

# Dell EMC PowerEdge T350

## Technical Specifications

## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

<b>Chapter 1: Technical specifications.....</b>	<b>4</b>
Chassis dimensions.....	4
System weight.....	5
Processor specifications.....	5
PSU specifications.....	5
Cooling fan specifications.....	6
Supported operating systems.....	6
System battery specifications.....	6
Expansion card riser specifications.....	6
Memory specifications.....	6
Storage controller specifications.....	7
Drive specifications.....	7
Drives.....	7
Optical drives.....	7
Ports and connectors specifications.....	7
USB ports specifications.....	7
NIC port specifications.....	8
VGA ports specifications.....	8
Serial connector specifications.....	8
IDSDM (optional).....	8
Video specifications.....	8
Environmental specifications.....	9
Particulate and gaseous contamination specifications .....	10
Thermal air restrictions.....	11

# Technical specifications

The technical and environmental specifications of your system are outlined in this section.

## Topics:

- Chassis dimensions
- System weight
- Processor specifications
- PSU specifications
- Cooling fan specifications
- Supported operating systems
- System battery specifications
- Expansion card riser specifications
- Memory specifications
- Storage controller specifications
- Drive specifications
- Ports and connectors specifications
- Video specifications
- Environmental specifications

## Chassis dimensions

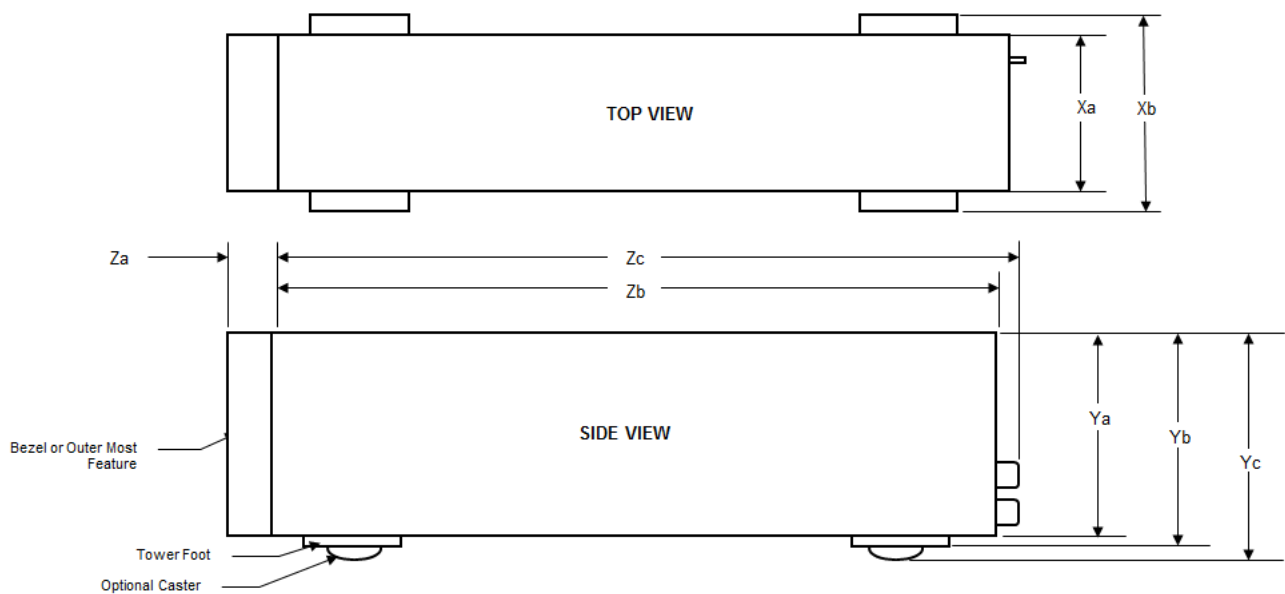


Figure 1. Chassis dimensions

**Table 1. Chassis dimension for the system**

Drives	Xa	Xb	Ya	Yb	Yc	Za	Zb	Zc
8 x 3.5-inch / 4 x 3.5-inch	175 mm (6.88 inches)	N/A	369.5 mm (14.54 inches)	382.5 mm (15.05 inches)	N/A	With bezel: 19 mm (0.74 inches)	560.5 mm (22.06 inches)	562.12 mm (22.13 inches)

## System weight

**Table 2. PowerEdge T350 system weight**

System configuration	Maximum weight (with all drives/SSDs)
4 x 3.5-inch	19.54 kg (43.07 pound)
8 x 3.5-inch	25.34 kg (55.86 pound)

## Processor specifications

**Table 3. PowerEdge T350 processor specifications**

Supported processor	Number of processors supported
Intel Xeon E-2300 Series processor with up to 8 cores or Intel Pentium processor with up to 2 cores	One

## PSU specifications

The PowerEdge T350 system supports up to one cabled or two redundant AC power supply units (PSUs).

**Table 4. PSU specifications**

PSU	Class	Heat dissipation (maximum)	Frequency	Voltage	AC		DC	Current
					High line 200 - 240 V	Low line 100 - 120 V		
450 W AC	Bronze	1871 BTU/hr	50/60 Hz	100 - 240 V, autoranging	450 W	450 W	N/A	6.5 - 3.5 A
600 W AC	Platinum	2250 BTU/hr	50/60 Hz	100 - 240 V, autoranging	600 W	600 W	N/A	7.1 - 3.6 A
600 W Mixed Mode HVDC	N/A	2250 BTU/hr	N/A	240 V	N/A	N/A	600 W	2.9 A

- NOTE:** This system is also designed to connect to the IT power systems with a phase-to-phase voltage not exceeding 240 V.
- NOTE:** Heat dissipation is calculated using the PSU wattage rating.
- NOTE:** When selecting or upgrading the system configuration, to ensure optimum power utilization, verify the system power consumption with the Dell Energy Smart Solution Advisor available at [Dell.com/ESSA](https://www.dell.com/ESSA).

# Cooling fan specifications

The PowerEdge T350 system supports up to one cabled fan connected to the system board.

# Supported operating systems

The PowerEdge T350 system supports the following operating systems:

- Canonical Ubuntu Server LTS
- Citrix Hypervisor
- Microsoft Windows Server with Hyper-V
- Red Hat Enterprise Linux
- SUSE Linux Enterprise Server

For more information, go to [www.dell.com/ossupport](http://www.dell.com/ossupport).

# System battery specifications

The PowerEdge T350 system supports CR 2032 3.0-V lithium coin cell system battery.

# Expansion card riser specifications

The PowerEdge T350 system supports up to two Gen4, and two Gen3 PCI express (PCIe) expansion cards.

**Table 5. Expansion card slots supported on the system board**

PCIe slot	Risers	Processor connection	PCIe slot height	PCIe slot length	PCIe slot width
Slot 1 (Gen4)	N/A	Processor 1	Full height	Half length	x4 link in x8 slot
Slot 2 (Gen4)	N/A	Processor 1	Full height	Full length	x16
Slot 3 (Gen3)	N/A	Platform Controller Hub	Full height	Half length	x1
Slot 4 (Gen3)	N/A	Platform Controller Hub	Full height	Half length	x4 link in x8 slot

**NOTE:** Slot 1 function is disabled, when using Intel Pentium processor.

# Memory specifications

The PowerEdge T350 system supports the following memory specifications for optimized operation.

**Table 6. Memory specifications**

DIMM type	DIMM rank	DIMM capacity	Single processor	
			Minimum system capacity	Maximum system capacity
UDIMM	Single rank	8 GB	8 GB	32 GB
		16 GB	16 GB	64 GB
	Dual rank	32 GB	32 GB	128 GB

**Table 7. Memory module sockets**

Memory module sockets	Speed
4, 288-pin	3200 MT/s, 2933 MT/s, 2666 MT/s

**NOTE:** Memory DIMM slots are not hot pluggable.

**NOTE:** Dual rank UDIMMs with two DIMMs per channel (2DPC) limits the speed to 2933 MT/s.

## Storage controller specifications

The PowerEdge T350 system supports the following controller cards:

**Table 8. Storage controller cards**

Internal controllers	External HBA
<ul style="list-style-type: none"> <li>S150</li> <li>PERC H755</li> <li>PERC H355</li> <li>PERC H345</li> <li>HBA355i</li> </ul>	<ul style="list-style-type: none"> <li>HBA355e (non-RAID)</li> </ul>

## Drive specifications

### Drives

The PowerEdge T350 system supports:

- 4 x 3.5-inch hot-swappable SAS, SATA drives.
- 8 x 3.5-inch hot-swappable SAS, SATA drives.

**NOTE:** Supports 2.5-inch drive in 3.5-inch hybrid drive carrier.

### Optical drives

The PowerEdge T350 system supports one Slim SATA DVD-ROM drive or DVD +/- RW drive.

**NOTE:** DVD devices support only data.

## Ports and connectors specifications

### USB ports specifications

**Table 9. PowerEdge T350 USB specifications**

Front		Rear		Internal (Optional)	
USB port type	No. of ports	USB port type	No. of ports	USB port type	No. of ports
USB 3.0-compliant port	One	USB 2.0-compliant port	Five	Internal USB 3.0-compliant port	One
iDRAC Direct port (Micro-AB USB)	One	USB 3.0-compliant ports	One		

**Table 9. PowerEdge T350 USB specifications (continued)**

Front		Rear		Internal (Optional)	
USB port type	No. of ports	USB port type	No. of ports	USB port type	No. of ports
2.0-compliant port)					

**NOTE:** The micro USB 2.0 compliant port can only be used as an iDRAC Direct or a management port.

## NIC port specifications

The PowerEdge T350 system supports up to two 10/100/1000 Mbps Network Interface Controller (NIC) ports embedded on Motherboard.

**Table 10. NIC port specification for the system**

Feature	Specifications
LOM	1 GbE x 2

## VGA ports specifications

The PowerEdge T350 system supports One DB-15 VGA port on the back panel.

## Serial connector specifications

The PowerEdge T350 system supports one serial connector, which is a 9-pin connector, Data Terminal Equipment (DTE), 16550-compliant.

## IDSDM (optional)

The PowerEdge T350 system supports Internal Dual SD module (IDSDM).

The IDSDM supports two SD cards and is available in the following configurations:

**Table 11. Supported SD card storage capacity**

IDSDM card
<ul style="list-style-type: none"><li>• 16 GB</li><li>• 32 GB</li><li>• 64 GB</li></ul>

**NOTE:** One IDSDM card slot is dedicated for redundancy.

**NOTE:** Use Dell EMC branded SD cards that are associated with the IDSDM configured systems.

## Video specifications

The PowerEdge T350 system supports integrated Matrox G200 graphics controller with 16 MB of video frame buffer.

**Table 12. Supported video resolution options for the system**

Resolution	Refresh rate (Hz)	Color depth (bits)
1024 x 768	60, 72, 75, 85	8, 16, 32



**Table 12. Supported video resolution options for the system (continued)**

Resolution	Refresh rate (Hz)	Color depth (bits)
1280 x 800	60, 75	8, 16, 32
1280 x 1024	60, 75, 85	8, 16, 32
1360 x 768	60	8, 16, 32
1440 x 900	60, 75, 85	8, 16, 32
1600 x 900	60	8, 16, 32
1600 x 1200	60, 65, 70, 75, 85	8, 16, 32
1680 x 1050	60, 75, 85	8, 16, 32
1920 x 1080	60	8, 16, 32
1920 x 1200	60, 75, 85	8, 16, 32

## Environmental specifications

**NOTE:** For additional information about environmental certifications, refer to the *Product Environmental Datasheet* located with the *Documentation* on [www.dell.com/support/home](http://www.dell.com/support/home).

**Table 13. Continuous Operation Specifications for ASHRAE A2**

Temperature	Specifications
Allowable continuous operations	
Temperature range for altitudes <= 900 m (<= 2953 ft)	10–35°C (50–95°F) with no direct sunlight on the equipment
Humidity percent range (non-condensing at all times)	8% RH with -12°C minimum dew point to 80% RH with 21°C (69.8°F) maximum dew point
Operational altitude de-rating	Maximum temperature is reduced by 1°C/300 m (33.8°F/984 Ft) above 900 m (2953 Ft)

**Table 14. Continuous Operation Specifications for ASHRAE A3**

Temperature	Specifications
Allowable continuous operations	
Temperature range for altitudes <= 900 m (<= 2953 ft)	5–40°C (41–104°F) with no direct sunlight on the equipment
Humidity percent range (non-condensing at all times)	8% RH with -12°C minimum dew point to 85% RH with 24°C (75.2°F) maximum dew point
Operational altitude de-rating	Maximum temperature is reduced by 1°C/175 m (33.8°F/574 Ft) above 900 m (2953 Ft)

**Table 15. Continuous Operation Specifications for ASHRAE A4**

Temperature	Specifications
Allowable continuous operations	
Temperature range for altitudes <= 900 m (<= 2953 ft)	5–45°C (41–113°F) with no direct sunlight on the equipment
Humidity percent range (non-condensing at all times)	8% RH with -12°C minimum dew point to 90% RH with 24°C (75.2°F) maximum dew point

**Table 15. Continuous Operation Specifications for ASHRAE A4 (continued)**

Temperature	Specifications
Operational altitude de-rating	Maximum temperature is reduced by 1°C/125 m (33.8°F/410 Ft) above 900 m (2953 Ft)

**Table 16. Common Environmental Specifications for ASHRAE A2, A3, and A4**

Temperature	Specifications
Allowable continuous operations	
Maximum temperature gradient (applies to both operation and non-operation)	20°C in an hour* (36°F in an hour) and 5°C in 15 minutes (41°F in 15 minutes), 5°C in an hour* (41°F in an hour) for tape <i>i</i> <b>NOTE:</b> * - Per ASHRAE thermal guidelines for tape hardware, these are not instantaneous rates of temperature change.
Non-operational temperature limits	-40 to 65°C (-104 to 149°F)
Non-operational humidity limits	5% to 95% RH with 27°C (80.6°F) maximum dew point
Maximum non-operational altitude	12,000 meters (39,370 feet)
Maximum operational altitude	3,048 meters (10,000 feet)

**Table 17. Maximum vibration specifications**

Maximum vibration	Specifications
Operating	0.21 G <sub>rms</sub> at 5 Hz to 500 Hz for 10 min (all x, y, and z axes)
Storage	1.88 G <sub>rms</sub> at 10 Hz to 500 Hz for 15 minutes (all six sides tested)

**Table 18. Maximum shock pulse specifications**

Maximum shock pulse	Specifications
Operating	Six consecutively executed shock pulses in the positive and negative x, y, and z axis of 6 G for up to 11 ms.
Storage	Six consecutively executed shock pulses in the positive and negative x, y, and z axis (one pulse on each side of the system) of 71 G for up to 2 ms.

## Particulate and gaseous contamination specifications

The following table defines the limitations that help avoid any damages to the IT equipment and/or, or both failure from particulate and gaseous contamination. If the levels of particulate or gaseous pollution exceed the specified limitations and results in equipment damage or failure, you must rectify the environmental conditions. Remediation of environmental conditions is the responsibility of the customer.

**Table 19. Particulate contamination specifications**

Particulate contamination	Specifications
Air filtration	Data center air filtration as defined by ISO Class 8 per ISO 14644-1 with a 95% upper confidence limit. <i>i</i> <b>NOTE:</b> This condition applies to data center environments only. Air filtration requirements do not apply to IT equipment designed to be used outside a data center, in environments such as an office or factory floor. <i>i</i> <b>NOTE:</b> Air entering the data center must have MERV11 or MERV13 filtration.
Conductive dust	Air must be free of conductive dust, zinc whiskers, or other conductive particles.

**Table 19. Particulate contamination specifications (continued)**

Particulate contamination	Specifications
	<p><b>i</b> <b>NOTE:</b> This condition applies to data center and non-data center environments.</p>
Corrosive dust	<ul style="list-style-type: none"> <li>• Air must be free of corrosive dust.</li> <li>• Residual dust present in the air must have a deliquescent point less than 60% relative humidity.</li> </ul> <p><b>i</b> <b>NOTE:</b> This condition applies to data center and non-data center environments.</p>

**Table 20. Gaseous contamination specifications**

Gaseous contamination	Specifications
Copper Coupon Corrosion rate	<300 Å/month per Class G1 as defined by ANSI/ISA71.04-2013
Silver Coupon Corrosion rate	<200 Å/month as defined by ANSI/ISA71.04-2013

**i** **NOTE:** Maximum corrosive contaminant levels measured at ≤50% relative humidity.

## Thermal air restrictions

- Two PSUs are required in redundant mode, however PSU failure is not supported.
- Non Dell qualified peripheral cards or peripheral cards greater than 25 W are not supported.
- GPU is not supported.
- The operating temperature is for a maximum altitude of 950 m for fresh air cooling.
- Because of single fan in the system, cooling redundancy is not supported.

**i** **NOTE:** DIMM blank is not required.