

# HERMES-ER Series

Industrial Rugged Metal 2.5" SATA II SLC SSD supports DDRII SDRAM Cache



### Product features

- ❖ SLC - NAND type flash technology
- ❖ 2.5" SATA SSD form-factor
- ❖ Supports Windows-7 TRIM Command
- ❖ Supports DDRII SDRAM 512Mbits cache for Extreme performance
- ❖ Extremely rugged metal casing to endure harsh environments
- ❖ Maximum sequential read speed 252.6 MB/sec (8CH. Max.)
- ❖ Maximum sequential write speed 210.5 MB/sec (8CH. Max.)
- ❖ Capacity from 64GB up to 256GB

### Product specifications

|                                    |   |                               |                                   |
|------------------------------------|---|-------------------------------|-----------------------------------|
| <b>Compatibility</b>               | ❖ SATA 1.0a and SATA 2.6 Specification compliance   | <b>Power consumption</b>      | ❖ Power requirement +5V ± 10%     |
| <b>Flash technology</b>            | ❖ SLC-NAND type flash based                         | <b>Reading mode</b>           | ❖ 570 mA (8CH. Max.)              |
| <b>Form-factor</b>                 | ❖ Rugged Metal 2.5" SATA SSD                        | <b>Writing mode</b>           | ❖ 720 mA (8CH. Max.)              |
| <b>Host Interface</b>              | ❖ SATA 7-pin (data) + 15-pin (power)                | <b>Idle mode</b>              | ❖ 210 mA (8CH. Max.)              |
| <b>Performance</b>                 |   | <b>Reliability</b>            |                                   |
| <b>Data transfer rate</b>          | ❖ Serial ATA Gen-I and Gen-II (1.5Gb/s and 3.0Gb/s) | <b>Wear-leveling</b>          | ❖ Static wear-leveling algorithms |
| <b>Sequential read</b>             | ❖ 251.4 MB/sec (8CH. Max.)                          | <b>MTBF</b>                   | ❖ > 4,000,000 hours               |
| <b>Sequential write</b>            | ❖ 192.6 MB/sec (8CH. Max.)                          | <b>Endurance</b>              | ❖ > 2,000,000 cycles              |
| <b>Random access time</b>          | ❖ 0.2ms (estimated)                                 | <b>ECC</b>                    | ❖ 16 bits per 512 bytes block     |
| <b>Environmental specification</b> |   | <b>Data retention</b>         | ❖ 10 Years                        |
| <b>Operating temp.</b>             | ❖ STD. 0°C~70°C/IND. -40°C~+85°C                    | <b>Physical specification</b> |                                   |
| <b>Non-operating temp.</b>         | ❖ STD. -20°C~+80°C/IND. -50°C~+95°C                 | <b>Weight</b>                 | ❖ 115g ± 5g /4.06 oz.             |
| <b>Humidity</b>                    | ❖ 10% ~ 95% non-condensing                          | <b>Dimension(W x L x H)</b>   | ❖ 69.90 x 99.70 x 9.50 (mm)       |
| <b>Vibration</b>                   | ❖ 15G compliance to MIL-STD-810F                    | <b>Conformal coating</b>      | ❖ Option for special request      |
| <b>Shock</b>                       | ❖ 1,500G compliance to MIL-STD-810F                 | <b>Warranty</b>               |                                   |
| <b>Altitude</b>                    | ❖ 70,000 feet                                       | <b>Standard grade</b>         | ❖ 3 years                         |
|                                    |   | <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 SATA II SLC SSD supports DDRII SDRAM

| Product Picture | Capacity     | 0° C ~ 70° C        | -40° C ~ +85° C     |
|-----------------|--------------|---------------------|---------------------|
|                 | <b>64GB</b>  | SR2SR064G-JECTC(/C) | WR2SR064G-JEITI(/C) |
|                 | <b>128GB</b> | SR2SR128G-JECTC(/C) | WR2SR128G-JEITI(/C) |
|                 | <b>256GB</b> | SR2SR256G-JECTC(/C) | WR2SR256G-JEITI(/C) |

### Part number decoder

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

#### Example

W R 2 S R 2 5 6 G — J E I T I / 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

**2SR** : 2.5" SATA II SSD supports DDR SDRAM

**X14** ❖ Flash IC

**T** : Toshiba SLC-NAND flash IC

**X6 X7 X8 X9** ❖ Capacity

**064G** : 64GB

**128G** : 128GB

**256G** : 256GB

**X15** ❖ Flash IC grade

**C** : Commercial grade

**I** : Industrial grade

**C** ❖ Reserved for specific requirement

**C** : Conformal-coating

**X11** ❖ Controller

**J** : JMicron (HERMES Series)

CFC Industrial CompactFlash Card

CFA Industrial CFast Card

AFC Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCI-e Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

UFD Industrial Rugged Metal USB Flash Disk

SDC/H Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive

CFC Industrial CompactFlash Card

CFA Industrial CFast Card

AFC Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCI-e Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

UFD Industrial Rugged Metal USB Flash Disk

SDC/H Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive