



# LoadMaster™ for Bare Metal Datasheet

Resilient application delivery on industry standard  
hardware platforms



# High-performance load balancing on industry standard hardware

LoadMaster for Bare Metal offers the scalability, feature depth and security for resilient delivery of a wide range of applications for organizations of all sizes on industry standard hardware platforms. LoadMaster simplifies application delivery with easy management, a compelling TCO and outstanding customer support.

## Benefits of Kemp Loadmaster

### Resilient

LoadMaster can enhance application availability and resilience with the option for Highly Available (HA) pairing of appliances and geographic server load balancing (GSLB) removing single points of failure in the data center and across data centers. Application server health checks enable redirection of traffic to healthy servers and the optional Kemp 360 Vision service provides 24x7 proactive support to ensure continuous application availability.

### Secure

As the access point for applications, LoadMaster provides authentication and attack mitigation services to prevent malicious and unauthorized access to application resources. Edge Security Pack enables pre-authentication of clients (LDAP, OIDC, Active Directory, RADIUS & SAML) while the Web Application Firewall (WAF) offers continuous application-level protection through OWASP CRS with updated reputation data daily.

### Easily Managed

LoadMaster appliances can be managed via the intuitive web UI, via API (PowerShell/RESTful) or via Kemp 360 Central. Application templates simplify deployment and optimization, while the API provides an easy way to automate configuration and management tasks whether through DevOps toolsets or operational frameworks.

### Scalable

As application delivery demands grow, LoadMaster can scale by clustering multiple servers together into a single load balancer entity. As well as scaling to meet increasing capacity requirements, clustering also provides resilience as the failure of a cluster member is gracefully handled with remaining members continuing to provide service.

### Low Cost of Ownership

LoadMaster delivers performance and functionality at a compelling price point when measured against the key metrics of SSL transactions per second, application throughput and active connections. Coupled with the low operational overheads delivered by features such as application templates and our world class customer support services, organizations can achieve significant TCO reductions on application delivery.

### Fully Featured

LoadMaster includes a comprehensive set of features to enable deployment of application delivery and interfaces and API to integrate with existing authentication, logging, management, and provisioning systems.

## Feature Subscriptions

LoadMaster subscriptions offer flexibility, simplicity, and value to meet your application delivery requirements and challenges. Subscriptions are annual and can be upgraded and downgraded as application delivery demands change for maximum flexibility. The tiers are mapped to common customer challenges and requirements, simplifying the task of selecting the appropriate feature set and support levels. This also offers additional value of up to 40% when compared to individually selecting features.

## LoadMaster Feature Subscription Tiers

Each subscription tier adds to the features and services delivered by lower tiers as follows

STANDARD SUPPORT	ENTERPRISE SUPPORT	ENTERPRISE PLUS SUPPORT
10x5 Customer Support	24x7 Customer Support	24x7 Customer Support
Software Updates	Software Updates	Software Updates
Security Patches	Security Patches	Security Patches
L4-L7 Application Delivery	L4-L7 Application Delivery	L4-L7 Application Delivery
Network Telemetry	Edge Security Pack	Edge Security Pack
	Intrusion Prevention	Intrusion Prevention
	Network Telemetry	Network Telemetry
	Kemp 360 Vision - managed service for application monitoring & preemptive alerting	Kemp 360 Vision - managed service for application monitoring & preemptive alerting
	Kemp 360 Central - centralized management & orchestration software	Kemp 360 Central - centralized management & orchestration software
		Web Application Firewall (WAF) with updated reputation data daily
		GSLB with updated reputation data daily
		Floating License

## Features

### Network Telemetry

- Export network flow data to Flowmon Collector in the industry standard IPFIX protocol format.
- Leverage the power of Flowmon Collector to store and analyze flow data, gaining visibility into the entire application value delivery chain to identify bottlenecks, misconfigurations, and potential security issues.
- Combine LoadMaster-exported data with IPFIX data from other network nodes on Collector to gain a complete picture of your infrastructure.
- View LoadMaster data on Flowmon Collector in dashboards and widgets specific to LoadMaster and the Virtual Services defined on it.

### Web Application Firewall (WAF)

- Real-time application threat mitigation
- Updated reputation data daily
- Threats mitigated
  - Cookie tampering
  - Cross site request forgery
  - Cross site scripting
  - Data loss prevention
  - SQL injection
  - PCI-DSS Section 6.6 compliance

### Edge Security Pack

- Microsoft TMG replacement
- Pre-authentication
- Multi-domain authentication & SSO
- X.509 client certificate authentication
- Custom login forms
- Two-factor authentication
- OIDC, SAML, Active Directory, RADIUS & LDAP
- Forms to Forms based authentication

### Intrusion Prevention

- Snort compatible IPS
- Allow/Deny IP by address

### Global Server Load Balancing (GSLB)

#### Scheduling and Balancing

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- Round Robin
- Weighted Round Robin
- Chained Failover (Fixed Weighting)
- Regional
- Real Server Load
- Location Based

#### Security

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- Allow/Deny List (Access Control List)
- Updated reputation data daily
- DDoS mitigation

#### Health Checking & Failover

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- ICMP health checking of server farm machines
- Layer 4 TCP checking
- HTTP/HTTPS health check
- Active/Active High Availability

### L4-L7 Application Delivery

#### General

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- Server Load Balancing (SLB) for TCP/UDP based protocols
- TLS (SSL) Offload
- Layer 7 Content Switching
- Transparent caching for HTTP/HTTPS
- Compression of static and dynamic HTTP/HTTPS content
- HTTP/2 Support
- Up to 1000 Virtual and 1000 Real Servers
- NAT-based forwarding
- Support for Direct Server Return (DSR) configurations
- Configurable S-NAT support
- VLAN Trunking (802.1Q)
- Link interface bonding (802.3ad)
- IPv6 support for addressing and features
- IPv6 - IPv4 bidirectional conversion

#### Health Checking

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- Aggregated health checks
- ICMP health checking
- Layer 7 checking against any target server port

- Active/Hot Standby configurations for High Availability
- Stateful Failover
- Scale-out Clustering
- Aggregated health checks

### Session Persistence

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

### Scheduling and Balancing Methods

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- SDN Adaptive
- Round Robin
- Weighted Round Robin
- Least Connection
- Weighted Least Connection
- Agent-based Adaptive
- Chained Failover (Fixed Weighting)
- Source-IP Hash
- Layer 7 Content Switching
- Global Server Load Balancing (GSLB)
- AD Group based traffic steering

### SSL/TLS Features

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- Configurable TLS (1.0, 1.1, 1.2, 1.3) and SSL (2.0, 3.0)
- Support for EV (Extended Validation) certificates
- OCSP certificate validation
- Server Name Identification (SNI) support
- Support for up to 1,000 TLS (SSL) certificates
- Automated TLS (SSL) certificate chaining
- Certificate Signing Request (CSR) generation
- FIPS 140-2 Level 1
- STARTTLS mail protocols (POP3, SMTP, IMAP)

### Administration

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- Change auditing
- Web User Interface (WUI)
- SSH & physical console
- RESTful and PowerShell APIs
- VMware vRealize Orchestrator
- Context based help (WUI)
- Real time display of performance and availability
- Application templates
- Remote syslogd support
- Automated configuration backup
- Selective restore of configuration
- Connection draining
- Comprehensive logging and reporting
- SNMP support
- Diagnostic shell with in-line tcpdump

### Security

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- Allow/Deny List (Access Control List)
- IP address filtering
- IPsec Tunnel support
- DDoS mitigation, including L7 rate-based attacks
- IPsec VPN to Azure, AWS, and public clouds
- Authenticated NTP

### Kemp 360 Central

- Centralized management and orchestration
- Included with Enterprise support subscription, and Enterprise Plus support subscription
- LoadMaster configuration management
- Automated LoadMaster backups
- Centralized & scheduled firmware updates
- LoadMaster logfile consolidation
- Performance management
- 3<sup>rd</sup> party load balancer support

### Kemp 360 Vision

- Managed service for application monitoring & preemptive alerting
- Included with Enterprise support subscription, and Enterprise Plus support subscription
- 24x7 automated issue escalation service
- Proactive issue management
- Integrated with Kemp Support ticketing

## LoadMaster for Bare Metal Licensing

	LMB-MAX
<b>Subscription Tiers Supported</b>	All
<b>Licensed Performance</b>	
Load Balancer Throughput	Uncapped*
SSL TPS	Uncapped*
Concurrent Layer 4 Connections	Uncapped*
Max Servers/ Virtual Clusters	1,000/1,000
Subscription Tiers Supported	All

\* Actual performance is dependent on the host hardware resources including processor, memory, networking, and overall system architecture. L4 concurrent connections will scale linearly with additional installed RAM.

The page <https://kemptechnologies.com/loadmaster-hardware-compatibility-list/> contains details on the hardware platforms supported by LoadMaster for Bare Metal.

\* All specifications are subject to change without prior notice.

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