

PHANES-HR Series

MLC 2.5" Rugged Metal SATA III SSD / Supports DDRIII SDRAM CACHE



Product Feature


- MLC - NAND type flash technology
- Standard 2.5" SATA Flash Disk form-factor (7mm height)
- Supports Windows-7 TRIM Command
- Supports DDRIII SDRAM cache
- Capacity from 64GB up to 2TB
- Compliant with SATA 1.0a/ 2.6/ 3.0 specification
- Extremely rugged metal casing to endure harsh environments
- S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology)
- Maximum sequential read speed 550 MB/sec (Max.)
- Maximum sequential write speed 530 MB/sec (Max.)

Product Specification

Compatibility	➤ SATA 1.0a, SATA 2.6 and SATA 3.0 Specification compliance	Power consumption	
Flash technology	➤ MLC-NAND type flash based	Power requirement	➤ +5V ± 5%
Form-factor	➤ Rugged Metal 2.5" SATA SSD	Reading mode	➤ 2520 mW (Max.)
Host Interface	➤ SATA 7-pin (data) + 15-pin (power)	Writing mode	➤ 4450 mW (Max.)
Performance		Idle mode	➤ 400 mW (Max.)
Data transfer rate	➤ SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s	Reliability	
Sequential read	➤ 550 MB/sec (Max.)	Wear-leveling	➤ Static and Dynamic wear-leveling algorithms
Sequential write	➤ 530 MB/sec (Max.)	ECC	➤ 120 bits per 2K bytes block
Random access time	➤ 0.1ms (estimated)	Physical specification	
Environmental specification		Weight	➤ 115g ± 5g /3.7 oz.
Operating temp.	➤ STD. 0°C~70°C/W.T. -40°C~+85°C	Dimension(W x L x H)	➤ 69.90 x 100.00 x 7.00 (mm)
Non-operating temp.	➤ STD. -20°C~+80°C/W.T. -50°C~+95°C	Warranty	
Conformal coating	➤ Option for wide temperature	MLC(standard/wide temp.)	➤ 2 years / Within 3k Erasing counts
Humidity	➤ 10% ~ 95% non-condensing		
Vibration	➤ 80 Hz to 2K Hz, 20G, 3 axes		
Shock	➤ 0.5ms, 1500G, 3 axes		
Altitude	➤ 70,000 feet		

Operating temperature supports standard grade 0°C ~ 70°C and wide temp. grade -40°C ~ +85°C

Part number list - 2.5" rugged metal SATA III MLC SSD supports DDRIII SDRAM Cache

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	64GB	SR7SR064G-PHCTMB	WR7SR064G-PHCTMB/C
	128GB	SR7SR128G-PHCTMB	WR7SR128G-PHCTMB/C
	256GB	SR7SR256G-PHCTMB	WR7SR256G-PHCTMB/C
	512GB	SR7SR512G-PHCTMB	WR7SR512G-PHCTMB/C
	1TB	SR7SR001T-PHCTMB	WR7SR001T-PHCTMB/C
	2TB	SR7SR002T-PHCTMB	WR7SR002T-PHCTMB/C

Remarks : Wide temperature grade -40°C ~ +85°C with special conformal coating treatment on PCBA.

Part Number Decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 X16 / C

Example

W R 7 S R 0 0 2 T — P H C T M B / C

X1 Grade

S : Standard grade operating temp. 0° C~70 ° C

W : Wide temp. grade operating temp. -40° C~+85 ° C

X2 The material of casing

R : Rugged metal casing

X3 X4 X5 Product category

7SR : 2.5" SATA SSD with SDRAM Cache

X6 X7 X8 X9 Capacity

064G : 64GB **512G :** 512GB

128G : 128GB **001T :** 1TB

256G : 256GB **002T :** 2TB

X11 Controller

P : PHANES Series

X12 Controller version

A, B, C, D.....

X13 Controller grade

C : Commercial grade

X14 Flash IC

T : Toshiba NAND flash IC

X15 Flash IC grade

M : MLC-NAND flash IC

X16 Generation

B : 15 nm

C Reserved for specific requirement

C : Conformal-coating