The Cactus Technologies 2.5” IDE Solid State Drive (SSD) - 303 Pro Series is a high capacity solid-state flash memory product that complies with the IDE interface. In addition to the normal features found on the 303 Series 2.5” SSD, the Pro Series offers several security, purge, and write protect features. There is also a version with a physical write protect switch.

**ATA SECURITY FEATURE SET:**
- Set/Disable Password
- Security Lock/Unlock
- Additional Functions

**CTPURGE: GENERIC ERASE OPTIONS:**
- Erase Only
- Erase and Overwrite with random data once
- Erase and Overwrite with random data N times

**CTPURGE: ERASE OPTIONS ACCORDING TO:**
- USA-AF AFSSI 5020 spec
- USA Navy NAVSO P-5239-26 spec
- DoD 5220.22-M spec
- NSA Manual 130-2 spec
- USA-Army 380-19 spec
- NISPOMSUP Chap.8, Sect.8-501 spec
- IREC (IRIG) 106 specification
- Others upon customer request

**CTLOCK: SIMPLIFIED LOCK/UNLOCK COMMAND**

**CTWPROT - WRITE PROTECT:**
- Software Command
- Hardware selection

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**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**

- 5.0V
- Read: 220mA
- Write: 180mA
- Sleep: 0.5mA

**SHOCK & VIBRATION**

- Shock: 3,000G
- Vibration: 20G peak-to-peak
## Industrial Grade IDE Solid State Drive

### INTERFACE
- **Interface**: Industry Standard IDE

### INTERFACE TRANSFER RATE
- **Rate**: 66MB/sec

### POWER REQUIREMENT
- **DC Input Voltage**: 5V ± 10%
- **Sleep**: 0.5mA
- **Read**: 220mA
- **Write**: 180mA

### ENVIRONMENTAL SPECIFICATION
- **Standard Temperature**: 0°C to 70°C
- **Extended Temperature**: -45°C to +90°C
- **Humidity**: 8-95%, non-condensing
- **Acoustic Noise**: 0dB
- **Vibration**: 20G peak to peak max.
- **Shock**: 3000G max.
- **Altitude**: 100,000 feet max.

### RELIABILITY AND MAINTENANCE
- **Endurance**: 2,000,000 erase cycles per block
- **MTBF**: 4,000,000 Hours
- **Data Reliability**: less than 1 Error in $10^{14}$ bits read

### CARD CAPACITY
- **Capacity**: 128MB to 32GB