

# HERMES Series

## Industrial Rugged Metal 1.8" SATA II SLC SSD



### Product features

- SLC - NAND type flash technology
- 1.8" SATA SSD form-factor
- Extremely rugged metal casing to endure harsh environments
- Maximum sequential read speed 184.2MB/sec
- Maximum sequential write speed 153.3MB/sec
- Capacity from 8GB up to 64GB

### Product specifications

<b>Compatibility</b>	SATA 1.0a and SATA 2.6 specification compliance	<b>Power consumption</b>	Power requirement $\pm 5V \pm 10\%$
<b>Flash technology</b>	SLC-NAND type flash based	Reading mode	280mA (Max.)
<b>Form-factor</b>	Rugged Metal 1.8" SATA SSD	Writing mode	340mA (Max.)
<b>Host Interface</b>	Standard SATA 7-pin (data) + 15-pin (power)	Sleeping mode	150mA (Max.)
<b>Performance</b>		<b>Reliability</b>	
Data transfer rate	Serial ATA Gen-I (1.5Gbits) and Gen-II (3.0Gbits)	Wear-leveling	Static wear-leveling algorithms
Sequential read	184.2MB/sec (Max.)	MTBF	> 3,000,000 hours
Sequential write	153.3MB/sec (Max.)	ECC	8 bits or 15 bits per 512bytes block
Random access time	0.2ms	Endurance	> 2,000,000 cycles
<b>Environmental specification</b>		Data retention	10 years
Operating temp.	STD. 0°C ~ 70°C / IND. -40°C ~ +85°C	<b>Physical specification</b>	
Non-operating temp.	STD. -20°C ~ +80°C / IND. -50°C ~ +95°C	Weight (max.)	55 g $\pm$ 5 g / 1.94 oz.
Humidity	10% ~ 95% non-condensing	Dimension(W x L x H)	69.80 x 59.90 x 9.50 (mm)
Vibration	15G compliance to MIL-STD-810F	<b>Conformal coating</b>	Option for special request
Shock	1,500G compliance to MIL-STD-810F	<b>Warranty</b>	
Altitude	70,000 feet	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 1.8" rugged metal SATA II SLC SSD

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	8GB	SR8SF008G-JACSC	WR8SF008G-JAISI
	16GB	SR8SF016G-JACSC	WR8SF016G-JAISI
	32GB	SR8SF032G-JACSC	WR8SF032G-JAISI
	64GB	SR8SF064G-JACSC	WR8SF064G-JAISI

### Part number decoder

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

### Example

S R 8 S F 0 6 4 G — J A C S C

#### 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

R : Rugged metal casing

#### X13 Controller grade

C : Commercial grade

I : Industrial grade

#### X3 X4 X5 Product category

8SF : 1.8" SATA II SSD

#### X14 Flash IC

S : Samsung SLC-NAND flash IC

#### X6 X7 X8 X9 Capacity

008G : 8GB      032G : 32GB

016G : 16GB      064G : 64GB

#### X15 Flash IC grade

C : Commercial grade

I : Industrial grade

#### X11 Controller

J : JMicron (HERMES 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

MSE Industrial micro SATA Flash Module

MUM Industrial micro USB Module

SSD Industrial Solid State Disk

USB 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

SSD Industrial Solid State Disk

USB Industrial Rugged Metal USB Flash Disk

SD Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive