

HERCULES-Q Series

MLC 2.5" Rugged Metal PATA SSD



Product Feature


- MLC - NAND type flash technology
- 2.5" standard PATA (IDE) SSD form-factor
- Compatible with ATA/ATAPI-8 standard
- Capacities from 16GB up to 512GB
- S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology)
- Extremely rugged metal casing to endure harsh environments
- Data transfer mode support PIO 0~6, MWDMA 0~4, UDMA 0~7
- Performance up to Read: 103.3 MB/sec ; Write: 100.0 MB/sec

Product Specification

Compatibility	➤ ATA/ATAPI-8 and True IDE mode	Power consumption	
Flash technology	➤ MLC-NAND type flash based	Power requirement	➤ +5V ± 10%
Form-factor	➤ Rugged Metal 2.5" PATA (IDE) SSD	Reading mode	➤ 260 mA (Max.)
Host Interface	➤ Standard 44-pin PATA (IDE) Male connector	Writing mode	➤ 150 mA (Max.)
Master/Slave	➤ By jumper	Idle mode	➤ 5.1 mA (Max.)
Data transfer rate	➤ PIO 0 ~ 6 Mode	Reliability	
	➤ MWDMA 0 ~ 4 Mode	Wear-leveling	➤ Global wear-leveling
	➤ UDMA 0 ~ 7 Mode	ECC	➤ 72 bits per 1024 bytes block
Performance		Physical specification	
Sequential read	➤ 103.3 MB/sec (Max.)	Weight	➤ 70 g ± 5 g / 2.47 oz.
Sequential write	➤ 100.0 MB/sec (Max.)	Dimension(W x L x H)	➤ 69.85 x 99.70 x 8.90 (mm)
Random access time	➤ 0.5ms (estimated)	Conformal coating	➤ Optional for special request
Environmental specification		Warranty	
Operating temp.	➤ STD. 0°C~70°C/W.T. -40°C~+85°C	MLC(standard/wide temp.)	➤ 2 years / Within 3k Erasing counts
Non-operating temp.	➤ STD. -20°C~+80°C/W.T. -50°C~+95°C		
Humidity	➤ 10% ~ 95% non-condensing		
Vibration	➤ 7 Hz to 2K Hz, 20G, 3 axes		
Shock	➤ 0.5ms, 1500 G, 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 PATA (IDE) MLC SSD

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	16GB	SR2IF016G-MQCTMB-U(/C)	WR2IF016G-MQCTMB-UC
	32GB	SR2IF032G-MQCTMB-U(/C)	WR2IF032G-MQCTMB-UC
	64GB	SR2IF064G-MQCTMB-U(/C)	WR2IF064G-MQCTMB-UC
	128GB	SR2IF128G-MQCTMB-U(/C)	WR2IF128G-MQCTMB-UC
	256GB	SR2IF256G-MQCTMB-U(/C)	WR2IF256G-MQCTMB-UC
	512GB	SR2IF512G-MQCTMB-U(/C)	WR2IF512G-MQCTMB-UC

Remarks : P : optional as PIO-6 mode / Fixed disk type

U : defaulted as UDMA-7 mode / Fixed disk type

Part Number Decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 X16 — Z1 C

Example

W R 2 I F 5 1 2 G — M Q C T M B — U 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

2IF : 2.5" PATA (IDE) SSD

X6 X7 X8 X9 Capacity

016G : 16GB **128G :** 128GB

032G : 32GB **256G :** 256GB

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

X11 Controller

M : HERCULES Series

X12 Controller version

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

X13 Controller grade

C : Commercial grade

X14 Flash IC

T : Toshiba flash IC

X15 Flash IC grade

M : MLC-NAND flash IC

X16 Generation

B : 15 nm

Z1 RData transfer rate and disk type

U : defaulted as UDMA-7 mode / Fixed disk type

C Reserved for specific requirement

C : Conformal-coating