

Riverbed® Steelhead® Product Family

Model Specifications: Riverbed Steelhead xx50 Series Appliances

Steelhead Appliances are available in a range of different models to suit the needs of any office.

	Small Office Steelhead						Mid-Size Office Steelhead					
Model	250 Series			550 Series			1050 Series			2050 Series		
Configurations	L	M	H	M	H	U	L	M	H	L	M	H
Profile	Desktop			Desktop			1U			1U		
Upgradeable to	250-M/H	250-H	-	550-H	-	-	1050-M/H	1050-H	-	2050-M/H	2050-H	-
Optimized WAN Capacity ^a	1 Mbps	1 Mbps	2 Mbps	2 Mbps	4 Mbps	4 Mbps	8 Mbps ^o	10 Mbps ^o	20 Mbps ^o	45 Mbps ^o		
Optimized TCP Connections ^d	30	125	200	300	600	600	800	1,300	2,300	2,500	4,000	6,000
Raw Capacity	120 GB			160 GB			250 GB	250 GB		500 GB		1 TB
Data Store Capacity	40 GB			80 GB			100 GB	100 GB		200 GB		400 GB
RSP Partition ^k	55 GB			55 GB			100 GB	100 GB (Default) 200 GB (RAID)		200 GB		75 GB
RSP 64 Bit Packages	No			No			Yes			Yes		
Storage Fault Tolerance	-			-			Optional RAID			RAID		
Front Swappable Drives	-			-			1	1 (default) 4 ^g (RAID)		2 (default) 4 ^g (RAID)		4 ^g
RAM ^m	1 GB			2 GB			2 GB	2 GB	2 GB	4 GB		6 GB
Expansion Slots (PCI-e) ^h	-			-			1			1		
Onboard Bypass ports (Copper)	2			2			4			4		
Max # of Bypass Ports	2			2			8			8		

	Large Office or Data Center Steelhead						Management		
Model	5050			6050	7050		INT 9350	CMC 8150	SMC 8650
Configurations	L	M	H		L	M			
Profile	3U			3U	3U		3U	1U	1U
Upgradeable to	5050-M/H	5050-H	-	-	7050-M		-	-	-
Optimized WAN Capacity ^a	90 Mbps ^{b, o}	90 Mbps ^{b, o}	155 Mbps ^b	310 Mbps	1 Gbps ^{b, c, n}		12 Gbps ^p	NA	NA
Optimized TCP Connections ^d	7,500	10,000	18,000	50,000	75,000	100,000	1,000,000	-	-
Raw Capacity	2 TB	2 TB	3 TB	8 TB	2.8 TB	5 TB	-	1 TB	1 TB
Data Store Capacity	600 GB	600 GB	800 GB	3.5 TB	2.2 TB	4.4 TB	-	NA	N/A
RSP Partition ^k	100 GB ^e	100 GB ^e	150 GB ^e	150 GB ^e	100 GB ^e	100 GB ^e	-	-	-
RSP 64 Bit Packages	Yes			Yes	Yes		-	-	-
Storage Fault Tolerance	RAID			RAID	RAID ^f		RAID	-	-
Front Swappable Disks	8 ^g	8 ^g	12 ^g	16 ^g	16 ^g	30 ^g	3 ^g	2	2
RAM ^m	8 GB			24 GB	32 GB	48 GB	8 GB	6 GB	6 GB
Expansion Slots (PCI-e) ^h	4	4	4	4	4	4	4	-	-
Onboard Bypass ports (Copper)	4	4	4	4	4	4	4	-	-
Max # of Bypass Ports	20	20	20	20	20	20	20	-	-

(a) Inbound (WAN to LAN) Steelhead capacity is unrestricted; outbound WAN capacity can be expected up to the amount listed.

On the 2050, 5050, and 6050, total WAN capacity equals inbound traffic + outbound traffic

(b) No enforced optimized WAN bandwidth limit

(c) For Data Center to Data Center workloads, WAN capacity is up to 1 Gbps. For DC to remote office workloads, recommended WAN capacity is up to 622 Mbps

(d) TCP Connections can be expected up to the amount listed

(e) No PFS support

(f) Data store uses fault tolerant striped configuration

(g) Hot swappable disks

(h) Optional Network Bypass cards: Dual and Quad LX and SX GigE Fiber GigE, Quad Copper GigE, Dual 10GbE SR/LR

(k) Raw disk capacity allocated to the RSP partition. About 7GB is used by RSP package and filesystem. Partner packages need additional storage (based on the size of the package)

(m) RSP requires additional 2GB of memory, 6050 requires 4GB, 7050 requires 8GB. RSP packages on the 550 are limited to 1.5GB memory since the software is unable to use the full 2GB of additional memory.

(n) Over 4Gbps of LAN performance with 2.5X data reduction when configured to use jumbo Ethernet frames.

(o) The 5050L and the 1050 B/W increases require BIOS 5.5.7 or 6.0.2 onwards

(p) Multiple inpath interfaces were used to achieve this throughput

Power & Physical Specifications

	Small Office Steelhead				Mid-Size Office Steelhead								
Model	250 Series			550 Series		1050 Series				2050 Series			
Configurations	L	M	H	M	H	U	L	M	H	L	M	H	
Profile	Desktop			Desktop		1U				1U			
Dual Power Supplies	-			-		(Optional)				✓			
Power [Watts] (Typical)	62.5			66.5		138				197			
BTU	213			227		471				515			
Temperature	0 - 45 deg C / 32 - 113 deg F (Operating) -40 - 65 deg C / -40 - 149 deg F (Storage)					10 - 40 deg C / 50 - 95 deg F (Operating) -40 - 65 deg C / -40 - 149 deg F (Storage)							
Relative Humidity ⁱ	20% - 80% non-condensing (Operating) 5% - 95% non-condensing (Storage)												
Operating Acoustic Noise	45 dBA Sound Pressure (Typical)					61 dBA Sound Pressure (Typical)							
System Dimensions (LxWxH) ⁱⁱ	12 x 7.1 x 1.65 in 304.8 x 180.3 x 42 mm					25.4 x 17.2 x 1.71 in 645.4 x 436 x 43.5 mm							
Packaging Dimensions	24.5 x 12 x 4 in 622 x 305 x 102 mm					33.6 x 22.9 x 8.6 in 854 x 582 x 219 mm							
Max Weight (without packaging)	4.7 Lbs / 2.15 Kg					29 Lbs / 13.1 Kg			30 Lbs / 13.6 Kg		35 Lbs / 15.9 Kg		
Rail Information	Mounting ears included. Orderable spare part RMK-001					Mounting rail kit included. Orderable spare part RMK-002							

	Large Office or Data Center Steelhead						Management		
Model	5050			6050	7050	7050	INT 9350	CMC 8150	SMC8650
Configurations	L	M	H		L	M			
Profile	3U			3U	3U		3U	-	-
Dual Power Supplies	✓			✓	✓		✓	-	-
Power [Watts] (Typical)	203	225		352	425	430	320	153	
BTU	693	768		1670	1455	1470	1091	515	
Temperature	10 - 40 deg C / 50 - 95 deg F (Operating) -40 - 65 deg C / -40 - 149 deg F (Storage)						10 - 35 deg C / 50-95 deg F (Operating) -40-70 deg C / -40-158 deg F (Storage)		
Relative Humidity ⁱ	20% - 80% non-condensing (Operating) 5% - 95% non-condensing (Storage)								
Operating Acoustic Noise	61 dBA Sound Pressure (Typical)						Same as 1050		
System Dimensions (LxWxH) ⁱⁱ	25.72 x 17.0 x 5.2 in 653.4 x 431.6 x 131.9 mm						Same as 1050	1.69 x 17.6 x 21.5 in (4.27 x 44.7 x 54.62)	
Packaging Dimensions	34.1 x 23.7 x 15.9 in 866 x 602 x 403 mm						Same as 1050	13 x 25 x 35 in (33 x 64 x 89)	
Max Weight (without packaging)	59 Lbs / 26.7 Kg	64 Lbs / 29 Kg	71 Lbs / 32.2 Kg	55 Lbs / 25 Kg	59 Lbs / 25.8 Kg	51 Lbs / 23.2 Kg	30 lbs / 13.6 kg		
Rail Information	Mounting rail kit included. Orderable spare part RMK-003						Mounting rail kit included. Orderable spare part RMK-002		

(i) Operating altitude up to 10,000 feet

(ii) Length is without bezel

The availability, export or re-export of these products or specific features are subject to the export laws and regulations of the U.S. and the laws and regulations of any applicable foreign agency or authority.

Please refer to the xx20 appliances spec sheet for specifications on the other models.

System Requirements: Steelhead Mobile

Steelhead Mobile software optimizes application performance over the WAN for the mobile workforce.

Operating System	Windows 2000 SP4, XP SP2 (32 bit versions only); Vista and Windows 7 (32 bit and 64 bit versions). Mac OSX 10.5 and 10.6 (Intel only)
CPU	Celeron 650 MHz
Memory	256 MBz
Disk Store	256 MB free disk space (min. required)
Steelhead Appliance¹	Required
Steelhead Mobile Controller (SMC)	Required: Either Steelhead Mobile Controller Appliance or Steelhead Mobile Controller Virtual Edition

Software Specifications: Steelhead Mobile

Concurrent Clients Supported per SMC	4000 (SMC-Appliance) / 100 (SMC-Virtual Edition)
Concurrent Clients Supported with SMC Cluster²	n x 4000
VPN Compatibility³	Cisco, Juniper, Nortel, OpenVPN, Microsoft, Aventail, Citrix, AT&T Netclient, Array, Check Point, F5, Sonicwall, Fortinet, WatchGuard
Wireless PC Card Compatibility⁴	Verizon, AT&T, Sprint

(1) At least one Steelhead appliance is required running RIOS version 4.x or higher.

(2) SMCs can operate in clustered mode to support additional Steelhead Mobile clients.

(3) Partial listing. VPN compatibility may be impacted by vendor software version, client configuration, and other factors. Refer to detailed VPN specifications at http://www.riverbed.com/products/steelhead_mobile/vpn_specs/ for more information.

(4) Partial listing. Wireless PC Card compatibility may be impacted dependent upon hardware and driver versions, bundled software and other factors. Refer to detailed wireless specifications at http://www.riverbed.com/products/steelhead_mobile/wireless/ for more information.



Think fast.®

About Riverbed

Riverbed delivers performance for the globally connected enterprise. With Riverbed, enterprises can successfully and intelligently implement strategic initiatives such as virtualization, consolidation, cloud computing, and disaster recovery without fear of compromising performance. By giving enterprises the platform they need to understand, optimize and consolidate their IT, Riverbed helps enterprises to build a fast, fluid and dynamic IT architecture that aligns with the business needs of the organization. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com.



2005, 2006, 2007, 2008, 2009, 2011



Riverbed Technology
199 Fremont Street
San Francisco, CA 94105
Tel: +1 415 247 8800
Fax: +1 415 247 8801
www.riverbed.com

Riverbed Technology Ltd.
Venture House
Arlington Square
Downshire Way
Bracknell RG12 1WA, UK
Tel: +44 (0) 1344 401900

Riverbed Technology Pte. Ltd.
391A Orchard Road #22-06/10
Ngee Ann City Tower A
Singapore 238873
Tel: +65 6508-7400

Riverbed Technology K.K.
Shiba-Koen Plaza Building 9F
3-6-9, Shiba, Minato-ku
Tokyo, Japan 105-0014
Tel: +81 3 5419 1990

©2011 Riverbed Technology. All rights reserved. Riverbed and any Riverbed product or service name or logo used herein are trademarks of Riverbed Technology. All other trademarks used herein belong to their respective owners. The trademarks and logos displayed herein may not be used without the prior written consent of Riverbed Technology or their respective owners.