



Dell EMC PowerEdge RAID Controller H345

A sixteen-port 12Gb/s PCI Express RAID controller, the Dell EMC PowerEdge RAID Controller (PERC) H345 supports 3Gb/s, 6Gb/s and 12Gb/s SAS and 3Gb/s & 6Gb/s SATA hard-disk drives or solid-state drives.

Small to medium business owners can enjoy the latest RAID technology at affordable prices and low-power consumption with the Dell EMC PowerEdge RAID Controller (PERC) H345. Ideal for file, web, database, and email servers, the PERC H345 delivers trusted Dell EMC PERC reliability with minimal maintenance effort.

Our entry-level controller card offers a straight-forward solution that includes essential RAID levels and support for Non-RAID (Pass-Thru) configuration options. In addition, these cards connect to SATA and SAS hard disk drives and solid-state drives, allowing for tiered storage that optimizes cost and performance. Another cost-optimizing feature is physical disk power management (Dimmer Switch™) technology, which manages power consumption for idle, unconfigured and configured drives. The Dell EMC entry-level RAID controllers cover the spectrum of tiered storage requirements for cost-sensitive applications that require robust data protection.

12Gb/s SAS performance advantage

12Gb/s SAS is designed for backward compatibility with 6Gb/s SAS and 6Gb/s SATA hard drives. Regardless of the drive speed, 12Gb/s PowerEdge RAID controllers deliver significant performance improvements in both read and write applications as compared to their 6Gb/s predecessors.

Intuitive storage management

Managing the PERC H345 is easy using the integrated Dell Remote Access Controller (iDRAC9). Without having to deploy an agent, IT admins can configure, deploy, update, and monitor the PERC H345, via the GUI or through the RACADM CLI. Additionally, Dell EMC OpenManage Enterprise is a 1:Many console that provides the ability to perform storage operations across multiple servers. This includes the RAID controllers as well as the physical disks in the PowerEdge system.

- Create and execute jobs automatically for each storage configuration operation
- Option to reboot the host OS automatically to complete the job or wait and do it later at a more convenient time.
- Support for real-time RAID monitoring and inventory of hardware.

Dell EMC OpenManage Storage Services (OMSS) provides the tools to efficiently manage PERC products. Dell EMC offers a collection of applications and tools including a pre-boot setup utility and a full spectrum of online RAID management utilities. This suite of applications allows administrators to adjust SAS or SATA topology views from the system host down to the logical and physical drive level. Extending to enterprise deployments, these tools can scale to easily configure, monitor and manage RAID and JBOD volumes locally or over the LAN network.

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Features	Technical Specification	
Solution provided	Low cost, entry RAID and Non-RAID (Pass-Through) solution for high-density servers (1U or 2U) and workstations with the flexibility to use both SATA and SAS HDDs, SSDs, and pass-through drive configurations	
Form Factors	PCIe Adapter Card (HHHL) & Custom (Front)	
Connectors	Adapter Card – Low Profile Slimline x8 (Defined in SFF-8654)	
Maximum number of physical devices	Non-RAID (JBOD Mode): up to 32 RAID 0: 32 per volume RAID 1: 2 per volume plus hot spare	RAID 10: 32 per volume
Host bus type	8-lane, PCI Express 3.0 compliant	
Data transfer rates	Up to 12Gb/s per port	
SAS controller	LSI SAS3416	
Key RAID data protection features	RAID levels 0, 1, 10 ¹ Selectable logical drive as boot drive Consistency check Support for TRIM/UNMAP commands for SAS/SATA SSDs in Pass-Thru Native command queuing Staggered spin-up for SATA drives Hot-plug support Global hot-spare support Online Capacity Expansion (OCE) Online RAID Level Migration (RLM)	Automatic rebuild of hot-spare drives Auto resume during array rebuild Greater than 2TB logical drive support Soft bad block management Error recovery support S.M.A.R.T. support T10-DIF Support Physical disk power management (Dimmer Switch™) 4K Native Sector Support
RAID management	CTRL-R Dell EMC OpenManage Storage Services PERC CLI Additional Management: UEFI (HII) CEM	
Environments	Operating: 0°C to 65°C 5 to 90% non-condensing	Storage: -45°C to 105°C 5 to 90% non-condensing
PCI card type	3.3V add-in card	
PCI voltage	+12V	
LED indicators	±10% Internal Activity/Fault per x16 port: Heartbeat	
Operating systems	Citrix XenServer Microsoft Windows Server with Hyper-V Red Hat Enterprise Linux Ubuntu Server SUSE Linux Enterprise Server VMware ESXi For specifications and interoperability details, see Dell.com/OSsupport	
Brackets	Full-height, low-profile	
Warranty	Up to five-year warranty available for controller (up to the length of purchased system warranty)	

¹ RAID5/50 is no longer available on our entry RAID controller

Global services and support

Dell EMC Services can help reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell EMC Services team takes a holistic view of your needs, and designs solutions for your environment and business objectives while leveraging proven delivery methods, local talent and in-depth domain knowledge for the lowest total cost of ownership.

Learn more at Dell.com/PERC