

HAMMER-D Series

Industrial USB Flash Disk Generation 4 Rugged Metal Casing



Product features

- ✦ SLC - NAND type flash technology
- ✦ IP-54 & IP-68 Waterproof metal casing design
- ✦ USB 2.0 Mass Storage compliant
- ✦ USB2.0 High-Speed and USB1.1 FullSpeed compatible interface
- ✦ Complies with Microsoft Vista Ready-Boost® requirements
- ✦ Capacities from 128MB up to 8GB
- ✦ Performance up to 20.1 MB/sec

Product specifications

| | | | |
|------------------------------------|---|-------------------------------|---|
| Compatibility | ✦ USB2.0 High-Speed and USB1.1 FullSpeed compatible interface | Power consumption | Power requirement ✦ 5V ± 10% via USB port |
| Flash technology | ✦ SLC-NAND type flash based | Reading mode | ✦ 74.0 mA (Max.) |
| Performance | | Writing mode | ✦ 88.0 mA(Max.) |
| Data transfer rate | ✦ USB 2.0 supports transfer rates up to 480 Mb/s (60MB/s) | Idle mode | ✦ 63.5 mA (Max.) |
| Sequential read | ✦ 20.1 MB/sec (Max.) | Reliability | |
| Sequential write | ✦ 20.0 MB/sec (Max.) | Wear-leveling | ✦ Static wear-leveling algorithms |
| Random access time | ✦ 0.6ms (estimated) | MTBF | ✦ > 1,000,000 hours |
| Environmental specification | | Endurance | ✦ > 2,000,000 cycles |
| Operating temp. | ✦ STD. 0°C~70°C/W.T. -40°C~+85°C | ECC | ✦ 8 bits or 15 bits per 512 bytes block |
| Non-operating temp. | ✦ STD. -20°C~+80°C/W.T. -50°C~+95°C | Physical specification | |
| Humidity | ✦ 10% ~ 95% non-condensing | Weight | ✦ 25 g ± 3 g / 0.88 oz. |
| Vibration | ✦ 15G compliance to MIL-STD-810F | Dimension(W x L x H) | ✦ 54.80 x 15.80 x 15.80 (mm) |
| Shock | ✦ 1,500G compliance to MIL-STD-810F | Conformal coating | ✦ Option for special request |
| Altitude | ✦ 70,000 feet | Warranty | |
| OS supported | ✦ Win Vista, CE, XP Pro, XP Embedded, Server 2003, Linux, Mac9.x, Mac OS X Industrial grade Win98SE need driver | Standard grade | ✦ 3 years |
| Functionality | ✦ Supports auto-run function | Industrial grade | ✦ 5 years |
| | ✦ A bootable disk for system recovery | | |
| | ✦ Supports partition management, password and security | | |

Operating temperature supports Standard grade 0°C ~ 70°C and Industrial grade -40°C ~ +85°C

Part number list - Rugged metal SLC USB flash disk - Generation 4

| Product Picture | Capacity | 0° C ~ 70° C | -40° C ~ +85° C |
|-----------------|--------------|-----------------------|-----------------------|
| | 128MB | SRUFD128M-ADCSC-4(/C) | WRUFD128M-ADISI-4(/C) |
| | 256MB | SRUFD256M-ADCSC-4(/C) | WRUFD256M-ADISI-4(/C) |
| | 512MB | SRUFD512M-ADCSC-4(/C) | WRUFD512M-ADISI-4(/C) |
| | 1GB | SRUFD001G-ADCSC-4(/C) | WRUFD001G-ADISI-4(/C) |
| | 2GB | SRUFD002G-ADCSC-4(/C) | WRUFD002G-ADISI-4(/C) |
| | 4GB | SRUFD004G-ADCSC-4(/C) | WRUFD004G-ADISI-4(/C) |
| | 8GB | SRUFD008G-ADCSC-4(/C) | WRUFD008G-ADISI-4(/C) |

Part number decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 — Z1 C

Example

S R U F D 0 0 1 G — A D C S C — 4 / C

X1 ✦ Grade

S : Standard grade operating temp. 0° C ~ 70° C

W : IND. temp. grade operating temp. -40° C ~ +85° C

X12 ✦ Controller version

A, B, C, ...

X2 ✦ The material of casing

M : Rugged metal casing

X13 ✦ Controller grade

C : Commercial grade

I : Industrial grade

X3 X4 X5 ✦ Product category

UFD : USB flash disk

X14 ✦ Flash IC

S : Samsung flash IC

X6 X7 X8 X9 ✦ Capacity

128M : 128MB **001G** : 1GB

256M : 256MB **002G** : 2GB

512M : 512MB **004G** : 4GB

008G : 8GB

X15 ✦ Flash IC grade

C : Commercial grade

I : Industrial grade

Z1 ✦ Housing Generation

4 : Generation 4 housing

X11 ✦ Controller

A : Alcor (HAMMER Series)

C ✦ Reserved for specific requirement

C : Conformal-coating

CF Industrial CompactFlash Card

CFast Industrial CFast Card

ATA Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCI-e Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

UFD Industrial Rugged Metal USB Flash Disk

SD Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive

CF Industrial CompactFlash Card

CFast Industrial CFast Card

ATA Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCI-e Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

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