Specifications

**RAID Levels**
- RAID 0: Data striped across three to 16 drives
- RAID 1: Mirrored pairs of two drives
- RAID 2/0: Data mirrored, then striped across four to 16 drives
- RAID 3: Independent data access on five or nine drives (with dedicated parity disk)
- RAID 5: Independent data access on three to 16 drives (with striped parity)
- Any combination of these RAID levels can exist on a single CX300
- RAID stripe depth configurable to 4, 16, 64, 128, or 256 sectors per disk
- MetaLUNs: Storage virtualization via online LUN expansion through either striping or concatenation
- Configurable global hot spares
- Rebuild priority tuning: adjustment of minimum I/O reserved for server use during rebuild

**Front-End (Host) Connectivity**
- Two storage processors per CX300
- Each storage processor has two 2 Gb Fibre Channel optical ports.
- FCP-SCI-3 protocol
- Command tag queuing up to 256 tags
- FC-AL and FC-SW support

**Maximum Cable Length**
- Shortwave Optical: 300 meters (2 Gb), 500 meters (1 Gb)

**Back-End (Disk) Connectivity**
- Each storage processor has one 2 Gb Fibre Channel Arbitrated Loop. CX300 supports a maximum of 60 disk drives.

**Drive Interface**
- Fallback from each storage processor to both Fibre Channel loops is possible

<table>
<thead>
<tr>
<th>Nominal Capacity</th>
<th>73 GB (10,000)</th>
<th>146 GB (10,000)</th>
<th>300 GB (10,000)</th>
<th>73 GB (5,000)</th>
<th>146 GB (5,000)</th>
<th>500 GB SATA (2,200)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formatted Capacity</td>
<td>637 GB</td>
<td>135 GB</td>
<td>272 GB</td>
<td>637 GB</td>
<td>135 GB</td>
<td>465 GB</td>
</tr>
<tr>
<td>Form Factor</td>
<td>3.5&quot;</td>
<td>3.5&quot;</td>
<td>3.5&quot;</td>
<td>3.5&quot;</td>
<td>3.5&quot;</td>
<td>3.5&quot;</td>
</tr>
<tr>
<td>Density</td>
<td>1.0&quot;</td>
<td>1.0&quot;</td>
<td>1.0&quot;</td>
<td>1.0&quot;</td>
<td>1.0&quot;</td>
<td>1.0&quot;</td>
</tr>
<tr>
<td>Rotational Speed</td>
<td>10,000 rpm</td>
<td>10,000 rpm</td>
<td>10,000 rpm</td>
<td>15,000 rpm</td>
<td>15,000 rpm</td>
<td>7,200 rpm</td>
</tr>
<tr>
<td>Interface</td>
<td>Fibre Channel</td>
<td>Fibre Channel</td>
<td>Fibre Channel</td>
<td>Fibre Channel</td>
<td>Fibre Channel</td>
<td>Serial ATA</td>
</tr>
<tr>
<td>Data Buffer</td>
<td>32 MB</td>
<td>32 MB</td>
<td>32 MB</td>
<td>32 MB</td>
<td>32 MB</td>
<td>16 MB</td>
</tr>
<tr>
<td>Transfer Rates</td>
<td>26.6-40.2 MB/s</td>
<td>43.78 MB/s</td>
<td>59-118 MB/s</td>
<td>57-86 MB/s</td>
<td>58-96 MB/s</td>
<td>29-64 MB/s</td>
</tr>
<tr>
<td>Buffer to/from Media MB/s</td>
<td>200 MB/s (max.)</td>
<td>200 MB/s (max.)</td>
<td>200 MB/s (max.)</td>
<td>200 MB/s (max.)</td>
<td>200 MB/s (max.)</td>
<td>150 MB/s (max.)</td>
</tr>
<tr>
<td>Average Seek</td>
<td>6.2 ms Read</td>
<td>5.3 ms Write</td>
<td>4.7 ms Read</td>
<td>5.4 ms Write</td>
<td>3.6 ms Read</td>
<td>8.2 ms Read</td>
</tr>
<tr>
<td>Rotational Latency</td>
<td>2.99 ms</td>
<td>2.99 ms</td>
<td>2.99 ms</td>
<td>2.99 ms</td>
<td>2.99 ms</td>
<td>4.17 ms</td>
</tr>
</tbody>
</table>

**Available Software**
- Navisphere® Manager: comprehensive configuration, management, and event notification for single or multiple CLARiON systems
- Navisphere Analyzer: comprehensive performance, management, and trend analysis
- SnapView™: point-in-time view of information for non-disruptive backup and BCVs
- PowerPath® Base: path failover for continuous data access
- PowerPath: path failover for continuous data access and load balancing for optimal channel performance
- Non-disruptive Upgrade (NDU): online upgrades of storage software and FLARE™ operating system
- CLARalert®: constant system monitoring, call-home notification, and remote diagnostics

*Consult your EMC account manager for availability, software configuration, and compatibility information.*
## System Memory

Two Storage Processors per CX300

1 GB of Memory per Storage Processor

### Dimensions (approximate)

<table>
<thead>
<tr>
<th>System</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rackmount Processor Chassis with Standby Power Supplies (standard NEMA 19-inch rack)</td>
<td>6.83 in. (173.36 cm)</td>
<td>17.72 in. (45.0 cm)</td>
<td>23.75 in. (60.38 cm)</td>
<td>164 lb. (74.6 kg) max.</td>
</tr>
<tr>
<td>Rackmount 2 Gbit Fibre Channel Disk Expansion Chassis with Dual Power Supplies</td>
<td>5.25 in. (133.33 cm)</td>
<td>17.72 in. (45.0 cm)</td>
<td>23.75 in. (60.38 cm)</td>
<td>88 lb. (40 kg) max. configuration</td>
</tr>
<tr>
<td>Rackmount 2 Gbit Fibre Channel Point-to-Point Disk Expansion Chassis with Dual Power Supplies</td>
<td>5.25 in. (133.33 cm)</td>
<td>17.72 in. (45.0 cm)</td>
<td>23.75 in. (60.38 cm)</td>
<td>68 lb. (30.9 kg) max. configuration</td>
</tr>
<tr>
<td>Rackmount ATA Disk Expansion Chassis with Dual Power Supplies</td>
<td>5.25 in. (133.33 cm)</td>
<td>17.72 in. (45.0 cm)</td>
<td>23.75 in. (60.38 cm)</td>
<td>84 lb. (38 kg) max. configuration</td>
</tr>
</tbody>
</table>

### Rackmount 2 Gbit Fibre Channel Disk Expansion Chassis with Dual Power Supplies

- Height: 5.25 inches (13.3 cm)
- Width: 17.72 inches (45 cm)
- Depth: 23.75 inches (60.38 cm)
- Weight: 88 pounds (40 kg)

### Rackmount 2 Gbit Fibre Channel Point-to-Point Disk Expansion Chassis with Dual Power Supplies

- Height: 5.25 inches (13.3 cm)
- Width: 17.72 inches (45 cm)
- Depth: 23.75 inches (60.38 cm)
- Weight: 68 pounds (30.9 kg)

### Rackmount ATA Disk Expansion Chassis with Dual Power Supplies

- Height: 5.25 inches (13.3 cm)
- Width: 17.72 inches (45 cm)
- Depth: 23.75 inches (60.38 cm)
- Weight: 84 pounds (38 kg)

### 40U Rack Enclosure

- Height: 75.0 inches (190.8 cm)
- Width: 24.0 inches (61.1 cm)
- Depth: 36.0 inches (91.6 cm)
- Weight: Empty: 300 pounds (136 kg)

### Power

<table>
<thead>
<tr>
<th>System</th>
<th>Processor Chassis</th>
<th>2Gbit Fibre Channel Disk Expansion Chassis</th>
<th>2Gbit Fibre Channel Point-to-Point Disk Expansion Chassis</th>
<th>ATA Disk Expansion Chassis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Voltage</td>
<td>90–264 Vrms, single phase</td>
<td>90–264 Vrms, single phase</td>
<td>90–264 Vrms, single phase</td>
<td>90–264 Vrms, single phase</td>
</tr>
<tr>
<td>Frequency</td>
<td>47–63 Hz</td>
<td>47–63 Hz</td>
<td>47–63 Hz</td>
<td>47–63 Hz</td>
</tr>
<tr>
<td>Power Factor</td>
<td>.98 (min)</td>
<td>.98 (min)</td>
<td>.98 (min)</td>
<td>.98 (min)</td>
</tr>
<tr>
<td>DC Voltage</td>
<td>–36 V to –72 V dc</td>
<td>–36 V to –72 V dc</td>
<td>–36 V to –72 V dc</td>
<td>N/A</td>
</tr>
<tr>
<td>Power Consumption (maximum)</td>
<td>650 VA, 638W</td>
<td>400 VA, 392W</td>
<td>440 VA, 425W</td>
<td>300 VA, 294W</td>
</tr>
<tr>
<td>Heat Dissipation (maximum)</td>
<td>2,000 Btu/hour</td>
<td>1,340 Btu/hour</td>
<td>1,450 Btu/hour</td>
<td>1,072 Btu/hour</td>
</tr>
</tbody>
</table>

### Protection

- Rackmount: Dual Inlet
- Rackmount: Dual Inlet
- Rackmount: Dual Inlet

### AC Circuits

- 10 amps, fused, Redundant, external AC circuits
- 10 amps, fused, Redundant, external AC circuits
- 10 amps, fused, Redundant, external AC circuits

### Inlet Type

- Dual Inlet
- Dual Inlet
- Dual Inlet
- Dual Inlet

### 40U Cabinet (optional) AC Power Capability

- Dual Inlets
- NEMA L6-30P or IEC 309-32 P or IP-57 (Australia)
- 200–240 VAC +/- 10%, Single Phase
- 47–63 Hz
- 4800 VA @ 200 V, 5760 VA @ 240 V
- 30A, 2-pole circuit breaker

### Operating Environment

- Temperature: 50–104 degrees F (10–40 degrees C)
- Temperature Gradient: 10 degrees C/hr
- Relative Humidity: 20% to 80% (non-condensing)
- Altitude: 8,000 ft. (2438.4 m) @ 104 degrees F (40 degrees C) max.
- 10,000 ft. (3048 m) @ 98.6 degrees F (37 degrees C) max.

### Electromagnetic Emissions and Immunity

- FCC Class A
- CE Mark
- ICES-003 Class A (for Canada)
- EN55022, Immunity, ITE
- EN55024, ITE
- AS/NZS 3548 Class A (for Australia/New Zealand)
- BSMI Class A (for Taiwan)
- EN60950, ITE
- EN60950, ITE
- EN60950, ITE
- EN60950, ITE

### Quality and Safety Standards

- UL 1950, CSA C22.2 No 950
- EN50020
- NEBS Level 3 Certification
- EN55022

Manufactured under an ISO 9000-registered quality system

www.EMC.com