

# 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
A	100.30 ± 0.40	3.949 ± 0.016
B	69.85 ± 0.20	2.750 ± 0.008
C	7.40 ± 0.15	0.292 ± 0.004



## 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
<b>32GB</b>	119.0	36.12	13.86	1.276
<b>64GB</b>	114.7	63.92	11.42	1.252
<b>128GB</b>	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	
<b>Read</b>	240.9	236.8	240.1	
<b>Write</b>	158.9	245.5	247.5	
<b>Idle</b>	0.8	0.8	0.8	

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

Endurance				
Capacity	32GB	64GB	128GB	
<b>Tera Byte Write</b>	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
<b>TS32G~128GPSD330</b>	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	
<b>Operating Temperature</b>	0 °C to 70 °C
<b>Storage Temperature</b>	-40 °C to 85 °C
<b>Operating Humidity (Non condensation)</b>	0% to 95%
<b>Storage Humidity (Non condensation)</b>	0% to 95%

SHOCK & Vibration Test		
	Condition	Standad
<b>Mechanical Shock Test</b>	1500G, 0.5ms, 3 axes	IEC 60068-2-27
<b>Vibration Test</b>	20G (Peak-to-Peak) 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
A	100.30 ± 0.40	3.949 ± 0.016
B	69.85 ± 0.20	2.750 ± 0.008
C	7.40 ± 0.15	0.292 ± 0.004



## Specifications

Capacity						
Model P/N	Cylinder	Head	Sector	User LBA	Physical Capacity	
<b>TS8GPSD520</b>	15526	16	63	15,650,208	8,012,906,496 Byte	
<b>TS16GPSD520</b>	16383	15	63	31,277,056	16,013,852,672 Byte	
<b>TS32GPSD520</b>	16383	15	63	62,533,632	32,018,219,584 Byte	
<b>TS64GPSD520</b>	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
<b>8GB</b>	116	65	10.14	1.378
<b>16GB</b>	119	100	10.99	1.75
<b>32GB</b>	118.3	102.4	11.58	1.73
<b>64GB</b>	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
<b>Read</b>	240.5	259.2	252.8	266
<b>Write</b>	195.3	268.7	257.3	268
<b>Idle</b>	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
<b>Tera Byte Write</b>	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
<b>TS8G~64GPSD520</b>	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	
<b>Operating Temperature</b>	0 °C to 70 °C
<b>Storage Temperature</b>	-40 °C to 85 °C
<b>Operating Humidity (Non condensation)</b>	0% to 95%
<b>Storage Humidity (Non condensation)</b>	0% to 95%

SHOCK & Vibration Test		
	Condition	Standard
<b>Mechanical Shock Test</b>	1500G, 0.5ms, 3 axes	IEC 60068-2-27

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.