

PHANES-AR Series

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



PRODUCT FEATURES


- MLC - NAND type flash technology
- 2.5" SATA SSD form-factor
- Supports Windows-7 TRIM Command
- Supports DDRIII SDRAM cache
- Capacity from 256GB up to 1TB
- 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 526.7 MB/sec (Max.)
- Maximum sequential write speed 416.9 MB/sec (Max.)

PRODUCT SPECIFICATION

Compatibility	➤ SATA 1.0a, SATA 2.6 and SATA 3.0 Specification compliance	Power consumption	Power requirement ➤ +5V ± 5%
Flash technology	➤ MLC-NAND type flash based	Reading mode	➤ 842mA (Max.)
Form-factor	➤ Rugged Metal 2.5" SATA SSD	Writing mode	➤ 1075mA (Max.)
Host Interface	➤ SATA 7-pin (data) + 15-pin (power)	Idle mode	➤ 65mA (Max.)
Performance		Reliability	
Data transfer rate	➤ Serial ATA Gen-I, Gen-II and Gen-III (1.5Gb/s, 3.0Gb/s and 6.0Gb/s)	Wear-leveling	➤ Static and Dynamic wear-leveling algorithms
Sequential read	➤ 526.7 MB/sec (Max.)	ECC	➤ 72 bits per 1024 bytes block
Sequential write	➤ 416.9 MB/sec (Max.)	Physical specification	
Random access time	➤ 0.1ms (estimated)	Weight	➤ 115g ± 5g /4.06 oz.
Environmental specification		Dimension(W x L x H)	➤ 69.90 x 100.00 x 9.50 (mm)
Operating temp.	➤ STD. 0°C~70°C/IND. -40°C~+85°C	Warranty	➤ 2 years
Non-operating temp.	➤ STD. -20°C~+80°C/IND. -50°C~+95°C		
Conformal coating	➤ Option for wide temperature		
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
	256GB	SR2SR256G-PACTMA	WR2SR256G-PACTMA/C
	512GB	SR2SR512G-PACTMA	WR2SR512G-PACTMA/C
	1TB	SR2SR01TB-PACTMA	WR2SR01TB-PACTMA/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 2 S R 5 1 2 G — P A C T M A / 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

2SR : 2.5" SATA SSD with SDRAM Cache

X6 X7 X8 X9 Capacity

256G : 256GB

512G : 512GB

01TB : 1TB

X11 Controller

P : Phison (PHANES-AR 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

A : A19 nm

C Reserved for specific requirement

C : Conformal-coating