

When Reliable Performance is Critical

Storage for Medical Monitoring and Imaging Devices



Innodisk provided an industrial-grade storage solution with a 2.5" SSD and SD Cards for a Chinese client. The flash devices were needed for two medical devices: a vital-sign monitor and an ultrasound imaging device.

Introduction

Advances in technology have drastically improved our level of care and patient monitoring capabilities. However, these critical instruments that assist medical professionals have strict requirements for both reliability and longevity. For this reason, Innodisk was approached by a Chinese manufacturer of medical imaging systems for a solution to their storage requirements.

The manufacturer needed storage devices for a new vital sign monitor and an ultrasound imaging device. However, they were struggling with finding a solution that could satisfy all their requirements. The devices would see high numbers of data write/erase cycles and needed both onboard storage as well a reliable method of swapping data. At the same time, the manufacturer needed assurances on long-time supply and the ability to work around compatibility restrictions of their system.

Our Roadmap to Success

Robust Storage

2.5" 3MG2-P SSD

- Extreme longevity with SLC flash memory
- Data loss protection through iData Guard™
- 512GB of capacity

SD 3.0 Card

- Industrial-grade design
 - Power failure management
 - 32GB of capacity
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Challenges

- Stability and reliability: The storage solution needed to fit the strict requirements of medical equipment
- Compatibility concerns: The platform to design in was limited and required a customized storage approach
- Long-time supply concerns: Manufacturing of the monitor and imaging device would go on for a substantial time period and long-time supply was essential for product output consistency
- Data swapping: The client needed a reliable way of swapping data between devices

Solutions

- Industrial-grade storage: Flash storage built to last in harsh environments and heavy-write environments. The storage devices was also rigorously tested to ensure quality.
- Customized to client specifications: The form factor was altered to ensure full compatibility
- Long-time supply: Innodisk could offer guarantees of long-time supply of storage devices
- Robust SD cards: With rugged SD cards, data could be reliably and efficiently swapped between devices

Result

With Innodisk's storage solution the client had an answer for its requirements on reliability, customization and long-time supply. The long-time supply meant that the manufacturer did not have to worry about component shortages in later stages of the product life cycle. With this case, Innodisk has proven itself as a reliable provider of storage solutions to the medical market.

Our Promise

We at Innodisk believe that through cooperation we can overcome any challenge. By maintaining a strong line of communication all the way from inquiry to implementation, we ensure a tailor-made solution that fits your application. We remain committed to innovation with our continual focus on hardware, firmware and software integration.