The Cactus Technologies 2.5" IDE Solid State Drive (SSD) - 303 Series is a high capacity solid-state flash memory product that complies with the IDE interface. Our 2.5” line of robust and reliable storage solutions are designed for today’s rigorous industrial market applications. The storage capacity of the Solid State Drive line ranges from 128MB to 32GB.

**CACTUS TECHNOLOGIES**

**2.5” IDE Solid State Drive (SSD)**

**303 Series**

- **INDUSTRY STANDARD 2.5” FORM FACTOR**

- **CARD CAPACITIES**
  - 128MB to 32GB

- **WRITE-ABORT AND BROWN-OUT PROTECTION CIRCUITRY**

- **INTERFACE SUPPORTS**
  - ATA PIO Mode 0-4
  - Multiword DMA Mode 0-2
  - UDMA Mode 0-4

- **DUAL VOLTAGE SUPPORT**
  - 3.3V or 5.0V

- **UNIQUE ELECTRONIC SERIAL CARD ID**

- **TRACEABILITY BARCODE**

- **SMART LIFE CYCLE ANALYSIS OPTION**

- **SOLID STATE DESIGN**

- **INDUSTRY LEADING**
  - Data Reliability
  - Shock & Vibration
  - Operating Temp Range
  - Data Transfer Rates

- **ZERO DB NOISE**

- **4-MILLION HOUR MTBF**

- **5-YEAR WARRANTY**

**PERFORMANCE**

- **Read Data Transfer Rate** up to 35MB/sec
- **Write Data Transfer Rate** up to 20MB/sec

**RELIABILITY**

- Advanced Wear Leveling Algorithm
- Industrial Error Checking & Correction
- Less Than 1 Error in $10^{14}$ Bits Read
- MTBF 4,000,000 Hours

**ENVIRONMENTAL & POWER**

- **Operating Temperature Range**
  - **Standard** 0°C to 70°C
  - **Extended** -45°C to +90°C

- **POWER CONSUMPTION**
  - **Read** 220mA
  - **Write** 180mA
  - **Sleep** 0.5mA

**SHOCK & VIBRATION**

- **Shock** 3,000G
- **Vibration** 20G peak-to-peak
## INDUSTRIAL GRADE IDE SOLID STATE DRIVE

<table>
<thead>
<tr>
<th>INTERFACE</th>
<th>Industry Standard IDE</th>
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<tbody>
<tr>
<td>INTERFACE TRANSFER RATE</td>
<td>66MB/sec</td>
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<tr>
<td>DC Input Voltage</td>
<td>5V ± 10%</td>
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<tr>
<td>Sleep</td>
<td>0.5mA</td>
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<tr>
<td>Read</td>
<td>220mA</td>
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<tr>
<td>Write</td>
<td>180mA</td>
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<td>ENVIRONMENTAL SPECIFICATION</td>
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<tr>
<td>Standard Temperature</td>
<td>0°C to 70°C</td>
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<tr>
<td>Extended Temperature</td>
<td>-45°C to +90°C</td>
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<tr>
<td>Humidity</td>
<td>8-95%, non-condensing</td>
</tr>
<tr>
<td>Acoustic Noise</td>
<td>0dB</td>
</tr>
<tr>
<td>Vibration</td>
<td>20G peak to peak max.</td>
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<tr>
<td>Shock</td>
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<tr>
<td>Altitude</td>
<td>100,000 feet max.</td>
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<tr>
<td>RELIABILITY AND MAINTENANCE</td>
<td></td>
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<tr>
<td>Endurance</td>
<td>2,000,000 erase cycles per block</td>
</tr>
<tr>
<td>MTBF</td>
<td>4,000,000 Hours</td>
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<tr>
<td>Data Reliability</td>
<td>less than 1 Error in $10^{14}$ bits read</td>
</tr>
<tr>
<td>CARD CAPACITY</td>
<td>128MB to 32GB</td>
</tr>
</tbody>
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**Cactus Technologies Limited**  
Suite C, 15/F, Capital Trade Center  
62 Tsun Yip Street, Kwun Tong  
Kowloon, Hong Kong  
Tel: +852-2797-2277  
Email: sales@cactus-tech.com

**Cactus USA**  
3112 Windsor Road  
Suite A356  
Austin, Texas 78703  
Tel: (512) 775-0746  
Email: americas@cactus-tech.com  
[www.cactus-tech.com](http://www.cactus-tech.com)