

# VB120 – 64G Modular 1G/10G Network Packet Broker

Product Brief

## FLEXIBLE, POWERFUL AND COMPUTE-READY VISIBILITY FOR 1G AND 10G ENVIRONMENTS



Service providers, private clouds, government organizations and enterprise must collect, aggregate, and optimize traffic from a number of network segments. They also need to address space and power constraints in the data center and manage the migration from 1G to 10G network infrastructure

Network professionals today are challenged by increasing network speeds, dynamic environments and a proliferation of traffic and applications types, all while experiencing pressure to optimize the effectiveness of service assurance and cybersecurity tools.

Flexible, modular and powerful packet-flow switching systems capable of supporting traffic optimization at the high-speed edge are critical to enabling cost effective and scalable network monitoring.

### The Solution

VSS Monitoring helps you maximize the insight and capabilities of your packet visibility infrastructure. Using vBroker™ series of packet-flow switches, you can make better use of your enterprise performance monitoring and security tools, simplify operational complexity and realize additional cost savings and service quality improvements.

VSS vBroker appliances solve a variety of network-related IT challenges in your network and data centers, enhancing network visibility for monitoring and improving your ability to detect and respond to security incidents. The vBroker appliance eases the strain on capex and opex budgets as network size and speeds grow.

### Specification Overview

- Supports 1G and 10G access at full line rates
- Filtering: hardware-based, user-independent on OSI layers 2-7 (includes custom offset, ingress and egress, and overlapping filters, and Inner Layer 3 and Layer 4 GRE, GTP, and MPLS filtering<sup>1</sup>)
- Session-based/flow-aware load balancing (includes Inner Layer 3 and Layer 4 MPLS and GTP Load Balancing<sup>1</sup>)
- vMesh™ architecture enables self-organizing interconnection
- vProtector™ mode for active inline bidirectional traffic access and vProtector functionality
- Selective Aggregation (any-to-any port mapping)
- Ports configurable (I/O) for network access or monitor output
- Local, remote management: API, CLI, and GUI (HTTP/HTTPS, Telnet/SSH, SNMPv1-3)
- AAA security (RADIUS, TACACS+)
- Multi-user access with defined privileges, unique screen views, and management accessibility restrictions
- Policy-based event triggering and actions
- VLAN source port tagging
- Port and Time Stamping (NTP, GPS, 1PPS, PTP sync)<sup>1</sup>
- Conditional packet slicing / trimming by packet type (vSlice™)<sup>1</sup>
- Protocol stripping /de-encapsulation (Cisco FabricPath, GRE header, GTP header, MAC-in-MAC, TRILL header, MPLS label, VLAN tag, VN tag, and VXLAN header)<sup>1</sup>
- Pluggable 4-port I/O modules
- IP Fragment Reassembly (Defrag)<sup>1</sup>
- Correlated GTP v1/v2 Load-Balancing<sup>1</sup>
- Dual, redundant, universal power supplies (AC and DC hot-swappable options)
- Built for NEBS Level 3



**1. Requires an advanced hardware chassis module.**

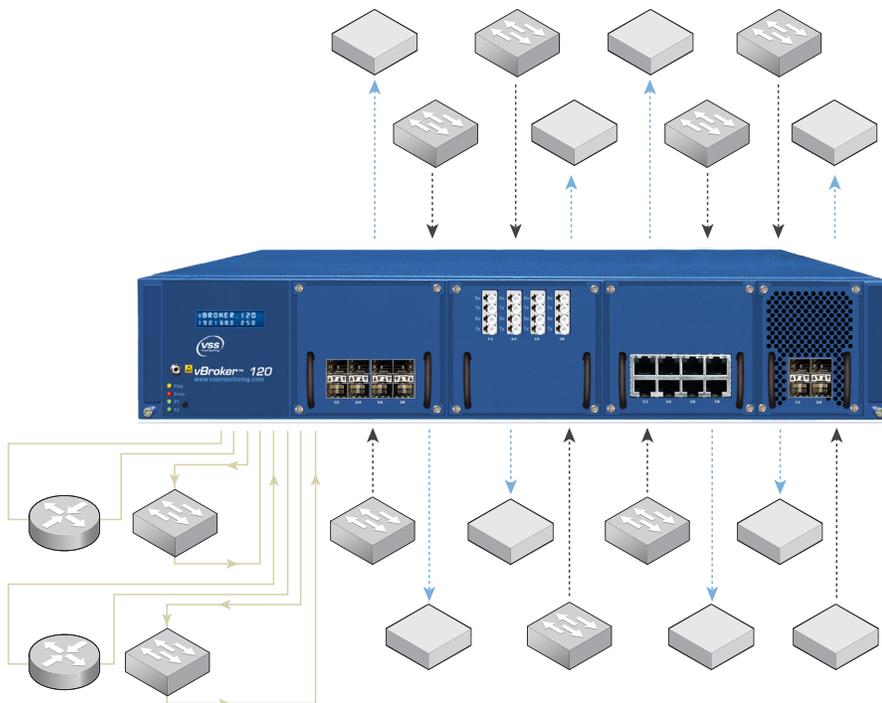


Figure 1. Displays input/output flexibility of SFP+ ports

vBroker support the VSS vMesh™ architecture giving you the flexibility and modularity to deploy just the appliances you need, with the ability to scale link-layer visibility and data access to a system-level architecture comprised of many participating devices and ports in a single logical system.

## Product Description

The VB120 is a 2U appliance that bridges the gap between Gigabit and 10 GigE networks. The first three pluggable modules have 8 ports for up to 24 1G ports, and the fourth pluggable module has 4 10G/1G ports. All twenty-eight ports are active. Any port can be designated as an input port, an output port, or as an intermediate or a stacking port.

The pluggable modules are available for either Inline or SPAN access. The modules with SFP and SFP+ ports are fully I/O configurable, while the fiber TAP-only module ports are fixed inputs only and are completely passive. PowerSafe™ copper and fiber chassis modules provide the active bypass or tapping capability using the VSS PowerSafe technology with configurable failsafe operation to ensure continuous traffic availability or blocking. This device can be locally managed via a serial console and remotely managed via HTTP, HTTPS, SSH, Telnet, and SNMPv1-v3.

## Benefits

- Gain visibility and data access across entire network
- Centralize tools while increasing their reach
- Flexible access to passive and active inline tools
- Boost monitoring and security tool efficiency
- Support network upgrades by load balancing traffic across tools
- Quickly provision new tools by eliminating SPAN port contention
- Centrally, remotely, and/or locally manage network visibility and access

Hardware-based, user-independent filtering allows traffic to be distinguished according to source and destination MAC/IP address as well as by specific protocols, such as HTTP, VoIP, and others. A customizable (user-defined) filter offers more granular specification of a filter, specifically within the payload of a packet. Filters can be ingress, egress, and overlapping depending on use of port classes.

Session-based, flow-aware load balancing increases user control of traffic distribution to monitoring tools, increasing output capacity while maintaining session integrity. For example, a 10G network can be captured and automatically balanced across multiple Gigabit monitoring tools based on user-defined session criteria. Session-based, flow-aware load balancing can operate in tandem with hardware-based filtering or independently.

The unified visibility from VSS Monitoring allow organizations to accelerate advances in cyber security posture, capabilities and responses. This approach provides network visibility for multiple active inline and out-of-band security systems tool-chained together creating a pervasive defense architecture against a broad range of attacks. Part of the Active Protection Suite is the vProtector™ mode, which provides an option for active inline bidirectional traffic access and PowerSafe chassis module(s) for fail-safe capability to ensure no interruption to the inline traffic availability. Should any inline security applications fail,

they may be bypassed or traffic 1 can be sent to another system.

Advanced chassis modules have additional hardware resources for packet optimization features including time and port stamping, protocol stripping/de-encapsulation, vSlice conditional packet slicing, and real-time microburst measurement. Options extend load balancing to inner layer 3 and 4 packets headers, in MPLS or GTP encapsulation.

The VB120 supports intelligent stacking technology, vStack+™, which enables traffic capture devices to be deployed in a redundant, low-latency mesh for dynamic, fault-tolerant visibility. A vMesh system can include a mix of appliances such as VB120s and Optimizer 2400s.

The VB120 provides automated event driven monitor output traffic direction and responses (Syslog messages, SNMP traps, light front LED, deactivate ports) with five user-definable trigger event types.

Redundant power supplies allow seamless transitions between power systems and ensure uptime. The VB120 is hot-swappable power supplies, fans, and air filters.

All VSS managed devices support field software updates for additional features and performance enhancements. The VB120 also supports updating of the FPGA firmware in the field.

vBrokers deliver maximum performance, scale and flexibility across both distributed environments and hyper-scale data centers. Carriers, private clouds, and large enterprises now have solutions that can match and grow with their network densities and performance.

To learn more about the VB120 and vBroker Series, visit our website at [www.vssmonitoring.com](http://www.vssmonitoring.com)



For more information please contact us at [info@vssmonitoring.com](mailto:info@vssmonitoring.com)

VSS Monitoring is a world leader in network packet brokers (NPB), providing a visionary, unique systems approach to integrating network switching and the broad ecosystem of network analytics, security, and monitoring tools.

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