

HAMMER Series

Industrial Semi-Metal USB Flash Disk Generation 3



Product features


- Tiny and semi-metal casing design
- USB 2.0 interface downwards compatible to USB 1.1
- Supports Ready Boost for Microsoft Vista O.S.
- USB 2.0 Mass Storage compliant
- Capacities from 128MB up to 8GB
- Performance up to 21.9 MB/sec

Product specifications

- | | | | |
|------------------------------------|---|-------------------------------|--|
| Compatibility | USB 2.0 and USB 1.1 backwards | Functionality | Supports auto-run function |
| Flash technology | SLC-NAND type flash based | | A bootable disk for system recovery |
| Performance | | | Supports partition management, password and security |
| Data transfer rate | USB 2.0 supports transfer rates up to 480 Mb/s (60MB/s) | Power consumption | |
| Sequential read | 21.9 MB/sec (Max.) | Power requirement | 5V ± 10% via USB port |
| Sequential write | 19.1 MB/sec (Max.) | Reading mode | 78.2 mA (Max.) |
| Average access time | 0.6 ms (estimated) | Writing mode | 80.5 mA (Max.) |
| Environmental specification | | Sleeping mode | 68.3 mA (Max.) |
| Operating temp. | STD. 0°C ~ 70°C / IND. -40°C ~ +85°C | Reliability | |
| Non-operating temp. | STD. -20°C ~ +80°C / IND. -50°C ~ +95°C | Wear-leveling | Dynamic wear-leveling algorithms |
| Humidity | 10% ~ 95% non-condensing | MTBF | > 1,000,000 hours |
| Vibration | 15G compliance to MIL-STD-810F | ECC | 4 bits per 512 bytes block |
| Shock | 1,500G compliance to MIL-STD-810F | Endurance | > 2,000,000 cycles |
| Altitude | 70,000 feet | Physical specification | |
| LED Indicator | Operating with blue light LED | Weight (max.) | 15 g ± 1 g / 0.53 oz. |
| OS supported | Windows ME / 2000 / XP / Vista
Mac9.x , Mac OS X / Win98SE need driver | Dimension(W x L x T) | 17.60 x 47.30 x 8.40 (mm) |
| | | Warranty | Standard grade : 3 years
Industrial grade : 5 years |

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

Part number list - Industrial semi-metal USB flash disk - Generation 3

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	128MB	SMUFD128M-ACCSC/3	WMUFD128M-ACISI/3
	256MB	SMUFD256M-ACCSC/3	WMUFD256M-ACISI/3
	512MB	SMUFD512M-ACCSC/3	WMUFD512M-ACISI/3
	1GB	SMUFD001G-ACCSC/3	WMUFD001G-ACISI/3
	2GB	SMUFD002G-ACCSC/3	WMUFD002G-ACISI/3
	4GB	SMUFD004G-ACCSC/3	WMUFD004G-ACISI/3
	8GB	SMUFD008G-ACCSC/3	WMUFD008G-ACISI/3

Part number decoder

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

Example

W M U F D 1 2 8 M — A C I S I / 3

X1 Grade

S : Standard grade operating temp. 0°C ~ 70°C
W : Industrial grade operating temp. -40°C ~ +85°C

X12 Controller version

A,B,C,....

X2 The material of casing

M : Semi-metal / 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 SLC-NAND 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

C Reserved for specific requirement

3 : Generation 3 housing

X11 Controller

A : Alcor (HAMMER Series)

CF

Industrial CompactFlash Card

CFast

Industrial CFast Card

ATA

Industrial PCMCIA ATA Card

MIF

Industrial micro IDE Flash Module

MSE

Industrial micro SATA Flash Module

MUM

Industrial micro USB Module

MPM

Industrial mini PCI-e 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

MSE

Industrial micro SATA Flash Module

MUM

Industrial micro USB Module

MPM

Industrial mini PCI-e Module

SSD

Industrial Solid State Disk

UFD

Industrial Rugged Metal USB Flash Disk

SD

Industrial SD & SDHC Memory Card

AD

Industrial Adapter Card-Drive