

FAQs

How is the Adaptec Series 5Z different from the Series 5?

The Adaptec Series 5Z offers the same industry-leading performance, full suite of RAID features, and Intelligent Power Management as the Series 5. In addition to the outstanding Series 5 feature set, the Series 5Z introduces Zero-Maintenance Cache Protection - a revolutionary advancement that solves Lithium Ion Battery Back-up (BBU) deficiencies by providing full protection to cached data with no installation, monitoring, maintenance, or replacement costs.

What is Zero-Maintenance Cache Protection (ZMCP)?

Zero-Maintenance Cache Protection is a revolutionary advancement that solves Lithium Ion BBU deficiencies by providing full protection to cached data with no installation, monitoring, maintenance, or replacement costs. It utilizes flash memory and super-cap technology to deliver an advanced and superior controller cache protection solution. The super-cap charges while your system boots offering backup protection immediately, while 4GB of flash memory dedicated to protecting the data in controller cache offers continued protection that never needs to be monitored or replaced after installation. Zero-Maintenance Cache Protection removes the hardware maintenance associated with other controller cache backup solutions.

Why do I need to protect my controller cache?

Controller cache should always be protected whenever it is enabled to guard against loss of data stored in the cache if system power goes out. Enabling the controller cache offers benefits in performance – especially RAID 5 and RAID 6 performance – and extends the duration and cost savings of Adaptec's Intelligent Power Management by storing data rather than writing it to a spun-down drive.

I currently use a battery backup module to protect my controller cache. How is Zero-Maintenance Cache Protection an improvement?

Zero-Maintenance Cache Protection (ZMCP) eliminates the inefficiencies of the Lithium Ion BBU protection model, resulting in cost savings over the life of the product and the lowest Total Cost of Ownership (TCO). By offering data protection that doesn't degrade over time, ZMCP removes the costs of monitoring, maintaining, replacing, and disposal associated with the Lithium Ion BBU model. With the data stored in flash memory, the Adaptec Series 5Z stores protected data for up to 10 years in case of power loss – a monumental improvement over the Lithium Ion BBU model which maintains data only for up to 72 hours before the battery power depletes. This extended data accessibility allows for less constrained disaster recovery plans, relieving remote data center response times from the 72 hour Lithium Ion BBU threshold.

What is the cost of Zero-Maintenance Cache Protection (ZMCP) and how much will I save from a Lithium Ion BBU model?

ZMCP is a free feature on the Adaptec Series 5Z product line, with all maintenance savings directly improving your bottom line. The actual cost of the Lithium Ion BBU protection model varies by use case, but there are several contributing variables to the Lithium Ion BBU cost equation. Battery charge reduces over time, requiring replacement during the system installation life. This replacement adds hardware costs and installation costs to physically replace the Lithium Ion BBU. Additionally, the system may suffer from unplanned downtime to replace a failed battery, resulting in loss of system resources that can be avoided with ZMCP. Old batteries need to be disposed of, usually adhering to hazardous material standards, adding even more cost. By adding up the hardware, maintenance, and disposal costs, savings can accumulate to thousands of dollars per year by implementing a Series 5Z solution. [Read our feature brief for more details.](#)

Why isn't this feature offered on competitors' products?

Zero-Maintenance Cache Protection is an industry-first solution offered only by Adaptec and is the result of conquering several technical hurdles in design and validation. Adaptec delivers the most innovative and impactful technological advances to its customers, emphasizing performance, efficiency, and value. The Adaptec Series 5Z extends all three of these criteria, and is essential to ensure your data is protected with assurance and confidence.

What is Unified Serial?

Unified Serial controllers, like the Adaptec Series 5Z family, support both SATA and SAS disk drives using a serial point-to-point interface. The command set is an enriched SCSI command set providing robust data management, error handling, and performance characteristics. This flexibility of supporting both SATA and SAS disk drives makes it easy for companies to standardize on a single I/O infrastructure for both mission-critical storage and secondary storage – dependent solely upon whether SATA or SAS disk drives are installed. Customers can standardize on a single I/O controller or storage system for all of their storage configurations, reducing training and repair costs.

What RAID levels do the Adaptec Series 5Z products support?

The Adaptec Series 5Z RAID controller family supports standard RAID levels 0, 1, 1E, 5, 5EE, 6, 10, 50, 60, and JBOD. It also supports Copyback Hot Spare, which allows the user to specify a fixed physical location for the hot spare for improved manageability.

What operating systems are supported?

The Adaptec Series 5Z family supports a long list of operating systems including Windows, Linux, VMware, Solaris, FreeBSD, and SCO. Please consult the Adaptec support site for a complete list of available operating systems and drivers.

What management utilities are included with the Adaptec Series 5Z?

Adaptec Storage Manager™ - One-view utility which centralizes management of all Adaptec RAID products. Adaptec Storage Manager enables remote RAID management, monitoring, and configuration through secure, encrypted communication.

ARCCONF (Command Line Interface - CLI) - Text-based command line interface that provides the same functions as Adaptec Storage Manager in environments where a GUI is not available.

BIOS configuration utility (ACU) - used for quick and easy local setup without booting the OS.

How compatible is the Adaptec Series 5Z family?

Adaptec controllers are tested and supported on all the major vendors' motherboard, enclosures, and disk drives. Please visit our website at www.adaptec.com/compatibility for a list of tested components.