CIGENT
Data Secured. Mission Assured.

SPEC SHEET

Cigent Secure SSD 2.5” SATA (FIPS)

Cigent’s Secure SSD (SATA) is designed for mission-critical deployments requiring NSA CSfC for Data-at-Rest (DAR) compliance. When integrated with Cigent Pre-Boot Authentication (PBA) and Cigent Software Full Drive Encryption (FDE), it enables a complete, dual-layered encryption strategy that satisfies the NSA’s CSfC layered protection mandate. Cigent’s unified solution simplifies deployment while meeting the rigorous security standards required by federal agencies.

Technical Specifications

- **Capacity**
  - 512GB, 1024GB, 2048GB, 4096GB
- **Form Factor**
  - 2.5” SSD
- **SATA Interface**
  - SATA III, SATA Revision 3.2
- **Flash Interface**
  - Transfer rate up to 533MBps
- **Sustained Performance**
  - Sequential Read: up to 530MB/s
  - Sequential Write: up to 530 MB/s
  - Random Read: up to 98K IOPS
  - Random Write: up to 91K IOPS
- **Temperature Range**
  - Normal temperature: 0°C ~ 70°C
  - Storage temperature: -40°C ~ 85°C
- **Reliability**
  - MTBF : 1.6 million hours
  - UBER: < 1 sector per 10^{16} bits
  - DWPD 1
  - TBW: 640TB - 512GB
    1400TB - 1024GB
    3020TB - 2048GB
    6700TB - 4096GB
- **Power Consumption**
  - Active Write (Max.) ≤ 2.3W
  - Active Read (Max.) ≤ 2.3W
  - Idle ≤ 0.135 W
- **Environment Specification**
  - Shock: 1500G0-P/0.5ms
  - Vibration: 20Hz~80Hz/1.52mm
    80Hz~2000Hz/20GP-P
  - Drop: 80cm height/each face
  - Bending: ≥ 50N force
- **Feature Support List**
  - Cigent PBA Certified
  - End to end data path protection
  - Thermal throttling
  - SmartECC
  - SmartRefresh
  - TCG Opal 2.0
  - FIPS 140-2 lv2 certified: certificate number #3758

Mission-Driven Data at Rest Protection

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