic-in). Optional parallel or serial ports via PCIe adapters |
| Noise emissions | Operating: < 35 dB(A). Idle: < 34 dB(A) (Maximum configuration) |

**Environmental specification**

| | |
|---|---|
| Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) |
| Temperature - non operating (with package) | -40 °C to 60 °C |
| Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) |
| Humidity - operating | 8%~80%, non-condensing |
| Humidity - storage (with package) | 10%~90%, non-condensing |



**Disk Bays and PCIe Slots**

| Disk bays configuration | 4 x 3.5" | 4 x 2.5" | 4 x hybrid 3.5" + 2.5" |
|---|---|---|---|
| Bay 1 | 1st HDD bay | 1st HDD bay | 1st HDD bay, 3.5"/2.5" |
| Bay 2 | 2nd HDD bay | 2nd HDD bay | 2nd HDD bay, 3.5"/2.5" |
| Bay 3 | Not supported | 3rd HDD bay | Not supported on standard models. Supports one 2.5" disk drive for special bid only |
| Bay 4 | 2nd half-height optical, or RDX tape drive, or 3rd HDD bay | 2nd half-height optical, or RDX tape drive, or 4th HDD bay | 2nd half-height optical, or RDX tape drive, or 3rd HDD bay (3.5"/2.5") |
| Bay 5 | 1st half-height optical, or 9.5mm optical + 4th HDD bay | 1st half-height optical, or 9.5mm optical +5th HDD bay | 1st half-height optical, or 9.5mm optical + 4th HDD bay (3.5"/2.5") |
| 6 | Four PCIe slots (top-down):<br>Slot 1: PCIe 3.0 x16, full height, half length (near CPU)<br>Slot 2: PCIe 3.0 x1, full height, half length<br>Slot 3: PCIe 3.0 x16 (x4 elec), full height, half length<br>Slot 4: PCIe 3.0 x1, full height, half length | | |

For a list of all supported options, please see *https://download.lenovo.com/pccbbs/options_iso/ocm_september_2016_thinkserver.xlsx* sheet

| Model | 70LV003HEA |
|---|---|
| Product | ThinkServer TS150 |
| Region | EMEA |
| Machine Type | 70LV |
| TopSeller | TopSeller |
| Processor | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 |
| Memory | 1x8GB UDIMM DDR4-2133 ECC |
| RAID Controller | RAID 121i |
| Disk Bays | 4x3.5" |
| Storage | 1x1TB HDD 7.2K 3.5" SATA6Gbs |
| Optical | 9.5mm DVD±RW |
| Add-on NIC | None |
| Add-on Ports | None |
| System Management | AMT |
| Operating System | None |
| Warranty | 1-year |
| Power Supply | 250W 85% Fixed |
| Ann Date (mm/yy) | 10/16 |