

HAMMER-D Series

Industrial Rugged Metal USB Flash Disk Generation 4



Product features


- IP-54 & IP-68 Waterproof metal casing design
- USB 2.0 Mass Storage compliant
- USB 2.0 Interface downwards compatible to USB 1.1
- Capacities from 128MB up to 8GB
- Supports Ready Boost for Microsoft Vista O.S.
- Performance up to 20.1 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		Supports partition management, password and security
Performance		Power consumption	
Data transfer rate	USB 2.0 supports transfer rates up to 480 Mb/s (60MB/s)	Power requirement	5V ± 10% via USB port
Sequential read	20.1 MB/sec (Max.)	Reading mode	78.2 mA (Max.)
Sequential write	20.0 MB/sec (Max.)	Writing mode	80.5 mA (Max.)
Average access time	0.6 ms (estimated)	Idle mode	68.3 mA (Max.)
Environmental specification		Reliability	
Operating temp.	STD. 0°C ~ 70°C / IND. -40°C ~ +85°C	Wear-leveling	Dynamic wear-leveling algorithms
Non-operating temp.	STD. -20°C ~ +80°C / IND. -50°C ~ +95°C	MTBF	> 1,000,000 hours
Humidity	10% ~ 95% non-condensing	ECC	8 bits or 15 bits per 512 bytes block
Vibration	15G compliance to MIL-STD-810F	Endurance	> 2,000,000 cycles
Shock	1,500G compliance to MIL-STD-810F	Physical specification	
Altitude	70,000 feet	Weight (max.)	25 g ± 3 g / 0.88 oz.
OS supported	Windows ME / 2000 / XP / Vista Mac9.x , Mac OS X / Win98SE need driver	Dimension(W x L x H)	54.80 x 15.80 x 15.80 (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 rugged metal USB flash disk - Generation 4

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

Part number decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 — 4 C

Example

W R U F D 1 2 8 M — A D I S I — 4 C

X1 Grade

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

X2 The material of casing

R : Rugged metal casing

X3 X4 X5 Product category

UFD : USB flash disk

X6 X7 X8 X9 Capacity

128M : 128MB 001G : 1GB
256M : 256MB 002G : 2GB
512M : 512MB 004G : 4GB
 008G : 8GB

X11 Controller

A : Alcor (HAMMER Series)

X12 Controller version

A,B,C,....D

X13 Controller grade

C : Commercial grade
I : Industrial grade

X14 Flash IC

S : Samsung SLC-NAND flash IC

X15 Flash IC grade

C : Commercial grade
I : Industrial grade

4 Generation of housing design

4 : Generation 4

C Reserved for specific requirement

C : Option for Conformal-coating on PCBA