

# PSD330

Transcend PSD is a series of 2.5 PATA SSD with high performance and advanced flash control techniques. Due to smaller size (fit the standard dimensions of 2.5" IDE Hard Disk Drives), huge capacity, high speed, and low power consumption, Solid State Disk is perfect replacement storage device for PCs, Laptops, gaming systems, and handheld devices.

## Features

- RoHS compliant products
- Single Power Supply: 5V±10%
- Built-in BCH ECC (Error Correction Code) functionality
- Support Global Wear-Leveling, Static Data Refresh, Early Retirement, and
- Erase Count Monitor functions to extend product life
- True IDE Mode supports:
  - Ultra DMA Mode 0 to Ultra DMA Mode 6
  - MultiWord DMA Mode 0 to MultiWord DMA Mode 2
  - PIO Mode 0 to PIO Mode 4
- Support S.M.A.R.T (Self-defined)
- Support Security Command
- Support Host Protected Area
- MTBF: 1,000,000 hours (in 25 °C)

### **Dimensions**

Side	Millimeters	Inches
А	A $100.30 \pm 0.40$ $3.949 \pm 0.016$	
В	$69.85 \pm 0.20$	$2.750\pm0.008$
С	$\textbf{7.40} \pm \textbf{0.15}$	$0.292\pm0.004$



## Specifications

Capacity						
Model P/N	Cylinder	Head	Sector	User LBA	Physical Capacity	
TS32GPSD330	16383	15	63	62,533,632	32,018,219,584 Byte	
TS64GPSD330	16383	15	63	125,044,736	64,002,424,832 Byte	
TS128GPSD330	16383	15	63	250,071,040	128,036,372,480 Byte	

Note. PSD330 series is shipped with RAW format. Inquiry for formatted device please contact with sales/PM.



#### Performance

	Sequential Read	Sequential Write	Random 4K Read	Random 4K Write
32GB	119.0	36.12	13.86	1.276
64GB	114.7	63.92	11.42	1.252
128GB	118.4	92.75	13.09	1.225

Note : Test by Crystal Disk Mark V3.0.1, 500MB size @25 °C, P5K-VM(ICH 9), 1GB RAM \* 2, IDE interface support up to UDMA6, Windows® XP SP3.

Power consumption (mA)					
Capacity	32GB	64GB	128GB		
Read	240.9	236.8	240.1		
Write	158.9	245.5	247.5		
Idle	0.8	0.8	0.8		

Note: All data above are maximum value from various test patterns.

Endurance						
Capacity	32GB	64GB	128GB			
Tera Byte Write	20 TBW	40 TBW	80 TBW			

Note: Based on JEDEC JESD218A specification, Client Application Class. And based on the following scenario: Active use: 40°C, 8hrs/day; Retention use: 30°C 1year.

Interface						
Part Number	Interface	Transfer Mode	Connector			
TS32G~128GPSD330	True IDE mode	Ultra DMA mode 0~6 Multi-Word DMA Mode 0~2 PIO Mode 0~4	44pin 2mm pitch Pin male Header			

Environmental Specifications				
Operating Temperature	0 °C to 70 °C			
Storage Temperature	-40 °C to 85 °C			
Operating Humidity (Non condensation)	0% to 95%			
Storage Humidity (Non condensation)	0% to 95%			

SHOCK & Vibration Test				
	Condition	Standad		
Mechanical Shock Test	1500G, 0.5ms, 3 axes	IEC 60068-2-27		
Vibration Toot	20G (Peak-to-Peak)			
Vibration Test	20Hz to 2000Hz (Frequency)	IEC 60068-2-6		

Note: If Third party report is needed, please contact with sales/PM.



EMC/EMI

Compliance

CE, FCC and BSMI

Note: If Third party report is needed, please contact with sales/PM.



# PSD520

Transcend PSD is a series of 2.5 PATA SSD with high performance and advanced flash control techniques. Due to smaller size (fit the standard dimensions of 2.5" IDE Hard Disk Drives), huge capacity, high speed, and low power consumption, Solid State Disk is perfect replacement storage device for PCs, Laptops, gaming systems, and handheld devices.

## Features

- RoHS compliant products
- Single Power Supply: 5V±10%
- Built-in BCH ECC (Error Correction Code) functionality
- Support Global Wear-Leveling, Static Data Refresh, Early Retirement, and
- Erase Count Monitor functions to extend product life
- True IDE Mode supports:
  - Ultra DMA Mode 0 to Ultra DMA Mode 6
  - MultiWord DMA Mode 0 to MultiWord DMA Mode 2
  - PIO Mode 0 to PIO Mode 4
- Support S.M.A.R.T (Self-defined)
- Support Security Command
- Support Host Protected Area
- MTBF: 1,000,000 hours (in 25 °C)

### **Dimensions**

Side	Millimeters	Inches
А	A $100.30 \pm 0.40$ $3.949 \pm 0.016$	
В	$69.85 \pm 0.20$	$2.750\pm0.008$
С	$\textbf{7.40} \pm \textbf{0.15}$	$0.292\pm0.004$



## Specifications

Capacity					
Model P/N	Cylinder	Head	Sector	User LBA	Physical Capacity
TS8GPSD520	15526	16	63	15,650,208	8,012,906,496 Byte
TS16GPSD520	16383	15	63	31,277,056	16,013,852,672 Byte
TS32GPSD520	16383	15	63	62,533,632	32,018,219,584 Byte
TS64GPSD520	16383	15	63	125,044,736	64,002,424,832 Byte

Note. PSD520 series is shipped with RAW format. Inquiry for formatted device please contact with sales/PM.

Performance (MB/s)							
	Sequential Read	Sequential Write	Random 4K Read	Random 4K Write			
8GB	116	65	10.14	1.378			
16GB	119	100	10.99	1.75			
32GB	118.3	102.4	11.58	1.73			
64GB	111	97	10.96	1.849			

Note : Test by Crystal Disk Mark V3.0.1, 500MB size @25 °C, P5K-VM(ICH 9), 1GB RAM \* 2, IDE interface support up to UDMA6, Windows® XP SP3.

Power consumption (mA)					
Capacity	8GB	16GB	32GB	64GB	
Read	240.5	259.2	252.8	266	
Write	195.3	268.7	257.3	268	
Idle	8.1	8.1	8.7	7.8	

Note: All data above are maximum value from various test patterns.

Endurance				
Capacity	8GB	16GB	32GB	64GB
Tera Byte Write	166.6 TBW	333.3 TBW	666.6 TBW	1333.2 TBW

Note: Based on JEDEC JESD218A specification, Client Application Class. And based on the following scenario: Active use: 40°C, 8hrs/day; Retention use: 30°C 1year.

Interface				
Part Number	Interface	Transfer Mode	Connector	
TS8G~64GPSD520	True IDE mode	Ultra DMA mode 0~6 Multi-Word DMA Mode 0~2 PIO Mode 0~4	44pin 2mm pitch Pin male Header	

Environmental Specifications		
Operating Temperature	-40 °C to 85 °C	
Storage Temperature	-40 °C to 85 °C	
Operating Humidity (Non condensation)	0% to 95%	
Storage Humidity (Non condensation)	0% to 95%	

SHOCK & Vibration Test			
	Condition	Standard	
Mechanical Shock Test	1500G, 0.5ms, 3 axes	IEC 60068-2-27	
Vibration Test	20G (Peak-to-Peak)	IEC 60068-2-6	
Vibration Test	20Hz to 2000Hz (Frequency)		



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