

# HERMIT Series

## Industrial Rugged Metal 2.5" PATA (IDE) SLC SSD



### Product features

- SLC - NAND type flash technology
- Compatible with ATA/ATAPI-6 standard
- 2.5" PATA (IDE) SSD form-factor
- Data transfer mode support PIO 0-4 and UDMA 0-4
- Extremely rugged metal casing to endure harsh environments
- Performance up to 40 MB/sec
- Master / Slave selectable
- Capacity from 128MB up to 16GB

### Product specifications

<b>Compatibility</b>	ATAPI-6 and True IDE mode	<b>Power consumption</b>	
<b>Flash technology</b>	SLC-NAND type flash based	<b>Power requirement</b>	+5V ± 10%
<b>Form-factor</b>	Rugged Metal 2.5" PATA (IDE) SSD	<b>Reading mode</b>	124.0 mA (Max.)
<b>Host Interface</b>	Standard 44 pins PATA (IDE) male connector	<b>Writing mode</b>	121.0 mA (Max.)
<b>Performance</b>		<b>Idle mode</b>	1.8 mA (Max.)
<b>Data transfer mode</b>	PIO-4 mode or UDMA-4 mode (def.)	<b>Reliability</b>	
<b>Data transfer rate</b>	66.6 MB/sec (ATA-5 / UDMA-4) 16.6 MB/sec (ATA-3 / PIO-4)	<b>Wear-leveling</b>	Static wear-leveling algorithms
<b>Sequential read</b>	40.0 MB/sec (Max. /with dual flash)	<b>MTBF</b>	> 3,000,000 hours
<b>Sequential write</b>	20.0 MB/sec (Max. /with dual flash)	<b>ECC</b>	4 bits per 512 bytes block
<b>Average access time</b>	0.2 ms (estimated)	<b>Endurance</b>	> 2,000,000 cycles
<b>Environmental specification</b>		<b>Physical specification</b>	
<b>Operating temp.</b>	STD. 0°C ~ 70°C / IND. -40°C ~ +85°C	<b>Weight (max.)</b>	110 g / 3.88 oz.
<b>Non-operating temp.</b>	STD. -20°C ~ +80°C / IND. -50°C ~ +95°C	<b>Dimension(W x L x H)</b>	69.90 x 99.70 x 9.50 (mm)
<b>Humidity</b>	10% ~ 95% non-condensing	<b>Conformal coating</b>	Option for special request
<b>Vibration</b>	15G compliance to MIL-STD-810F	<b>Warranty</b>	
<b>Shock</b>	1,500G compliance to MIL-STD-810F	<b>Standard grade</b>	3 years
<b>Altitude</b>	70,000 feet	<b>Industrial grade</b>	5 years

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

### Part number list - Industrial 2.5" rugged metal PATA (IDE) SLC SSD

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	128MB	SR2IF128M-HACSC-U	WR2IF128M-HAISI-U
	256MB	SR2IF256M-HACSC-U	WR2IF256M-HAISI-U
	512MB	SR2IF512M-HACSC-U	WR2IF512M-HAISI-U
	1GB	SR2IF001G-HACSC-U	WR2IF001G-HAISI-U
	2GB	SR2IF002G-HACSC-U	WR2IF002G-HAISI-U
	4GB	SR2IF004G-HACSC-U	WR2IF004G-HAISI-U
	8GB	SR2IF008G-HACSC-U	WR2IF008G-HAISI-U
	16GB	SR2IF016G-HACMC-U	WR2IF016G-HAIMI-U

### Remarks: The optional data-transfer modes and disk types are:

P: optional as PIO-4 mode / Fixed disk type

U: defaulted as UDMA-4 mode / Fixed disk type

### Part number decoder

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

### Example

S R 2 I F 5 1 2 M — H A C S C — U

**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

**2IF**: 2.5" PATA (IDE) SSD

**X6 X7 X8 X9** Capacity

**128M**: 128MB    **001G**: 1GB    **008G**: 8GB  
**256M**: 256MB    **002G**: 2GB    **016G**: 16GB  
**512M**: 512MB    **004G**: 4GB

**X11** Controller

**H**: Hyperstone (HERMIT 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  
**M**: Micron SLC-NAND flash IC

**X15** Flash IC grade

**C**: Commercial grade  
**I**: Industrial grade

**Z1** Data transfer rate and disk type

**P**: PIO-4 mode / fixed disk type

**U**: defaulted as UDMA-4 mode / fixed disk type

**C** Reserved for specific requirement

**C**: Conformal-coating