

ATTO ExpressSAS 6 Gb RAID Adapters

Overcoming server and workstation thermal challenges

In order to protect your data and prevent damage to your server, workstation, or the ATTO RAID Adapter, the ATTO ExpressSAS 6 Gb RAID Adapters are designed to automatically shut down if the board temperature exceeds its design specification.

There are various factors that could influence the internal ambient temperature and airflow in a computer, including the PCI slot position of the RAID adapter, its proximity to other high performance PCI adapters, the number of adapters in a system, as well as the number of, speed, and position of cooling fans in the system. The predominant cause of thermal issues is that the airflow near the RAID adapter is limited or may be blocked by other devices.

If the airflow is insufficient, the adapter may go into its thermal protection mode. The following symptoms will indicate that this has occurred:

- The drives will disappear or are no longer accessible from the operating system
- The RAID Adapter will no longer be accessible from the ATTO Configuration Tool. Errors will appear when trying to select the adapter
- Temperature warnings may appear in the error logs, depending upon how fast the temperature rises

If this occurs, there are a number of actions that can be taken to increase the air flow in the vicinity of the RAID adapter to prevent an over-temperature scenario:

- Most servers and workstations have the ability to adjust the chassis fan speed, usually through the BIOS. Try increasing the fan speed until adequate airflow is provided. We have found that this simple step will eliminate the issue in most cases.
- Most servers and workstations allow the user to install an additional chassis or PCI fan kit to increase airflow. This is a simple and inexpensive (normally under \$10 US) way to increase air flow. PCI fans can be found by searching for "PCI Fan Kit" on the internet.
- Relocate the RAID Adapter or other PCI cards so that there is more space between the cards for the air flow across the RAID adapter.

For more information please contact ATTO Technical Support at +1 716 691 1999, extension 242, or via email to TechSupp@attotech.com