

MACH5 S200/S400/S500

Blazing Performance: Every Workload, Every User, Everywhere

Introduction

Great performance shouldn't be limited to certain applications, or certain users, or certain times of the day. That is why MACH5 goes beyond traditional WAN optimization solutions and dramatically improves the performance of virtually all applications and workflows –from file transfers to backups, email, databases, video, and cloud applications. A cornerstone product of the Symantec Network Performance Optimization solutions, the MACH5 S200, S400 and S500 families combine optimization features such as protocol acceleration, compression, and caching to deliver high performance across IPv4 or IPv6 environments. And they deploy at the network core or the branch to assure that every user, everywhere experiences the superior performance they expect.

Acceleration

- **Protocol Optimization:** Accelerate application performance by mitigating the penalties that latency imposes on inefficient protocols or applications originally architected for the LAN and running on the WAN
- **Object Caching:** Dramatically accelerate web application and workflows that depend on centrally-stored files by delivering remote content locally in the branch
- **Byte Caching:** Reduce the effects of latency, and significantly reduce bandwidth consumption for repetitive data elements, even across disparate applications, transmitted over the WAN
- **Compression:** Reduce the effect of latency, and reduce bandwidth consumption for any compressible data transiting the WAN
- **Bandwidth Management:** Ensure productivity by prioritizing enterprise-critical data flows over bulk-data or recreational traffic
- **Video Optimization:** Stream splitting, video pre-population and video caching can save up to 99.99% of bandwidth
- **Mobile User Optimization:** Productivity enhancement for mobile and home users with Blue Coat ProxyClient

Application Acceleration

Support for multiple protocols

- HTTP, CIFS, SSL, FTP, Encrypted MAPI, MAPI, P2P, MMS, RTMP, RTMPE, RTSP, QuickTime, SCPS, TCP-Tunnel, DNS
- Provide LAN-like application performance to remote users and branch offices

- Deliver outstanding performance for streaming audio, video and other rich media applications
- Bandwidth management on all acceleration services
- Accelerate live and on-demand rich media, as well as SSL-encrypted traffic
- Control encrypted traffic for all users and applications inside and outside the enterprise
- Reduce recurring network bandwidth costs with multiple levels of compression and content caching

Performance and Reliability – SGOS

Platform highlights

- Secure object-based operating system with small footprint
- High-speed caching with advanced object pipelining and adaptive refresh
- Built-in pass-through network card, compression services, bandwidth management and SSL off loading

Network functionality

- Active/Active bridging support using virtual IP addressing for failover and remote installations
- Completely transparent when tunneling applications between appliances, maintaining IP and port information for traffic management
- Native support for advanced clustering for near limitless scalability, without additional load balancing appliances

- Routing configurations for gateway, route tables, RIP, DNS, and WCCP, with support for asymmetric routing of application delivery tunnels
- Health checks performed on a forwarding host or external servers to verify status and availability of device
- View & submit service requests via the Symantec management interface
- Send snapshots (trace files) to Symantec Support Services for faster resolution

Manageability – Policy Processing Engine

Powerful management interface

- Web-based management interface
- Optional command line interface
- Alerting via SNMP, SMTP and logging administrative events

Content Policy Language (CPL)

- Create custom text-based policies to address unique policy requirements
- Definable triggers and actions for policy definition

Extended Management with Director

- Distribute, backup, restore policy files for multiple ProxySG appliances
- Manage policies by device, group, or region
- Job scheduling/job status reporting

Management and Control of ProxyClient

- Configure, provision and maintain global deployment of ProxyClient
- Upgrade client versions seamlessly with auto version detection and update

Visibility – Management Reporting

Default logging

- HTTP, HTTPS, CIFS, Encrypted MAPI, MAPI, FTP, TCP-Tunnel, P2P, ICP, Windows Media, Real Media, QuickTime, DNS
- Global log file limits and upload sizing
- Client upload settings and scheduling

Custom logging and trace files

- Selectable fields/text/log formats

Statistics

- Bandwidth Gain
- HTTP/HTTPS/FTP history
- Streaming history
- Resources

SNMP Support

- Trap settings, community strings

Aggregate logs with Symantec Reporter

- Intuitive dashboard overview of web activity
- 50+ pre-defined reports track user activity, security risks, and web traffic performance
- Secure browser access/role-based viewing
- Provides real-time reporting of continuous logs from one or more ProxySG appliances

LICENSE TYPE	ACCELERATION EDITION	PROXY EDITION
CIFS acceleration	Yes	Yes
Windows Media optimization	Yes	Yes
Real Media optimization	Yes	Yes
QuickTime optimization	Yes	Yes
Adobe Flash optimization	Option	Option
Bandwidth Management	Yes	Yes
DNS proxy	Yes	Yes
HTTP acceleration	Yes	Yes
SSL acceleration	Yes	Yes
Encrypted MAPI /MAPI acceleration	Yes	Yes
Telnet proxy	No	Yes
ICAP Services	No	Yes
Netegrity SiteMinder	No	Yes
Oblix COREid	No	Yes
Peer-To-Peer	No	Yes
User Authentication	No	Yes
Onbox Content Filtering (3rd Party or BCWF)	No	Yes
Offbox Content Filtering (e.g. Websense)	No	Yes
Instant Messaging (AOL, Yahoo, and MSN)	No	Free
SSL Termination/Proxy	Yes	Yes

MACH5	SG S200-10	SG S200-20	SG S200-30	SG S200-40	SG S400-20	SG S400-30	SG S400-40	SG S500-10	SG S500-20	SG S500-30
Recommended Capacity										
Throughput	10 Mbps	25 Mbps	50 Mbps	100 Mbps	100 Mbps	155 Mbps	310 Mbps	622 Mbps	1250 Mbps	2,000 Mbps
Connections	1,500	3,000	6,000	10,000	10,000	18,000	36,000	75,000	150,000	200,000
System										
Disk Drives	500GB SATA	2 x 500GB SATA	2 x 500GB SATA	2 x 500GB SATA	3 x 1TB SAS	6 x 1TB SAS	8 x 1TB SAS	8 x 1TB SAS	16 x 1TB SAS	16 x 1TB SAS
Boot Device	Single 16GB SSD				2 x 16GB SSD (dual redundant)					
RAM	6GB	8GB	8GB	16GB	16GB	24GB	32GB	64GB	128GB	128GB
Onboard Ports ¹	(2) 1000Base-T Copper ports (with bypass) (2) 1000Base-T Copper ports (non-bypass) (1) 10/100Base-T Copper, BMC Management Port							(2) 10Gb Base-T Copper ports (with bypass) (2) 10Gb Base-T Copper ports (non-bypass) (1) 1000Base-T Copper, System Management Port (1) 1000Base-T Copper, BMC Management Port		
Optional NICs	4 x 10/100/1000Base-T (Copper with bypass capability) 4 x 1GbE Fiber-SX (with bypass capability, full height slot only)				4x10/100/1000Base-T (Copper with bypass capability) 4x1GbE Fiber-SX (with bypass capability, full height slot only) 2x10Gb Base-T (Copper with bypass capability)			2x10Gb Base-T (Copper non-bypass) 2x10Gb Fiber (SR with bypass capability) 2x10Gb Fiber (LR with bypass capability)		
Available Slots	1 full height				1 full height / 1 half height			2 full height	2 full height / 3 half height	2 full height / 3 half height
Power Supplies	1	1	1	1	2	2	2	2	2	2

¹ BMC ports are currently disabled.

Physical Properties	S200	S400	S500
Dimensions and Weight			
Dimensions (L x W x H)	446.3mm x 440.0mm x 43.5mm (17.57in x 17.32in x 1.71in) (chassis only) 454.5mm x 482.6mm x 43.5mm (17.89in x 19.0in x 1.71in) (chassis with extensions) Note: 640mm L (25.81in L) with optional slide rails 1 RU height	572mm x 432.5mm x 42.9mm (22.5in x 17.03in x 1.69in) (chassis only) 643mm x 485.4mm x 42.9mm (25.3in x 19.11in x 1.69in) (chassis with extensions) 1 RU height	710mm x 433.3mm x 87.2mm (27.95in x 17.05in x 3.43in) (chassis only) 812.8mm x 433.4mm x 87.2mm (32in x 17.06in x 3.43in) (chassis with extensions) 2 RU height
Weight (max)	Approx. 7.4 kg (16.4 lbs) +/- 5%	Approx. 12.8 kg (28 lbs) +/- 5%	Approx. 30kg (66.12 lbs) +/- 5%
Operating Environment			
AC Power	100-127VAC @ 6A 200-240V @ 3A, 47-63Hz	Dual redundant and hot swappable power supplies 100-127VAC @ 8A, 200-240VAC @ 4A, 47-63Hz	Dual redundant and hot swappable power supplies 100-240VAC, 50-60Hz, 12-5A
Total Output Power	350 Watts	450 Watts	1100 Watts
Thermal Rating	Typical: 785 BTU/Hr, Max: 1195 BTU/Hr	Typical: 1086 BTU/Hr, Max: 1381 BTU/Hr	Typical: 2598.42 BTU/Hr, Max: 3751 BTU/Hr
Optional DC Power	Not available	Input voltage range: 40.5V - 57V Input Max Current: 22A Total Output Power: 770W	Input voltage range: 40 - 72 VDC Input Max Current: 30A Total Output Power: 1100W
Temperature	5°C to 40°C (41°F to 104°F) at sea level		
Humidity	20 to 80% relative humidity, non-condensing		
Altitude	Up to 3,048m (10,000ft)		

For All MACH5 S200, S400 and S500 Series

Regulations	Safety	Electromagnetic Compliance (EMC)
International	CB – IEC60950-1, Second Edition	CISPR22, Class A; CISPR24
USA	NRTL – UL60950-1, Second Edition	FCC part 15, Class A
Canada	SCC – CSA-22.2, No.60950-1, Second Edition	ICES-003, Class A
European Union (CE)	CE – EN60950-1, Second Edition	EN55022, Class A; EN55024; EN61000-3-2; EN61000-3-3
Japan	---	VCCI V-3, Class A
Mexico	NOM-019-SCFI by NRTL Declaration	---
Argentina	S Mark – IEC 60950-1	---
Taiwan	BSMI – CNS-14336-1	BSMI – CNS13438, Class A
China	CCC – GB4943.1	CCC – GB9254; GB17625
Australia/New Zealand	AS/NZS 60950-1, Second Edition	AS/ZNS-CISPR22
Korea		KC – RRA, Class A
Russia	CU – IEC 60950-1	GOST-R 51318.22, Class A; 51318.24; 51317.3.2; 51317.3.3
Environmental	RoHS-Directive 2011/65/EU, REACH-Regulation No 1907/2006	
Product Warranty	Limited, non-transferable hardware warranty for a period of one (1) year from date of shipment. Support contracts available for 24/7 software support with options for hardware support.	
Gov't Certifications	For further government certification information please contact DL-BC-GROUP-Federal_Certifications@symantec.com	
More Info	Contact regulatorycompliance@symantec.com for specific regulatory compliance certification questions and support	

About Symantec

Symantec Corporation (NASDAQ: SYMC), the world's leading cyber security company, helps organizations, governments and people secure their most important data wherever it lives. Organizations across the world look to Symantec for strategic, integrated solutions to defend against sophisticated attacks across endpoints, cloud and infrastructure. Likewise, a global community of more than 50 million people and families rely on Symantec's Norton and LifeLock product suites to protect their digital lives at home and across their devices. Symantec operates one of the world's largest civilian cyber intelligence networks, allowing it to see and protect against the most advanced threats. For additional information, please visit www.symantec.com, subscribe to our [blogs](#), or connect with us on [Facebook](#), [Twitter](#), and [LinkedIn](#).



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