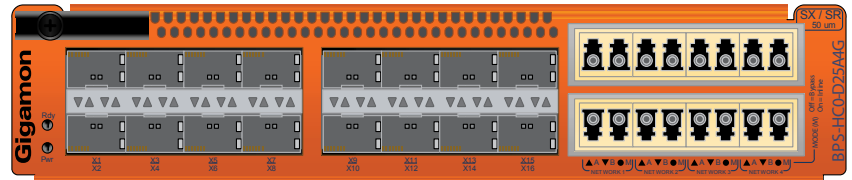# Product Brief

HC SERIES GigaBPS

The GigaVUE HC Series GigaBPS modules provide bypass protection to inline tools such as Intrusion Protection Systems (IPS). These innovative modules contain a combination sixteen (16) regular SFP/SPF+ port cages and four (4) pairs of specialized physical bypass ports to ensure traffic continuously flows through inline security gates.

The module leverages two levels of bypass protection:

1. Physical Bypass

2. Logical Bypass

Physical bypass preserves network traffic, failing to wire in the event of a power outage.

Logical bypass protects against inline tool failures that could disrupt network traffic. Bidirectional heartbeats monitor the health of the inline tool and in the event of a loss of link or loss of heartbeat, the traffic can be bypassed around the failing tool; alternatively, the network link can be brought down so that the traffic can be routed to a redundant network path. GigaBPS pertains specifically to fiber links. For copper bypass, Gigamon offers a GigaVUE-HC2 copper TAP module. This module includes electrical relays that can be used for bypass protection.

The GigaVUE-HC2 node is a multi-purpose, modular design that integrates port, TAP, bypass, and intelligent packet modules into a mid-sized 2RU form factor that can be clustered together with other GigaVUE H Series nodes into a single management entity. The following example depicts the GigaBPS module serving a variety of inline and out-of-band tools:

- Traffic Distribution: Improve the scalability of inline security by distributing the traffic across multiple tools, allowing them to share the load and inspect more traffic

- Serial Inline Tools: Deploy multiple security solutions, combining intrusion prevention, DDOS protection, anti-malware inspection, and others into a single, bypass-protected platform

- Traffic Profiles: Send specific traffic to specific tools based on Layer 2 to Layer 4 rules so that applications and services are protected by the tools best suited for that traffic

- Agile Deployment: Add, remove, and/or upgrade tools without disrupting network traffic; convert tools from out-of-band monitoring to inline inspection on the fly without rewiring

Quick Specs

✓ Contains 4 physical bypass port pair to connect switches or routers where inline monitoring is required

✓ Contains 16 10Gb port cages for use as network ports, tool ports, stacking ports, or logical bypass ports

✓ Offers heartbeat protection to protect both tools and throughput
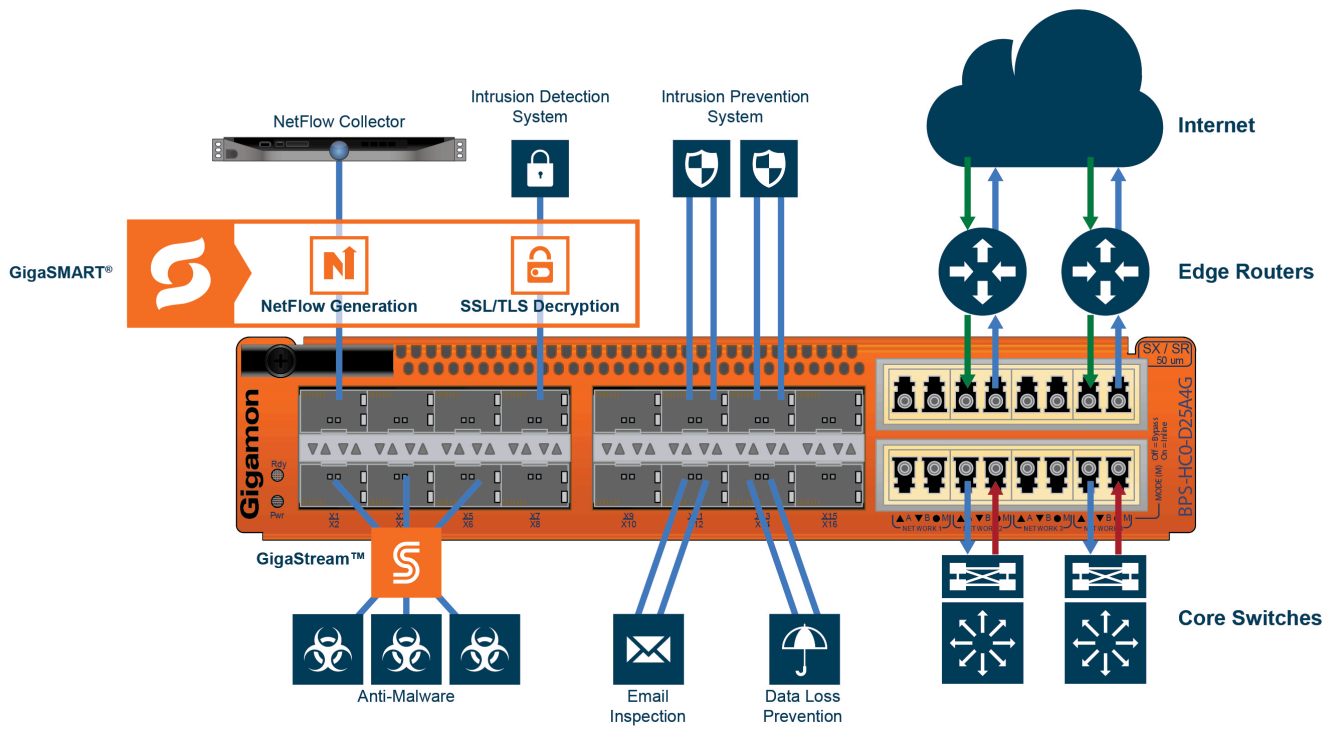
Figure 1: Multi-tiered security approach

Features & Benefits

- Enables multi-tiered security systems for both inline and out-of-band tools

- Provides physical bypass traffic protection in the event of power loss

- Provides logical bypass traffic protection in the event of an inline tool failure

- Improves scalability, efficiency, and efficacy of inline tools

- Eliminates maintenance windows to aid speedy deployments

- Supports both 1Gb and 10Gb fiber for breadth of coverage

Use Cases

- Multi-tiered security deployments protecting one or more network paths

- Zero-trust security environments inspecting traffic across the network

- Networks whose data rate exceeds the throughput of inspection tools

- Mixture of applications with specialized security tools for each