## LoadMaster™ 5400

- Application Delivery Optimization
- Server Load Balancing
- TLS (SSL) Acceleration

### Feature

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>High Performance L4/7 Server Load Balancing</td>
<td>Ensures each user gets the best application experience possible.</td>
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<tr>
<td>Web application firewall pack (AFP)</td>
<td>Protection against application level attacks and simplification of PCI-DSS compliance</td>
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<td>Active/Hot-Standby, with Stateful Failover</td>
<td>Removes load balancer as a single point of failure</td>
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<td>Server and application health checking</td>
<td>Guarantees user requests will be only be directed to available servers and available applications</td>
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<td>IP and L7 persistence</td>
<td>Ensures that users maintain continuous connections with the specific server where their transactional data is available even if the IP address changes during session</td>
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<tr>
<td>Layer 7 content switching</td>
<td>Optimize server traffic according to content type</td>
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<tr>
<td>TLS (SSL) acceleration and offload</td>
<td>Optimizes server performance and user experience for encrypted application content</td>
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<tr>
<td>Compression and caching of content</td>
<td>Reduces internal network latency and optimizes bandwidth for best possible client experience</td>
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<tr>
<td>Intrusion Prevention Systems (IPS)</td>
<td>Thwarts application threats in both non-encrypted and encrypted traffic streams</td>
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</tbody>
</table>

### Superior TLS (SSL) Performance for Enterprise Environments

Featuring support for up to 7000 TLS (SSL) transactions per second (TPS) with 2048 bit RSA keys, Global Server Load Balancing (GSLB) as standard and 8.8 Gbps of throughput, the LoadMaster™ 5400 is optimized for Enterprise environments and high-transaction e-commerce infrastructures. This rock solid performance provides for predictable delivery of critical application workloads and customer facing web services.

The LoadMaster™ 5400 is an essential component to include for high availability of critical line of business applications, customer facing web services and corporate intranets in large Enterprise deployments.

Combining the latest advancements in Layer 4 to Layer 7 application delivery technology, LoadMaster™ is the ADC of choice for providing high availability services in cloud, web and application infrastructures.
LoadMaster™ 5400

Specifications version 7.1

Standard
- Server Load Balancing (SLB) for TCP/UDP based protocols
- TLS (SSL) acceleration and offload
- Layer 7 content switching
- Advanced application transparent HTTP/HTTPS caching
- Optimized compression of static and dynamic HTTP/HTTPS content
- Application level protection with Web Application Firewall (WAF)
- SNORT-rule compatible Layer 7 intrusion prevention system (IPS)
- Up to 256 virtual and 1000 real servers
- IPv6 support
- IPv6 - IPv4 bidirectional conversion
- NAT-based forwarding
- Support for Direct Server Return (DSR) configurations
- Session reconnection for Microsoft remote desktop services (RDS)
- Configurable S-NAT
- VLAN Trunking (802.1Q)
- Link interface bonding (802.3ad)
- Edge Security Pack (Pre-Auth & SSO)

Performance
- Max Balancer L4 Throughput Up To 8.8Gbps
- Max Balancer L7 Throughput Up To 8.5Gbps
- 110,000 L7 (http) requests per second
- 400,000 L7 concurrent connections
- 25,600,000 L4 concurrent connections
- SSL Acceleration
  - 1K Keys up to 9,300 TPS
  - 2K Keys up to 7,000 TPS

TLS (SSL)
- Configurable TLS (1.0, 1.1, 1.2) and SSL (2.0, 3.0)
- Support for EV (Extended Validation) certificates
- Server Name Identification (SNI) support
- Up to 256 TLS (SSL) certificates

Automated TLS (SSL) certificate chaining
- TLS (SSL) Certificate Signing Request (CSR) generation
- STARTTLS offload for mail protocols (POP3, SMTP, IMAP)
- FIPS 140-2 Level 1 capable

Health Checking & High Availability
- ICMP health checking
- Layer 7 checking against any target server port
- Active/Hot Standby configurations for High Availability
- Stateful Failover

Administration
- Flexible administration Options
  - Web User Interface (WUI)
  - SSH
  - RESTful API
- Wizards for simplified deployment
- Context based help (WUI)
- Automation and orchestration via RESTful API
- Real time display of performance and availability
- Application templates for all major workloads
- Console port for local administration
- Remote syslogd support
- Automated configuration backup
- Selective restore of configuration
- Connection draining for managed outages
- Comprehensive logging and reporting
- SNMP support
- Diagnostic shell with in-line tcpdump

Scheduling and Balancing Methods
- Round Robin
- Weighted Round Robin
- Least Connection
- Weighted Least Connection
- Agent-based Adaptive
- Chained Failover (Fixed Weighting)
- Source-IP Hash

Session Persistence
- Source IP (L4)
- SSL SessionID (L4)
- HTTP/HTTPS Browser-session (L7)
- HTTP/HTTPS WebClient-session (L7)
- RDP Login ID (L7)
- Port Following for mixed HTTP/HTTPS sessions

Security Functionality
- Web Application Firewall Pack (AFP)
  - Data Loss Prevention (DLP)
  - Mitigation of OWASP Top 10
  - Support PCI-DSS compliance
  - Real-time protection for applications
- SNORT-Rule Compatible L7 Intrusion Prevention System (IPS)
- Permit / Deny Access Control Lists
- IP address filtering
- DDoS mitigation, including L7 rate based attacks

Hardware Platform
- Intel Xeon Quad-Core Processor
- 8 X 1GbE Auto-negotiating, Full Duplex
- 2 X 10G (SFP+) Modules
- Solid State Storage
- 8 GB RAM
- Local admin via serial and VGA/USB
- Dimension: (1U) 426 x 450 x 44(mm)
- Weight: 19lbs (8.5kg)
- 2 x 200W ATX power supply (Redundant, Hot-Swap)
- Certifications: CE/FCC Class A, UL, RoHS Compliant

* Specifications are subject to change without prior notice.