

Controller

PS5012-E12DI

Interface	NVMe PCIe Gen3x4		
Form Factor	2.5"(U.2)	M.2 2280	M.2 22110
NAND Flash	3D TLC		
Capacity ¹	256GB to 8TB	256GB to 2TB	4TB
Performance² (up to)			
Sequential Read	3200 MB/s	3200 MB/s	3200 MB/s
Sequential Write	1000 MB/s	1000 MB/s	1000 MB/s
4K Random Read	400K IOPS	200K IOPS	200K IOPS
4K Random Write	30K IOPS	20K IOPS	20K IOPS
Power (up to)			
Supply Voltage	12V ± 5%	3.3V ± 5%	3.3V ± 5%
Active (Average)	9W	6W	9W
Idle	2.5W	2W	2.5W
Temperature			
Operating	0°C~70°C		
Non-Operating	-40°C~85°C		
Advanced Features	<ul style="list-style-type: none"> • Self Encrypting Function(Optional): AES, TCG OPAL, TCG Pyrite • Power Loss Protection(pFail) circuit (Optional on 2.5") • Intelligent FW technology on Data loss Protection : <ol style="list-style-type: none"> 1) Data Loss Protection End to End Data Path Protection (ETEDPP) 2) SmartFlush™ • Intelligent FW technology on Data Reliability <ol style="list-style-type: none"> 1) SamrtECC™: LDPC + RAID ECC 2) Cross Die Bad Block Management 3) SmartRefresh™ • Thermal Protection Mechanism • Security Function(Optional): Write Protect, Quick Erase, Data Destroy 		

¹ 1GB = 1,000,000,000 bytes

² 1MB/s = 1,000,000 bytes / second