

HAMMER 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 20.5 MB/sec

Product specifications

Compatibility <ul style="list-style-type: none"> USB 2.0 and USB 1.1 backwards 	Functionality <ul style="list-style-type: none"> Supports auto-run function A bootable disk for system recovery Supports partition management, password and security
Flash technology <ul style="list-style-type: none"> SLC-NAND type flash based 	Power consumption <ul style="list-style-type: none"> Power requirement 5V ± 10% via USB port Reading mode 78.2 mA (Max.) Writing mode 80.5 mA (Max.) Idle mode 68.3 mA (Max.)
Performance <ul style="list-style-type: none"> Data transfer rate <ul style="list-style-type: none"> USB 2.0 supports transfer rates up to 480 Mb/s (60MB/s) Sequential read 20.5 MB/sec (Max.) Sequential write 18.7 MB/sec (Max.) Average access time 0.6 ms (estimated) 	Reliability <ul style="list-style-type: none"> Wear-leveling <ul style="list-style-type: none"> Dynamic wear-leveling algorithms MTBF <ul style="list-style-type: none"> > 1,000,000 hours ECC <ul style="list-style-type: none"> 8 bits or 12 bits per 512 bytes block Endurance <ul style="list-style-type: none"> > 2,000,000 cycles
Environmental specification <ul style="list-style-type: none"> Operating temp. STD. 0°C ~ 70°C / IND. -40°C ~ +85°C Non-operating temp. STD. -20°C ~ +80°C / IND. -50°C ~ +95°C Humidity 10% ~ 95% non-condensing Vibration 15G compliance to MIL-STD-810F Shock 1,500G compliance to MIL-STD-810F Altitude 70,000 feet 	Physical specification <ul style="list-style-type: none"> Weight (max.) 25 g ± 3 g / 0.88 oz. Dimension(W x L x H) 54.80 x 15.80 x 15.80 (mm)
OS supported <ul style="list-style-type: none"> Windows ME / 2000 / XP / Vista Mac9.x , Mac OS X / Win98SE need driver 	Warranty <ul style="list-style-type: none"> 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-ACCSC-4	WRUFD128M-ACISI-4
	256MB	SRUFD256M-ACCSC-4	WRUFD256M-ACISI-4
	512MB	SRUFD512M-ACCSC-4	WRUFD512M-ACISI-4
	1GB	SRUFD001G-ACCSC-4	WRUFD001G-ACISI-4
	2GB	SRUFD002G-ACCSC-4	WRUFD002G-ACISI-4
	4GB	SRUFD004G-ACCSC-4	WRUFD004G-ACISI-4
	8GB	SRUFD008G-ACCSC-4	WRUFD008G-ACISI-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 C 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,....

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