



Standard SATA Connector



Military Grade HiVibe[®] SATA Connector

ORANGE, BLUE, BLACK Series

Ruggedize SATA with HiVibe[®] Connector

2.5" SATA II or SATA III

Overview

Memkor's HiVibe SATA ruggedization solves SATA signal integrity problems associated with designs utilizing standard SATA connectors not optimized for persistent vibration and/or shock applications, the characteristics so prevalent in Defense & Aerospace deployments.

Designed in conjunction with Amphenol's rugged Hyperboloid contacts, Memkor's HiVibe ruggedization complements the inherent SSD resilience to adverse environments and virtually eliminates intermittent pin disconnects ensuring complete data capture in mission critical applications.

The HiVibe SATA interface is available as an option on any Memkor 2.5" SATA, either Orange, Blue, or Black Series SSDs.

With capacities of up to 8TB, with HW Write Protect, Secure Erase procedures, optional AES256 Encryption, Sudden Power Loss Safeguard circuits and logic, and rugged HiVibe interface, Memkor provides a true Military grade non-volatile storage, at the same highest Capacity-to-weight and Capacity-to-volume solutions available for high speed and high capacity Data Recorders Defense application.

The state of the art wear-leveling combined with a strong EDC/ECC/CRC ensures even flash usage across the entire drive, regardless of the application hence unparalleled user data integrity

HiVibe Values

- Eliminates SATA connector vulnerability to vibration
- Complements SSD resilience to severe environment
- Designed for demanding Defense applications
- Provides 7 signal and 15 power pins
- Provides high quality, impedance controlled contact
- Supports SATA II and SATA III speeds
- Mates with a variety of HiVibe receptacles
- HiVibe is a drop-in replacement to standard connectors

Ruggedized SSD Differentiators

- Optimal mechanical design through the use of FEA
- Acrylic, Urethane or Parylene Conformal Coating
- Optional low CTE underfill to eliminate fatigue failures
- Special Bill of Material with high reliability parts
- Optional Non-ROHS parts and process
- Optional HiVibe SATA connection ruggedization

Memkor 2.5" SSD Differentiators

- Up to 4 TB capacity in 9.5 mm (Orange Series)
- Up to 8 TB in 15.0mm height (Blue Series)
- Up to 550 MBps SATA III
- TCG OPAL with AES 256 Encryption on selected models
- Operates in excess of 30G vibration (Black Series)
- Multifunction connectors through SATA or stand alone
- Military grade Secure Erase with verification support
- HW or SW triggered Secure Erase
- HW enabled Write protect
- Memkor SMART SSD reliability monitoring

Examples of HiVibe



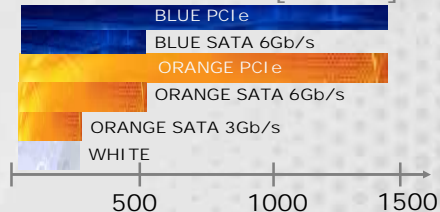
1 TB (SLC NAND) - HiVibe
BLACK Series SSD



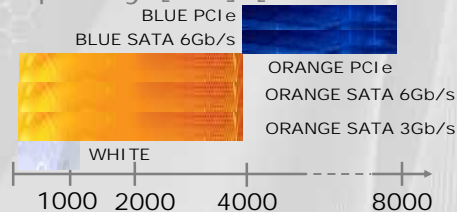
128GB (SLC NAND) - HiVibe
ORANGE Series SSD with HiVibe

Memkor General Application and Product Guide

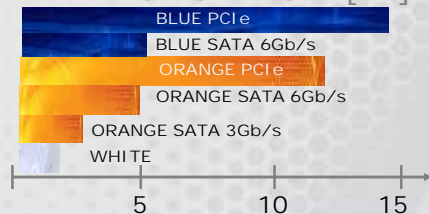
Performance [MB/s]



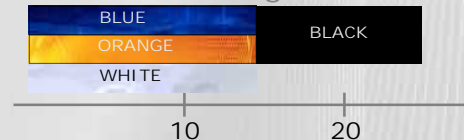
Capacity [GB] [MLC NAND]



MAX Power Draw [W]



Ruggedization Vibration [g's RMS]



Ordering Information

Model: MKD 25 ii xxx y O - tt s n ee ww (

Model: MKD ff ii xxx y O					
Memkor SSD	Form Factor ff:	Interface ii:	Capacity xxx:	Operating temp	Series
MKD	25—2.5" uSATA	ST - SATA	256 - 256 GB 512 - 512 GB 1T0 - 1024 GB	C - 0° to 70°C I - -40° to 85°C	O - ORANGE B - BLUE N - BLACK

- O2 s n ee ww					
Technology Code	Secure Erase: s	NAND: n	Encryption: ee	Write Protect: ww	HiVibe
O1 - SATA III O2 - SATA III (high capacity) L2 - SATA II	0 - no SE (D) Ask us about available options	- SLC (D) M - MLC	- No Encryption (D) Ask us about available options	- no WP (D) Ask us about available options	R - HiVibe Connector

D - default
I - Low
H - High
E - Enabled
SE - Secure Erase
WP - Write Protect