

Riverbed® Steelhead® Product Family with Granite

| | | Mid-Si | ze Office | Steelhe | ad | Large Office or Data Center Steelhead | | | | | | | | |
|--|---------|---------|-----------|---------|------------|---------------------------------------|-----------------------------------|-------------------------|----------|----------|---------------------|------------|------------|--|
| Model | CX555 | Series | C | X755 Se | ries | c | CX1555 Series CX5055 series CX705 | | | | CX7055 seri | 055 series | | |
| Configurations | М | Н | L | М | Н | L | М | н | M | н | L | М | Н | |
| Profile | Des | ktop | | Desktop |) | | 1U | | | | 2U | | | |
| Upgradeable to | 555 H | - | 755 M | - | - | 1555 M | - | - | 5055 H | - | 7055-M/H | 7055-H | - | |
| Optimized WAN Capacity | 6 Mbps | 10 Mbps | 10 Mbps | 10 Mbps | 20 Mbps | 50 Mbps ^(g) | 50 Mbps ^(g) | 100 Mbps ^(g) | 200 Mbps | 400 Mbps | 622 Mbps | 1 Gbps | 1.5 Gbps | |
| Optimized TCP and UDP flows | 350 | 650 | 900 | 1,500 | 2,300 | 3,000 | 4,500 | 6,000 | 14000 | 25000 | 75000 | 100000 | 150000 | |
| QoS Bandwidth ^(a) | 10 Mbps | 10 Mbps | 45 Mbps | 45 Mbps | 45 Mbps | 100 Mbps | 100 Mbps | 100 Mbps | No limit | | | | | |
| QoS Rules/Classes ^(b) | 500 | 500 | 1,000 | 1,000 | 1,000 | 2,000 | 2,000 | 2,000 | 4000 | | | | | |
| Raw Capacity ^(c) | 500 GB | 500 GB | 500 GB | 500 GB | 410 GB | 2,000 GB | 2,000 GB | 1,320 GB | 1.6 | 5 ТВ | 2.6 TB | 3.4 TB | 5.8 TB | |
| Data Store Capacity | 80 GB | 80 GB | 100 GB | 100 GB | 160 GB SSD | 400 GB | 400 GB | 320 GB SSD | 640 0 | iB SSD | 1.6TB SSD | 2.4 TB SSD | 4.8 TB SSD | |
| Storage Fault Tolerance | | - | | - | | | RAID ^(d) | | | | RAID ^(e) | | | |
| Hot Swappable Drives | | - | | - | | 4 | 4 | 4 | 10 | 12 | 12 | 17 | 18 | |
| RAM | 2 | GB | 2 GB 4GB | | | | 8 GB | | 16 | GB | 48 GB | 64 GB | | |
| Expansion Slots (PCI-e) ^(g) | | - | | - | | | 2 | | | | 4 | | | |
| Onboard Bypass ports (Copper) | 4 | 4 | | 4 | | 4 | | | 4 | | | | | |
| Max # of Bypass Ports | | 4 | | 4 | | | 12 | | 20 | | | | | |

NOTE: All WAN Capacity / Bandwidth, TCP Connections and UDP flows, and QoS specifications listed are maximums and may not be achieved in all environments.

(a) Recommended maximum outbound QoS shaping capacity

(b) Total of classes plus rules (c) Includes HDD's with SSD's (d) Richlades HDD's with SSD's (d) Richlades HDD's with SSD's (d) Richlad Configuration for HDD, Data store uses fault tolerant striped (FTS) configuration for SSD/HDD

(e) RAID1 configuration for HDD, Data store uses fault tolerant striped (FTS) configuration for SSD (f) Optional Network Bypass cards: Dual and Quad LX and SX GigE Fiber GigE, Quad Copper GigE, 10GbE SR/LR

(g) Requires RiOS 7.0.4 onwards

Power & Physical Specifications: Riverbed Steelhead CX Appliances

| | Small O | | Large (| Office or Data Center Ste | elhead | | | | |
|--|---|--|---|--|-------------------------------------|--|--|--|--|
| Model | CX555 Series | CX755 Series | CX1555 Series | CX5055 series | CX7055 series | | | | |
| Dual Power Supplies | - | - | ✓ | | ✓ | | | | |
| Power [Watts] (Typical) | 45 | 50 | 175 | 375 | 420 | | | | |
| BTU | 145 | 165 | 605 | 1280 | 1425 | | | | |
| Temperature ⁽ⁱⁱ⁾ | | 2 - 113 deg F (Operating) -40 - 149 deg F (Storage) | | 10 - 40 deg C / 50 - 104 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 (Typical) | | 45 dBA | 62 dBA | | 65 dBA | | | | |
| System Dimensions (LxWxH) ⁽ⁱⁱⁱ⁾ | 7.1 x 12 x 1.65 i | n / 180.3 x 304.8 x 42 mm | 25.4 x 17.2 x 1.71 in / 645.4 x 436 x 43.5 mm | | x 17.2 x 3.43 in x 436 x 87.1 mm | | | | |
| Packaging Dimensions | 17.5 x 12 x 3.87 in | / 444.5 x 304.8 x 174.6 mm | 36.25 x 2 | 3.38 x 12.5 in / 920.8 x 593.7 x 3 | 17.5 mm | | | | |
| Max Weight (without packaging) | 4.7 | Lbs / 2.15 Kg | 36 Lbs / 16.36 Kg | 52 Lbs / 23.6 Kg | 54 Lbs / 24.5 Kg | | | | |
| Rail Information | Mounting ears included. Orderable spare part RMK-001 | | | Mounting rail kit inlcuded. Orderable spare part RMK-002A | | | | | |

(i) Operating altitude up to 10,000 feet except in China 6,562 feet (2,000m) (iii) In China- for use in non-tropical locations (iii) 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

Model Specifications: Riverbed Steelhead EX Appliances

| | | Small Offic | e Steelhead | | Mid | l-Size Office Steelh | ıead | |
|---|--------------------|-------------|-------------|---------|----------------------|----------------------|---------|--|
| Model | | EX560 | Series | | | EX760 Series | | |
| Configurations | G | L | M | н | L | M | н | |
| Profile | | 1 | U | | 1U | | | |
| Upgradeable to | 560 L/M/H | 560 M/H | 560 H | - | 760 M/H | 760 H | - | |
| Optimized WAN Capacity | 4 Mbps | 4 Mbps | 6 Mbps | 10 Mbps | 10 Mbps | 10 Mbps | 20 Mbps | |
| Optimized TCP & UDP flows | N/A | 250 | 350 | 650 | 900 | 1,500 | 2,300 | |
| QoS Bandwidth ^(a) | 10 Mbps | 10 Mbps | 10 Mbps | 10 Mbps | 45 Mbps | 45 Mbps | 45 Mbps | |
| QoS Rules/Classes ^(b) | 500 | 500 | 500 | 500 | 1,000 | 1,000 | 1,000 | |
| Raw Storage Capacity | | 108 | 0 GB | | | 1160 GB | | |
| Data Store Capacity (SSD) | 40 GB | 40 GB | 70 GB | 70 GB | 150 GB 150 GB 150 GB | | | |
| VSP Partition ^(f) | N/A | | 190 GB | | | 190 GB | | |
| Granite block store ^(g) | 380 GB | | 190 GB | | | 190 GB | | |
| Storage Fault Tolerance | | | - | | - | | | |
| Hot Swappable Drives | | | - | | - | | | |
| RAM (without Granite) | | | 8 GB | | 16 GB | | | |
| Available for VSP (EX version 1) ^(l) | N/A | | 2 GB | | | 6 GB | | |
| Available for VSP (EX version 2) ⁽¹⁾ | | | 4 GB | | | 8 GB | | |
| RAM (with Granite) ^(e) | | 16 | GB | | | 16 GB | | |
| Available for VSP (EX version 1) ^(h,i) | | 7 | GB | | 6 GB | | | |
| Available for VSP (EX version 2) ^(h,i) | N/A ^(I) | | 9 GB | | | 8 GB | | |
| Expansion Slots (PCI-e) ^j | | | - | | - | | | |
| Onboard Bypass Ports (Copper) | | | 4 | 4 | | | | |
| Max # of Bypass Ports | | | 4 | | 4 | | | |

NOTE: All WAN Capacity / Bandwidth, TCP Connections and UDP flows, and QoS specifications listed are maximums and may not be achieved in all environments.

(a) Recommended maximum outbound QoS shaping capacity (b) Total of classes plus rules

(c) RAID 1 configuration for HDD, Data store uses fault tolerant striped (FTS) configuration for SSD

(d) RAID 10 configuration for HDD, Data store uses fault tolerant striped (FTS) configuration for SSD
(e) Granite requires extra memory. In some models - EX760, EX1160 and EX1260 - the memory is always included. On other models (EX560), extra memory is needed to support Granite. EX560 requires 16GB of RAM when configured for Granite.

(f) With the Granite license, the VSP partition can be larger. For more details, see the "Steelhead EX Installation and Configuration Guide"

(g) This is the minimum space. It can grow to encompass the VSP partition. For more details, see the "Steelhead EX Installation and Configuration Guide"

(h) The RAM available to VSP differs between EX version 1 and EX version 2. In EX version 1, the RAM noted here is given to the VMs. In EX version 2, the RAM noted here is the Host Physical Memory to VSphere. The memory available to guests will be lower than this number. For more details on VSphere memory management, pelase refer to the VSphere Resource Management Guide at http://pubs.vmware.com/vsphere-50/topic/com.vmware.lCbase/PDF/vsphere-esxi-vcenter-server-50-resource-management-guide.pdf

(j) EX1260 memory can be upgraded to 32GB (2TB model) and 64GB (4TB model) (j) Optional Network Bypass cards: Quad copper GbE, Dual & Quad LX/SX Fiber GigE (1X4 port or 2X2 port NIC's)

(k)100 Mbps WAN B/W license available on the EX1160/1260 VH only.

(I) VSP version 2 will be offered on G only systems at a later date.

Model Specifications: Riverbed Steelhead EX Appliances

| | | Large OfficeSteelhead | | | | | | | | | | | | | |
|---|--------------------|-----------------------|---------------------|---------|---------------------------|--|-------------|--------------------------|--------------------------|---------------------------|---------------------------|-------------|---------------------------|------------------------|---------------------------|
| Model | | EX | 1160 Se | ries | | | EX12 | 60 Series | (2 TB) | | | EX12 | 60 Serie | s (4 TB) | |
| Configurations | G | L | М | Н | VH | G L M H VH | | | G | L | М | Н | VH | | |
| Profile | 1U | | | | | 2U | | | | | 2U | | | | |
| Upgradeable to | 1160 L/M/H | 1160 M/H | 1160 H | - | - | 1260 L/M/H | 1260 M/H | 1260 H | - | - | 1260 L/M/H | 1260 M/H | 1260 H | - | - |
| Optimized WAN Capacity | | 10 Mbps | | 20 Mbps | 50 Mbps ^(k) | | 10 Mbps | | 20 Mbps | 50 Mbps ^k | | 10 Mbps | | 20 Mbps | 50 Mbps ^k |
| Optimized TCP & UDP flows | N/A | 900 | 1,500 | 2,300 | 4,000 | N/A | 900 | 1,500 | 2,300 | 4,000 | N/A | 900 | 1,500 | 2,300 | 4,000 |
| QoS Bandwidth ^(a) | | | 100 Mbps | | | | | 100 Mbps | | | | | 100 Mbp | S | |
| QoS Rules/Classes ^(b) | | | 1,000 | | | | | 1,000 | | | | | 1,000 | | |
| Raw Storage Capacity | | 2,16 | 0 GB | | 2,320 GB | | 4,160 | O GB | | 4,320 GB | | 8,16 | 0 GB | | 8,320 GB |
| Data Store Capacity (SSD) | | 150 |) GB | | 300 GB | 150 GB 300 GB | | | 150 GB | | | 300 GB | | | |
| VSP Partition ^(f) | N/A | | 27! | 5 GB | | N/A | | 57 | 5 GB | | N/A | | 12 | 30 GB | |
| Granite block store ^(g) | 760 GB | | 27! | 5 GB | | 1,580 GB | | 57 | 5 GB | | 3,574 GB | | 12 | 30 GB | |
| Storage Fault Tolerance | | | RAID ^(c) | | | | | RAID ^(d) | | | RAID ^(d) | | | | |
| Hot Swappable Drives | | | 4 | | | | 6 | j | | 8 | 10 | | | 12 | |
| RAM (without Granite) | N/A | | 20 GB | | 24 GB | | | | | | | | | | |
| Available for VSP (EX version 1) ⁽¹⁾ | N/A | | 8 GB | | 10 GB | | | N/A | | | | | N/A | | |
| Available for VSP (EX version 2) ^(l) | | 10 | GB | | 12 GB | | | | | | | | | | |
| RAM (with Granite) ^e | | 20 | GB | | 24 GB | | 24 / 32 | 2 ⁽ⁱ⁾ GB | | 24 / 32 ⁽ⁱ⁾ GB | | 32 / 64 | (i) GB | | 32 / 64 ⁽ⁱ⁾ GB |
| Available for VSP (EX version 1) ^(h,i) | | 8 | GB | | 10 GB | 9 / 17 ⁽ⁱ⁾ GB 5 / 13 ⁽ⁱ⁾ G | | | 5 / 13 ⁽ⁱ⁾ GB | 12 / 43 ⁽ⁱ⁾ GB | | | | 8 / 40 ⁱ GB | |
| Available for VSP (EX version 2) ^(h,i) | N/A ^(I) | | 10 GB | | 12 GB | N/A ⁽¹⁾ 11 / 19 ⁽¹⁾ GB 7 / | | 7 / 15 ⁽ⁱ⁾ GB | N/A ^(I) | | 14 / 47 ⁽ⁱ⁾ GI | 3 | 10 / 44 ⁽ⁱ⁾ GB | | |
| Expansion Slots (PCI-e) ^j | 2 | | | | 4 | | | | 4 | | | | | | |
| Onboard Bypass Ports (Copper) | 4 | | | | 4 | | | | 4 | | | | | | |
| Max # of Bypass Ports | | | 8 | | | 8 | | | | 8 | | | | | |

NOTE: All WAN Capacity / Bandwidth, TCP Connections and UDP flows, and QoS specifications listed are maximums and may not be achieved in all environments.

⁽a) Recommended maximum outbound QoS shaping capacity

⁽b) Total of classes plus rules

⁽c) RAID 1 configuration for HDD, Data store uses fault tolerant striped (FTS) configuration for SSD

⁽d) RAID 10 configuration for HDD, Data store uses fault tolerant striped (FTS) configuration for SSD

⁽e) Granite requires extra memory. In some models - EX760, EX1160 and EX1260 - the memory is always included. On other models (EX560), extra memory is needed to support Granite. EX560 requires 16GB of RAM when configured for Granite.

⁽f) With the Granite license, the VSP partition can be larger. For more details, see the "Steelhead EX Installation and Configuration Guide"
(g) This is the minimum space. It can grow to encompass the VSP partition. For more details, see the "Steelhead EX Installation and Configuration Guide"

⁽h) The RAM available to VSP differs between EX version 1 and EX version 2. In EX version 1, the RAM noted here is given to the VMs. In EX version 2, the RAM noted here is the Host Physical Memory to VSphere. The memory available to guests will be lower than this number. For more details on VSphere memory management, pelase refer to the VSphere Resource Management Guide at http://pubs.vmware.com/vsphere-50/topic/com.vmware.lCbase/PDF/vsphere-esxi-vcenter-server-50-resource-management-guide.pdf (i) EX1260 memory can be upgraded to 32GB (2TB model) and 64GB (4TB model)

⁽j) Optional Network Bypass cards: Quad copper GbE, Dual & Quad LX/SX Fiber GigE (1X4 port or 2X2 port NIC's)

⁽k)100 Mbps WAN B/W license available on the EX1160/1260 VH only. (l) VSP version 2 will be offered on G only systems at a later date.

Model Specifications: Granite

| | | Granite Core | | | | | | | | | | |
|--------------------------------------|-----------------|--------------|---|---------------|-------------|-----------|-------|--|--|--|--|--|
| Model | | VGC1000 | | GC2000 | | | | | | | | |
| Configurations | U | L | М | L | М | Н | VH | | | | | |
| Profile | | Virtual | | | 2 | U | | | | | | |
| Upgradeable to | VGC1000 L/M | VGC1000 M | - | GC2000 M/H/VH | GC2000 H/VH | GC2000 VH | - | | | | | |
| Front Swappable Drives | | N/A | | 2 | | | | | | | | |
| RAM | | N/A | | 24 GB | | | | | | | | |
| Expansion Slots (PCI-e) ^g | | N/A | | 4 | | | | | | | | |
| Included Ports (Copper) | | N/A | | | | 6 | | | | | | |
| Max. # of Ports | | N/A | | | | 6 | | | | | | |
| Branches | 5 10 20 | | | 10 | 20 | 40 | 80 | | | | | |
| Data Set Size ¹ | 2 TB 5 TB 10 TB | | | 5 TB | 10 TB | 20 TB | 35 TB | | | | | |

(1) Recommended size depending on data type

Power & Physical Specifications: Riverbed Steelhead EX and Granite Appliances

| | Small Office Steelhead | Mid-Size Office Steelhead | Large Office or Data Center Steelhead | Data Center | | | | | | |
|--|---|---|--|-------------|--|--|--|--|--|--|
| Model | EX560/760 Series | EX1160 Series | EX1260 Series | GC2000 | | | | | | |
| Dual Power Supplies | - | - ✓ ✓ | | | | | | | | |
| Power [Watts] (Typical) | 85 | 175 | 355 | 330 | | | | | | |
| вти | 295 | 605 | 1,215 | 1,130 | | | | | | |
| Temperature ⁱⁱ | | 10 - 40 deg C / 50 - 10 -40 - 65 deg C / -40 - | | | | | | | | |
| Relative Humidity ⁱ | | 20% - 80% non-condensing (Operating) 5% - 95% non-condensing (Storage) | | | | | | | | |
| Operating Acoustic Noise (Typical) | 57 dBA | 62 dBA | 65 dBA | | | | | | | |
| System Dimensions (LxWxH) ^{iil} | 17.09 x 15.52 x 1.66 in 434.0 x 394.3 x 42.4 mm | 25.4 x 17.2 x 1.71 in 645.4 x 436 x 43.5 mm | 25.4 x 17.2 x 3.43 in 645.4 x 436 x 87.1 mm | | | | | | | |
| Packaging Dimensions | | 36.25 x 23.3 920.8 x 593.7 | | | | | | | | |
| Max Weight (without packaging) | 17.76 Lbs 36 Lbs 58 Lbs 8.06 Kg 16.36 Kg 23.36 Kg | | | | | | | | | |
| Rail Information | Mounting ears included. Orderable spare part RMK-005 Mounting rail kit inlcuded. Orderable spare part RMK-002A | | | | | | | | | |

(i) Operating altitude up to 10,000 feet except in China 6,562 feet (2,000m) (iii) In China- for use in non-tropical locations (iii) Length is without bezel

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Model Specifications: Riverbed Steelhead xx50 Series Appliances

| | : | Small Offic | e Steelhead | Mid-Size Office Steelhead | | | | | | | | | | |
|--|-------------------|-------------------|-----------------------|---------------------------|--------|------------------------|--------|-------------------------------------|-----------------|--------------------------------------|----------|----------------------|-------|--|
| Model | 150 Series | 250 Series | | | 550 9 | 550 Series 1050 Series | | | | | | 2050 Series | | |
| Configurations | M | L | L M H | | | Н | U | L | M | Н | L | M | Н | |
| Profile | | | Deskt | ор | | | | 1 | U | | | 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 ⁽ⁱ⁾ | 2 Mbps | 2 Mbps | 4 Mbps | 4 Mbps | 8 Mbps° | 10 Mbps° | 20 Mbps° | | 45 Mbps ^b | | |
| Optimized TCP Connections ^d | 20 ⁽ⁱ⁾ | 40 ⁽ⁱ⁾ | 125 | 200 | 300 | 600 | 600 | 800 | 1,300 | 2,300 | 2,500 | 4,000 | 6,000 | |
| QoS Bandwidth ^q | 2 | 4 | 4 | 4 | 10 | 10 | 45 | 45 | 45 | 45 | 100 | 100 | 100 | |
| QoS Rules/Classes ^r | 100 | 300 | 300 | 300 | 500 | 500 | 1000 | 1000 | 1000 | 1000 | 2000 | 2000 | 2000 | |
| Raw Capacity | 120GB | | 120 GB | | 160 | GB | 250 GB | 250 | GB | 500 GB | | 1 TB | | |
| Data Store Capacity | 40GB | | 40 GB | | 80 | GB | 100 GB | 100 | GB | 200 GB | | 400 GB | | |
| RSP Partition ^k | - | | 55 GB | | 55 | 55 GB 100 GB | | 3 100 GB (Default) 200 GB (RAID) | | 200 GB | 75 GB | | | |
| RSP 64 Bit Packages | - | | | No | | | Yes | | | | Yes | | | |
| Storage Fault Tolerance | | | - | | | | - | | Optional RAII |) | | RAID | | |
| Front Swappable Drives | | | - | | | | 1 | | fault) (AID) | 2 (default) 4 ^g (RAID) | | | | |
| 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 | | | | | | 4 | | | | 4 | | | |
| Max # of Bypass Ports | | | 2 | | | | 8 8 | | | | | 8 | | |

| | | Larg | e Office or Dat | a Center Steel | Large Office or Data Center Steelhead | | | | | | | | | |
|--|-------------------------|-------------------------|-----------------------|---------------------|---------------------------------------|-----------------------|----------------------|----------|----------|--|--|--|--|--|
| Model | | 5050 | | 6050 | 70 | 50 | INT 9350 | CMC 8150 | SMC 8650 | | | | | |
| Configurations | L | M | Н | | L | M | | | | | | | | |
| Profile | 3U | | | 3U | 3 | U | 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 Gb | ps ^{b, c, n} | 40 Gbps ^p | NA | NA | | | | | |
| Optimized TCP Connections ^d | 7,500 | 10,000 | 18,000 | 50,000 | 75,000 | 100,000 | 1,000,000 | - | - | | | | | |
| QoS Bandwidth ^q | 200 | 200 | 200 | 310 | 1000 | 1000 | - | - | - | | | | | |
| QoS Rules/Classes ^r | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | - | - | - | | | | | |
| 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 SSD | 4.4 TB SSD | - | 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 | Y | es | - | - | - | | | | | |
| Storage Fault Tolerance | | RAID | | RAID | R.A | AID ^f | RAID | - | - | | | | | |
| Front Swappable Disks | 8 ^g | 8 ^g | 12 ^g | 16 ⁹ | 16 ^g | 30 ^g | 3 ⁹ | 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 | - | - | | | | | |
| Onboard Bypass ports (Copper) | 4 | 2 | 4 | | 4 | | 4 | - | - | | | | | |
| Max # of Bypass Ports | 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 and UDP flows 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 (i) Requires RiOS 7.0.3a, 6.5.5a onwards

(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 BM increases require RiOS 5.5. 7 or 6.0.2 onwards.

(p)Multiple inpath interfaces were used to achieve this throughput. Up to 40Gbps throughput (rx+tx traffic). Requires version INT 3.0 with XBridge enabled. WCCP and PBR configurations are not supported when XBridge is enabled.

(q) Recommended maximum outbound QoS shaping capacity

(r) Total of classes plus rules

Power & Physical Specifications: Riverbed Steelhead xx50 Series Appliances

| | Sı | mall Offic | e Steelhea | d | | | Mid-Size Office Steelhead | | | | | | | |
|---|---|------------|-------------------------|------------------|---|--------------|--|------|--------|-------------------------------------|------------------|-----|---|--|
| Model | 150 Series | | 250 Series | eries 550 Series | | | | 1050 | Series | | 2050 Series | | | |
| Configurations | М | L | М | Н | М | Н | U L M | | Н | L | М | Н | | |
| Profile | | Des | ktop | | Des | ktop | | 1 | U | | | 1U | | |
| Dual Power Supplies | | | - | | | - | | (Opt | ional) | | | ✓ | | |
| Power [Watts] (Typical) | | 4 | .0 | | 66 | i.5 | | 138 | | 151 | | 197 | | |
| BTU | 135 227 | | | | | 27 | | 471 | | 515 | | 672 | | |
| Temperature ⁱⁱ | 0 - 45 deg C / 32 - 113 deg F (Operating) -40 - 65 deg C / -40 - 149 deg F (Storage) | | | | | | | | | C / 50 - 95 deg C / -40 - 149 de | | | | |
| Relative Humidity ⁱ | | | | 20% | % - 80% non-c | ondensing (O | (Operating)5% - 95% non-condensing (Storage) | | | | | | | |
| Operating Acoustic Noise | | 45 | dBA Sound P | ressure (Typic | al) | | 61 dBA Sound Pressure (Typical) | | | | | | | |
| System Dimensions (LxWxH) ⁱⁱⁱ | | | 12 x 7.1 304.8 x 180 | | | | 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 | | | | | | | | | i.6 x 22.9 x 8.6 4 x 582 x 219 i | | | | |
| Max Weight (without packaging) | 4.7 Lbs / 2.15 Kg | | | | | | 70 l hc / 13 1 Kg | | | 30 Lbs / 13.6 Kg | 35 Lbs / 15.9 Kg | | g | |
| Rail Information | Mounting ears included. Orderable spare part RMK-001 | | | | Mounting rail kit included. Orderable spare part RMK-002 | | | | | | | | | |

| | | Large | Office or Dat | ta Center Ste | elhead | | Management | | | | |
|--|--|-------|---------------|--|-----------------|------------------|------------------|---|--------------|--|--|
| Model | | 5050 | | 6050 | 7050 | 7050 | INT 9350 | CMC 8150 | SMC8650 | | |
| Configurations | L | М | н | | L | М | | | | | |
| Profile | | 3U | | 3U | 3 | U | 3U | - | - | | |
| Dual Power Supplies | | ✓ | | ✓ | , | / | ✓ | - | - | | |
| Power [Watts] (Typical) | 2 | 03 | 225 | 352 | 425 | 430 | 320 | | 153 | | |
| BTU | 6 | 93 | 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 dec C / 50-95 deg F (Operating) -40-70 deg C / -40-158 deg F (Storage) | | | | | | | | | | |
| Relative Humidity ⁱ | | | | 20% - 80% non | -condensing (Op | erating)5% - 95% | % non-condensing | g (Storage) | | | |
| Operating Acoustic Noise | | | 61 dBA | Sound Pressure (| Typical) | | | | Same as 1050 | | |
| System Dimensions (LxWxH) ⁱⁱ | | | _ | 5.72 x 17.0 x 5.2 4 x 431.6 x 131.9 | | | | | Same as 1050 | | |
| Packaging Dimensions | 34.1 x 23.7 x 15.9 in 866 x 602 x 403 mm | | | | | | | | Same as 1050 | | |
| Max Weight (without packaging) | 59 Lbs / 64 Lbs / 71 Lbs / 55 Lbs / 59 Lbs / 51 Lbs / 30 lbs / 26.7 Kg 29 Kg 25.8 Kg 25.8 Kg 23.2 Kg 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 except in China 6,562 feet (2,000m) (ii) In China- for use in non-tropical locations (iii) 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.



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) |
|-----------------------------------|---|
| СРИ | Celeron 650 MHz |
| Memory | 256 MB |
| Disk Store | 256 MB free disk space (min. required) |
| Steelhead Appliance ¹ | Required |
| Steelhead Mobile Controller (SMC) | Required: Either Steelhead Mobile Controller Appliance or Steelhead Mobile Conroller Virtual Edition |

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

Software Specifications: Steelhead Mobile

| Concurrent Clients Supported per SMC | 120,000 (SMC -Cluster) /4000 (SMC-Appliance)/100 (SMC-Virtual Edition) |
|--|--|
| Concurrent Clients Supported with SMC Cluster ² | n x 4000 |
| VPN Compatibility ³ | Cisco, Juniper, Nortel, OpenVPN, Microsoft, Aventail, Citrix, AT&T Netclient, Array, Checkpoint, F5, Sonicwall, Fortinet, WatchGuard |
| Wireless PC Card Compatibility ⁴ | Verizon, AT&T, Sprint |

⁽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.

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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





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