

**2021 to 2024**

**Q10051404 - Disk capacity is '250GB'. But when I connect it to Areca controller in JBOD mode, Windows system sees the disk capacity as 232.8 GB. Where did the other capacity go?**

There are two ways to calculate Gigabyte (GByte): Using base 2 or using base 10. The operating systems use the base 2 “1024” definition of GByte, while disk drive manufacturers use the base 10 “1000” definition. Base 10 would define GByte as  $1000 \times 1000 \times 1000$ . Base 2 would define GByte as  $1024 \times 1024 \times 1024$ . Regardless of which scheme is used, you have exactly the same amount of usable capacity. Areca RAID controller volumes are simulated a big disk drive and use the base 10 “1000” definition same disk drive manufacturers. Raw unformatted capacity of a hard disk drive is usually quoted with “SI prefix” (metric system prefix), incrementing by powers of 1000. The operating systems report the formatted capacity of a hard drive using “binary prefix” units which increment by powers of 1024.

Unique solution ID: #1111

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