

2.5" PATA Solid State Drive

amp inc's 2.5" PATA interface solid state drive adopts an advanced SSD controller and NAND Flash components. It is compatible with ATA-7 protocol and supports PIO-4, MWDMA-2 and UDMA-6 transfer rates. Our SSD supports mainstream OS, such as Windows/MAC/ Linux/ Solaris/ Vxworks, and provides storage capacity ranging from 1GB to 256GB. amp inc SSD's are also ideal replacement for HDD's which are widely used in industrial control computer, embedded computer and national defense fields.

amp inc's 2.5" PATA interface solid state drive carry out a series of strict temperature, vibration and shock tests in accordance with standards of military equipment to ensure the products work in harsh environments.



Specification Summary

Physical Specifications	Interface	44-pin IDE
	Dimension	100.20mm×70.05 mm×9.37 mm
	Capacity	1GB to 256GB
	Flash Media	MLC-NAND Flash 1GB~256GB SLC-NAND Flash 1GB~128GB
Performance	Sequential Read	Up to 80 MB/s
	Sequential Write	Up to 40 MB/s
	4KB Random Read	Up to 3800 IOPS
	4KB Random Write	Up to 375 IOPS
Reliability	Write endurance: 8 years@ 100G write/day(32G) Read endurance: unlimited MTBF: >2,000,000 hours Date retention: >20years@ 25°C Date destroy do not support Sudden power-off recovery support ECC: 8bits for 512Bytes S.M.A.R.T and dynamic power management support Bad block management algorithm	
Environment	Storage temperature: -55~95°C Operation temperature: Optional Humidity: 5%~95% Vibration: 20G Peak, 10~2000Hz, (15mins/ Axis) x3 Axis Shock: 1500G (@0.5ms half sine wave)	
Electrical Specifications	Input Voltage	5V ± 5%
	Read Current	Read = 1.6 W (Max)
	Write Current	Write = 2.4 W (Max)
	Idle Current	Idle = 1.2 W
Host Interface	Compliant with ATA-7 specification	
	Supports PIO Mode 0-4	
	Supports Multi-Word DMA Mode 0-2	
	Supports Ultra DMA Mode 0-6	
Operating Temperature	Commercial Grade (0°C+70°), Industrial Grade (-40°C+85°)	
Weight	< 120g	

Part Number

MLC

Part Number	Capacity
AMP25P001-NM0MAC(I)	1GB
AMP25P002-NM0MAC(I)	2GB
AMP25P004-NM0MAC(I)	4GB
AMP25P008-NM0MAC(I)	8GB
AMP25P016-NM0MAC(I)	16GB
AMP25P032-NM0MAC(I)	32GB
AMP25P064-NM0MAC(I)	64GB
AMP25P128-NM0MAC(I)	128GB
AMP25P256-NM0MAC(I)	256GB

SLC

AMP25P001-NS0MAC(I)	1GB
AMP25P002-NS0MAC(I)	2GB
AMP25P004-NS0MAC(I)	4GB
AMP25P008-NS0MAC(I)	8GB
AMP25P016-NS0MAC(I)	16GB
AMP25P032-NS0MAC(I)	32GB
AMP25P064-NS0MAC(I)	64GB
AMP25P128-NS0MAC(I)	128GB

*C= Commercial Temperature

*I = Industrial Temperature