



## The Smart Alternative to Hard Disk Drives

### 2.5" & 1.8" SSD

#### Solid State Drives

Transcend's Solid State Drives (SSD) are ultra-lightweight, shock proof, power-saving alternatives to traditional hard disk drives.

Their standard 2.5" & 1.8" dimensions and modern SATA-II / IDE connection interfaces ensure 100% compatibility with normal hard drives for easy drop-in installation.

With no moving parts, Transcend's SSDs are extremely fast, completely silent, and are virtually immune to vibration and shock, making them perfect for use in ultra-lightweight portable notebooks or industrial applications.

#### FEATURES

- Ultra-fast under 1ms data access
- Standard 2.5" and 1.8" HDD dimensions
- Easy drop-in replacement for regular hard drives – no driver required
- SATA and IDE interfaces for compatibility with modern PCs and notebooks
- Robust, non-volatile Flash memory with wear-leveling technology
- Built-in ECC (Error Correction Code) to ensure reliable data-transfer
- Lower power consumption and less heat generation
- Zero spin-up / seek time
- Silent operation (no moving parts)
- Faster boot-up and smoother software application performance
- Shock and vibration resistant
- 2-year warranty



**No noise • No heat • No moving parts**



# 2.5" & 1.8" SSD

Solid State Drives



## SPECIFICATIONS

|                                   |                            |                                     |
|-----------------------------------|----------------------------|-------------------------------------|
| <b>Capacity</b>                   | 2.5" SATA:                 | 8GB, 16GB, 32GB, 64GB, 128GB, 192GB |
|                                   | 2.5" IDE:                  | 8GB, 16GB, 32GB, 64GB, 128GB        |
|                                   | 1.8" Micro-SATA:           | 8GB, 16GB, 32GB, 64GB               |
| <b>Dimensions (LxWxH)</b>         | 2.5" SATA:                 | 100.00mm x 69.85mm x 9.50mm         |
|                                   | 2.5" IDE:                  | 100.00mm x 69.85mm x 7.40mm         |
|                                   | 1.8" Micro-SATA:           | 78.50mm x 54.00mm x 5.00mm          |
| <b>Weight</b>                     | 2.5" SATA / IDE:           | 55±5g (SATA), 90±5g (IDE)           |
|                                   | 1.8" Micro-SATA:           | 30g                                 |
| <b>Input Voltage</b>              | 2.5" SATA / IDE:           | 5V                                  |
|                                   | 1.8" Micro-SATA:           | 3.3V / 5V                           |
| <b>Interface / Connector</b>      | 2.5" SATA:                 | 7-pin + 15-pin                      |
|                                   | 2.5" IDE:                  | 44-pin                              |
|                                   | 1.8" Micro-SATA:           | 7-pin + 9-pin                       |
| <b>Operating Temperature</b>      | 0°C (32°F) to 70°C (158°F) |                                     |
| <b>Access Speed</b>               | less than 1ms              |                                     |
| <b>Audible Noise</b>              | 0dB                        |                                     |
| <b>Operating Shock Resistance</b> | 1,500G                     |                                     |
| <b>Certificates</b>               | CE, FCC, BSMI              |                                     |

## TRANSFER RATE

| 2.5" SATA SSD  |                        |                         | 2.5" IDE SSD  |                        |                         |
|----------------|------------------------|-------------------------|---------------|------------------------|-------------------------|
| Model P/N      | Sequential Read (Max.) | Sequential Write (Max.) | Model P/N     | Sequential Read (Max.) | Sequential Write (Max.) |
| TS8GSSD25S-S   | 150 MB/s               | 90 MB/s                 | TS8GSSD25-S   | 74 MB/s                | 62 MB/s                 |
| TS16GSSD25S-M  | 150 MB/s               | 50 MB/s                 | TS16GSSD25-S  | 74 MB/s                | 62 MB/s                 |
| TS16GSSD25S-S  | 150 MB/s               | 100 MB/s                | TS32GSSD25-M  | 74 MB/s                | 45 MB/s                 |
| TS32GSSD25S-M  | 150 MB/s               | 90 MB/s                 | TS32GSSD25-S  | 74 MB/s                | 62 MB/s                 |
| TS32GSSD25S-S  | 150 MB/s               | 120 MB/s                | TS64GSSD25-M  | 75 MB/s                | 45 MB/s                 |
| TS64GSSD25S-M  | 150 MB/s               | 90 MB/s                 | TS64GSSD25-S  | 80 MB/s                | 70 MB/s                 |
| TS64GSSD25S-S  | 170 MB/s               | 140 MB/s                | TS128GSSD25-M | 68 MB/s                | 46 MB/s                 |
| TS128GSSD25S-M | 150 MB/s               | 90 MB/s                 |               |                        |                         |
| TS192GSSD25S-M | 150 MB/s               | 90 MB/s                 |               |                        |                         |

  

| 1.8" Micro-SATA |                        |                         |
|-----------------|------------------------|-------------------------|
| Model P/N       | Sequential Read (Max.) | Sequential Write (Max.) |
| TS8GSSD18S-S    | 90 MB/s                | 70 MB/s                 |
| TS16GSSD18S-S   | 90 MB/s                | 90 MB/s                 |
| TS32GSSD18S-M   | 90 MB/s                | 50 MB/s                 |
| TS64GSSD18S-M   | 90 MB/s                | 50 MB/s                 |

## POWER CONSUMPTION (AVG)

| 2.5" SATA SSD |                          | 2.5" IDE SSD |                          | 1.8" Micro-SATA |                          |
|---------------|--------------------------|--------------|--------------------------|-----------------|--------------------------|
| 8/16/32/64GB  | Active 1.4W<br>Idle 0.7W | 8/16/32GB    | Active 1.6W<br>Idle 0.8W | 8/16/32/64GB    | Active 1.3W<br>Idle 0.5W |
| 128GB         | Active 1.6W<br>Idle 0.7W | 64/128GB     | Active 1.8W<br>Idle 0.8W |                 |                          |
| 192GB         | Active 1.7W<br>Idle 0.7W |              |                          |                 |                          |

## Transcend 64GB 2.5" SATA SSD vs. 2.5" 5,400rpm HDD

|                                   |     |              |
|-----------------------------------|-----|--------------|
| <b>Avg. Transfer Rate (Read)</b>  | SSD | 163MB/s      |
|                                   | HDD | 68MB/s       |
| <b>Latency Time</b>               | SSD | 0 ms         |
|                                   | HDD | 5 ms         |
| <b>Access Time</b>                | SSD | 0.2 ms       |
|                                   | HDD | 12 ms        |
| <b>Acoustics (Active)</b>         | SSD | 0 dB         |
|                                   | HDD | 25 dB        |
| <b>Power Consumption (Active)</b> | SSD | 1.4 W        |
|                                   | HDD | 2.6 W        |
| <b>Operating Temp Range</b>       | SSD | 0°C ~70°C    |
|                                   | HDD | 5°C ~55°C    |
| <b>Shock (Operating)</b>          | SSD | 1,500 G      |
|                                   | HDD | 325 G        |
| <b>Vibration (Operating)</b>      | SSD | 3G (5-800Hz) |
|                                   | HDD | 1G (5-500Hz) |
| <b>Weight</b>                     | SSD | 48 g         |
|                                   | HDD | 100 g        |

## Key Benefits



Power saving



Easy to install in PCs and notebooks



50% lighter than standard hard drives (2.5" SATA version)



Faster OS boot-up and data access



Shock and vibration resistant



Please see Transcend Website for details and limitations

