

## Product Family

The BlackRidge adaptive cyber defense solution provides high performance network and cloud security operating in real time before other security technologies engage. BlackRidge solution components include hardware and software gateways and software, hardware and IoT endpoints that implement BlackRidge Transport Access Control (TAC) with First Packet Authentication™.



**Enterprise Gateways**



**Cloud and Virtual Gateways**



**Branch and IoT Gateways**



**Software, IoT and Hardware Endpoints**

## Product Deployment Options

BlackRidge products can be deployed in a variety of network, data center and cloud configurations. Our gateway software can be deployed as high-performance, network appliances or as virtual appliances, and our endpoint software can be installed on various end user devices or embedded in IoT and partner devices. Deployment options include in-line as a Layer 2 transparent bridge, or logically inline as a Layer 3 gateway.

BlackRidge products are designed to be highly resilient and can be configured for high availability and failover. Security policies can be verified during deployment with progressive installation modes of bridge, monitor and audit, and then enforce policy, with all actions logged to security information and event management (SIEM) systems. A management console is available to aid in deploying and maintaining a BlackRidge implementation.

### Enterprise, Branch and IoT Gateways

BlackRidge enterprise gateways are available as 1U rack-mountable appliances in 1GbE or 10GbE network configurations. Each appliance is configured with two 1/10GbE copper or two 10GbE optical fiber ports, along with a 1GbE dedicated management port. The network interface options are RJ-45 or fiber optics with SFP+ module or SR transceivers. A NIC bypass capability to fail open or closed is available also. The Enterprise gateways support up to 40,000 identities and 4,000,000 sessions.

A desktop fanless branch gateway and an IoT gateway are available for protecting assets in remote or branch offices, small subnets, server enclaves, and IoT devices. These gateways are configured with two 1GbE data ports and one 1GbE management port and support up to 1,000 identities.

### Cloud and Virtual Gateways

Enterprise gateways are available for the leading hypervisors and cloud environments. Each virtual appliance is configured with two data ports and a management port. The appliances adapt to their environment, automatically sizing based on the provisioned resources, and they are also available in branch or micro versions that support up to 1,000 identities. Supported environments include: AWS, VMware ESXi™ and Linux KVM, with Azure coming soon.

### Software, Hardware and IoT Endpoints

A BlackRidge endpoint is TAC software that is integrated in a user device or that is embedded in a hardware device. The TAC endpoint performs identity insertion into TCP/IP sessions and perform mutual authentication of network sessions. TAC software endpoints are available for the 64-bit

versions of Windows® 7/10 and Ubuntu, with additional Linux operating systems and MacOS® to be supported. BlackRidge hardware endpoints include the BlackRidge TAC Identity Device and partner IoT devices. Specifications for these hardware endpoints are included in other datasheets.

BlackRidge Gateway Specifications				
Product SKUs	BR-2010, BR-2020 BR-2040, BR-2090 BR-20x0-1	BR-3110 BR-3111	BR-3231-T	BR-3230-F BR-3231-SR
<b>Platform Description</b>	VMware, AWS, KVM, Azure. Enterprise and Micro-Versions	1G Branch Gateway & IoT Gateway	1G/10G Enterprise Gateway (Copper)	10G Enterprise Gateway (Fiber)
<b>Trusted Port</b>	1 x 1/10GbE v-switch	1 x 1GbE (RJ-45)	1 x 1/10GbE (RJ-45)	1x10GbE (SR) 1x10GbE (SFP+)
<b>Untrusted Port</b>	1 x 1/10GbE v-switch	1 x 1GbE (RJ-45)	1 x 1/10GbE (RJ-45)	1x10GbE (SR) 1x10GbE (SFP+)
<b>NIC Bypass</b>	-	-	Yes	Yes (BR-3231SR)
<b>Management Port</b>	1 x 1GbE v-switch	1GbE (RJ-45)	1GbE (RJ-45)	1GbE (RJ-45)
<b>Serial Port</b>	Yes (virtual)	Yes	Yes	Yes
<b>Max Identities</b>	1,000* to 40,000	25 to 1,000	40,000	40,000
<b>Concurrent Sessions</b>	100,000* to 4,000,000	4,000 to 100,000	4,000,000	4,000,000
<b>Latency Est.</b>	<100 µsec	<200 µsec	<12 µsec	<12 µsec
<b>Size</b>	-	7.28 x 5.39 x 1.73 in (18.5 x 13.7 x 4.4 cm)	17.24 x 20.67 x 1.73 in (43.8 x 52.5 x 4.4 cm)	17.24 x 20.67 x 1.73 in (43.8 x 52.5 x 4.4 cm)
<b>Weight</b>	-	2.2 lb. (1 kg)	33 lb. (15 kg)	33 lb. (15 kg)
<b>Power</b>	-	AC	Dual AC	Dual AC
<b>Wattage (W)</b>	-	36	300	300
<b>Heat (BTU/hr.)</b>	-	123	1024	1024
<b>Operating Temp</b>	-	32 to 104° F (0 to 40° C)	32 to 104° F (0 to 40° C)	32 to 104° F (0 to 40° C)
<b>Rel. Humidity</b>	-	5 to 90%	5 to 90%	5 to 90%
<b>Safety</b>	-	-	UL / CB	UL / CB
<b>Emission</b>	-	CE / FCC Class A	CE / FCC Class A	CE / FCC Class A
<b>EU RoHS</b>	-	Yes	Yes	Yes

\* Lower limit is for BR-20x0 Micro versions

## About BlackRidge Technology

BlackRidge Technology enables our customers and partners to deliver more secure and resilient business services in today's rapidly evolving cyber threat environments. Our zero trust approach to adaptive cyber defense uses identity to authenticate network connections and enforces identity across networks, to proactively stop cyber-attacks and protect your cloud services, servers and IoT devices.