

RENICE X9 2.5" R-SATA Solid State Drive



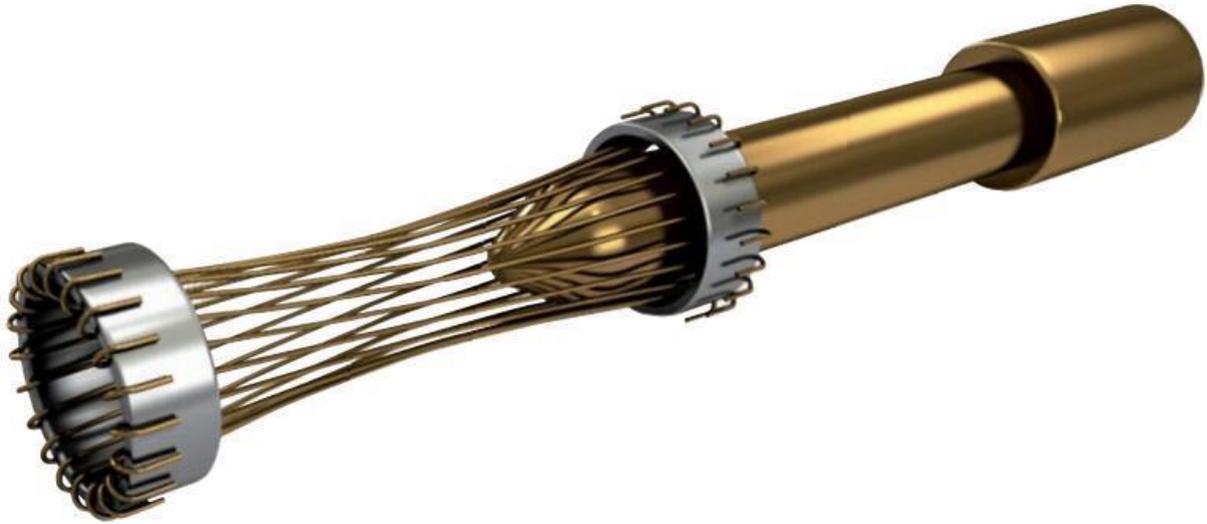
X9 R-SATA Technical Highlight

1. Secure Erase, support Physical Destroy and Logical Destroy
 - 1.1. Physical destroy
Implemented by HW button, with time-sharing shunt design to guarantee each NAND Flash been destroyed. The disk is scraped after destroy and data cannot be recovered by any means.
 - 1.2. Logical destroy
Support SW and HW methods.
 - 1.2.1 After data destruction, the disk cannot be recognized by HOST, and data cannot be recovered by any means;
 - 1.2.2 After destruction, all data in disk become FF, cannot be recovered. The disk is enabling to be used after initialization.
2. r-Backup technical patent, to keep the integrity of data information under abnormal power-off even when capacitor aging after years usage;
3. Exclusive Non-Balance wear-leveling technology, to increase the lifespan of the disk.
4. Support write-protect function
5. Support the only corresponds: the disk and the host computer. The destruction will be started automatically when the disk is connected to unauthorized host.
6. Deploying industrial underfill glue for all controller and chips, completely solidified under high temperature 160 °C, to resistance the vibration and risk from humidity, dust and salt mist.
7. Confirm coating processing, the PCBA is available working under water.

R-SATA SSD Reliability Design

1. Designed over-voltage and inrush protection.
2. Power-failure protection, 30,000 times verification without failure. r-Backup technology supports the 100% data integrity even the capacitor aging to 30% of the initial designed capacity.
3. High resistance to vibration and shock.
4. Under steady condition with random data filling, no more than 20% drop in performance.
5. All of the NAND Flashes are sorted by NFA100 NAND Flash Analyzer to ensure the RBER keeps $10^{-5.8}$ (MLC).

Reliability of R-SATA Connector



- Adopt hyperbolical surface design to provide the high reliability from the electric and mechanical characteristics
- Reduce the contact resistance by 50% compared to traditional gold-finger connector
- With internal liner contact to keep 360° excellent contact under heavy shock
- Support plug service life at 100,000 times
- Provide 50μ gold-planted for all contact surface
- provide superior signal integrity
- Shock: 100g, vibration: 30g
- Operation temperature of Connector: -55 °C to +125 °C