

# Ixia xFilter™

## Advanced Network Packet Optimization Appliance

The Ixia xFilter™ provides advanced packet brokering, grooming, and optimization capabilities, including packet management, filtering, tunnel decapsulation, and network management. This advanced appliance allows IT managers to offload the burden of compute-intensive functions from monitoring and security tools. The effectiveness of these tools could otherwise be severely impaired by diverting of bandwidth and CPU resources away from their primary functions of security and performance monitoring. As the first solution on the market to perform these vital functions in a single device, the Ixia xFilter significantly improves the efficiency, performance, and effectiveness of the entire network and its security monitoring infrastructure.

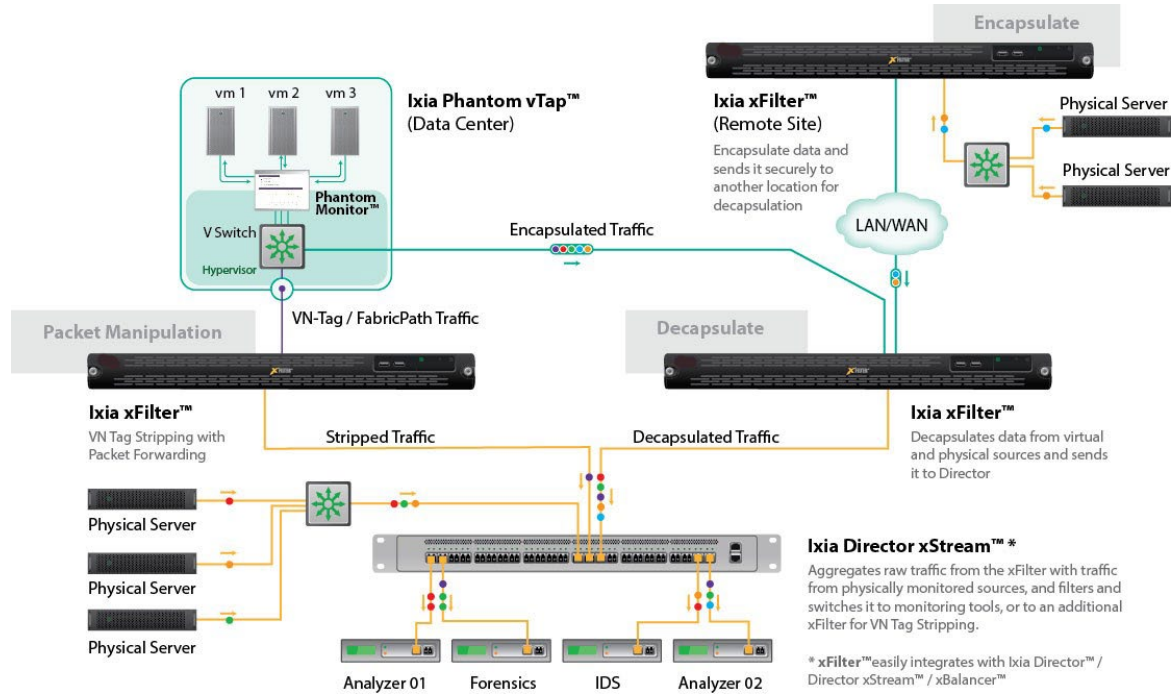
Available as a physical or virtual appliance, the xFilter offers deployment flexibility for operating in today's dynamic network environments and all areas of the converged data center. The physical appliance delivers high throughput port density (up to 12 10G ports), while the virtual appliance is the only on-demand solution of its kind that can be deployed and configured with a few simple mouse clicks.

### Further Optimization When Integrated with Network Access and Management Solutions

Switches belonging to the Ixia Director™ family – including the Ixia Director xStream™ data monitoring switch, and the Ixia xBalancer™ load balancing solution – are optional components. These solutions augment and complement the xFilter's capabilities. Integrating easily with the xFilter, the Ixia Director family aggregates raw traffic from multiple xFilter devices and switches it quickly and seamlessly to the network's instrumentation layer tools, which then carry out their respective inspection and monitoring processes. Load-balancing capabilities allow 10GB network sources to be redistributed out to 1GB tools (or vice versa). This capability is particularly useful for supporting converged data centers and addressing hybrid physical, virtual, and cloud-based network topologies. xFilter can also serve as an end point for traffic being extracted from virtual switches by the Ixia Phantom VTap.

### Highlights

- Serves as physical or virtual appliance across the converged data center
- Supports high-throughput monitoring of all traffic
- Delivers overall capacity of up to 120 Gbps in 1U
- Decapsulates tunneled traffic at 10 Gbps per physical port
- Enables up to 12 network plus 12 monitor connections
- Seamlessly integrates with Ixia Phantom vTap™
- Handles fragmentation and defragmentation of packets
- Complements Ixia Phantom vTap GRE and ER-SPAN tunneling



## XFilter Core Capabilities

### High-Throughput Decapsulation

The Ixia xFilter strips the headers from tunneled traffic coming from any tap or other source, thus enabling unobstructed visibility. It then decapsulates this traffic and reassembles fragmented packets for auditing and inspection in their raw form.

### Packet Forwarding

After decapsulation, and header removal, the xFilter forwards packets to an egress port (and optionally a VLAN), as determined by the forwarding rules.

### Versatile Multi-Protocol Packet Brokering and Manipulation

- MPLS stripping with packet forwarding: strips and removes MPLS headers as well as supports removal of 2, 4, and 6 stacked labels.
- VN-Tag stripping with Packet Forwarding: can be configured to remove VN-Tag headers from captured packets.
- VN-Tag mapping: maps virtual interface IDs of VN-Tag headers into VLAN IDs.
- Cisco FabricPath header stripping: decapsulates and strips Cisco FabricPath headers.
- VLAN tagging: enables streamlining of packets moving between switches by inserting a packet header to identify the packet's VLAN destination.

- Packet filtering: tightly controls access by analyzing packets and allowing them to pass or not, based on defined criteria.
- BGP-based IP filters: eliminates device-peering with BGP routers to simplify function and raise performance.
- Support for up to 5000 egress filters: offers unprecedented flexibility.
- GRE stripping: removes and strips outer IP and GRE headers.

## Key Features

- Serves as physical or virtual appliance to be deployed in all areas of the converged data center
- Supports high-throughput monitoring of all traffic
- Delivers overall capacity of up to 120 Gbps in 1U rack-mount appliance
- Decapsulates tunneled traffic at 10 Gbps per physical port
- Makes possible up to 12 network plus 12 monitor connections with simplex cables (RX fiber for network, TX for tool)
- Seamlessly integrates with Ixia Phantom VTap
- Handles fragmentation and defragmentation of packets
- Designed to fully complement Phantom Virtualization Tap GRE.
- Supports ERSPAN stripping.
- Easily integrates with Ixia Director, Ixia Director xStream and Ixia xBalancer
- Optimized for use with all Ixia taps
- Improves network visibility and security
- Maximizes threat management in monitored environments
- Reduces packet payload overhead before it reaches instrumentation layer tools

## Specifications

Specifications	
Functional	<ul style="list-style-type: none"> <li>• Purpose: decapsulates tunneled traffic for extraction and transport of packets to monitoring switch or tool. Advanced header manipulations for visibility of raw packets.</li> <li>• Tunneling protocol: MPLS, GRE, R-SPAN, ER-SPAN, PPPoE, Fabric PATH, VX-LAN, LTE/GTP</li> <li>• Fragmentation: automatic defragmentation</li> <li>• Throughput: up to 120 Gbps</li> <li>• Device management: direct (SSH), Ixia Director management is separate</li> </ul>

Operating	<ul style="list-style-type: none"> <li>• Operating temperature: 0°C to 35°C</li> <li>• Storage temperature: -10°C to 70°C</li> <li>• Relative humidity: 10% min, 95% max, non-condensing</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>• Dimensions: 1.75" high x 23.5" deep x 19" wide</li> <li>• Mounting: 19" rack mount (1U)</li> <li>• Weight: 26 lbs (11.8kg)</li> </ul>
Ports	<ul style="list-style-type: none"> <li>• Up to (12) 10 Gbps XR (SR transceivers optional)</li> <li>• Management: 100 Mbps RJ-45</li> <li>• Console: RS-232 serial DB9</li> </ul>
Electrical	<ul style="list-style-type: none"> <li>• Power: 100-240VAC, 47-63Hz 650W PFC</li> <li>• Redundancy: dual modules</li> <li>• Maintenance: power supplies are hot-swappable</li> </ul>
Indicators	<ul style="list-style-type: none"> <li>• Power, disk activity, network 1 activity, network 2 activity, over-temperature warning</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>• FCC, CE, VCCI, and C-Tick certified</li> <li>• Fully RoHS and WEEE compliant</li> </ul>
System Requirements	<ul style="list-style-type: none"> <li>• Ixia Phantom vTap or other source of tunneled traffic</li> </ul>

## Ordering Information

### XFX-600

xFilter Appliance, 6-port 10GBase-XR

### XFX-1200

xFilter Appliance, 12-port 10GBase-XR

### XFX-VA

xFilter, Virtual Appliance

All products require an advanced replacement service plan.

Service plans with 1 to 5 years coverage are available.

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