DATA SHEET

# iBypass VHD

## Very-High-Density, Modular Bypass Platform

## Problem: Inline Tools are a Single Point of Failure in the Network

Today's organizations are facing a triad of network concerns: the increasing volume of multiprotocol traffic at higher data rates, mounting security threats, and a strict regulatory environment. Deploying inline tools to inspect and control network traffic can help block incoming threats, but inline tools also complicate network operations—the more tools you deploy, the more potential points of failure. And in the event an inline tool becomes unavailable, it can completely bring down the network link, significantly compromising network uptime and disrupting business continuity.

## Solution: Increase Network Uptime with a Very-High-Density, Flexible Bypass Platform

Get fail-safe inline protection for all network monitoring tools with Ixia's very-high-density bypass switch, iBypass VHD. You'll improve overall network reliability, increase application availability, and add the convenience and cost savings of remote monitoring and control—all important requirements for any enterprise deployment. iBypass VHD provides built-in tap, regeneration, and aggregation functions and the following unique capabilities:

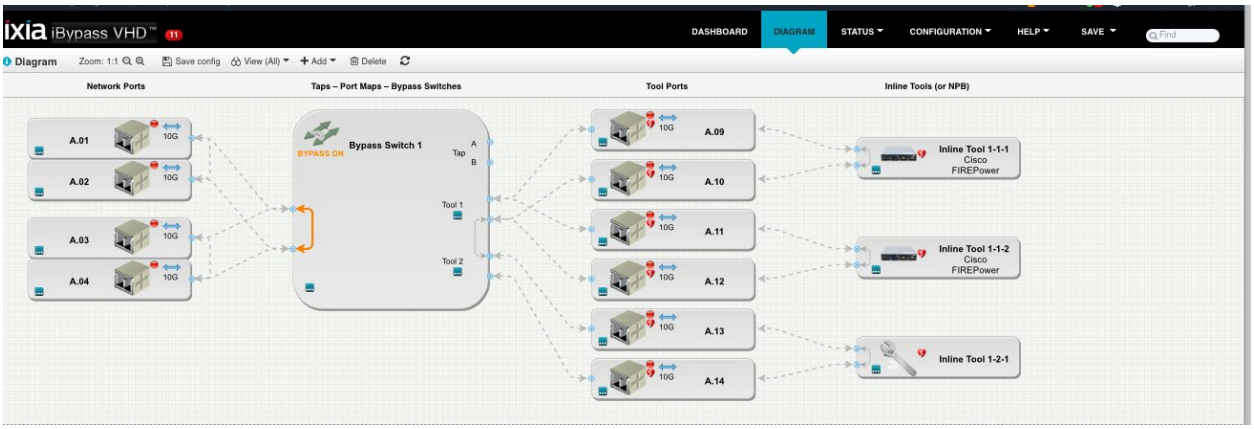
- **Preconfigured Heartbeats**—Preconfigured to work with security tools through a single click, reducing setup times and eliminating potential errors during deployment. Ixia is the only bypass switch vendor with preset, integrated security tool heartbeats built into the user interface.
- **Central Management Support**—Ixia Fabric Controller Centralized Manager (IFCCM) (formally Indigo Pro), the only central management tool for bypass switches, simplifies and speeds iBypass VHD configuration and management of tens to hundreds of devices. This is a necessary requirement for any large-scale deployment and is available for all Ixia iBypass switches.



- Only vendor with a central management tool, IFCCM, to control bypass switches—enables large-scale bypass switch deployments
- Maximize valuable data center real estate with 1U modular chassis that supports up to 12 bypass switches
- Efficiently use one bypass for mixed environment deployments
- Support unique deployment needs with licensable features—from tapping, aggregation, regeneration, to bypass switching

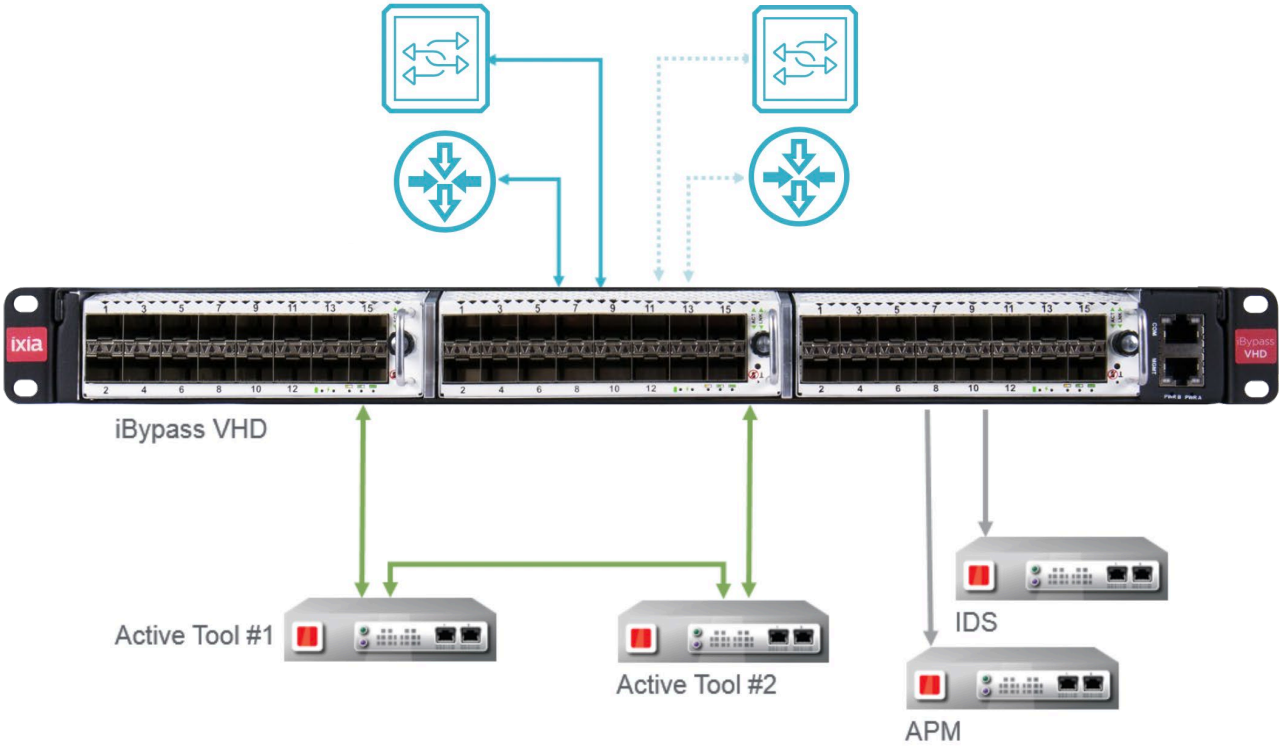
KEYSIGHT TECHNOLOGIES

- **Very High Density**—Highest density 10G bypass switch, supporting up to 12 x 10G/1G bypass switches in 1U. This maximizes valuable data center real estate, reducing rack cost for large-scale deployments.
- **Redundant or Serial Active Tool Support**—Manage multiple active or redundant security tools in a single device, which is critical for more resilient architectures and required by many organizations. Ixia is the only vendor supporting active-standby and active-active network/security architectures.
- **Easy-to-Use Web Interface**—The most powerful and simple user interface of any bypass switch. Drag-and-drop functionality coupled with intuitive presets, significantly reduces setup time and lowers ongoing support costs.




## Key features:

- **Fail Safe**—Fail-to-wire network port architecture, ensures that traffic is not interrupted by a bypass switch power failure
- **Improved Optical Performance**—Unique bypass functionality allows fiber runs to extend further while guaranteeing link and packet integrity
- **Multi-Function Hardware**—Built-in tap, regeneration, and aggregation capability provide the ability to feed out-of-band tools
- **Mix and Match Module**—SFP+ bypass modules can be configured as 10GE or 1GE; each card can be set independent of other installed modules
- **Redundant Power**—In-built hot-swappable power supplies are field replaceable and redundant; available in AC and DC variants
- **Modular Design**—Compact 1U design supports up to 3 modules per chassis capable of deploying 4, 8, or 12 bypass switches
- **Link Fault Detect Cascade (LFDC)**—An option to link down tool ports when the network ports are down




iBypass VHD flexibility example: with a failover network connection configured, iBypass VHD passes the traffic from a single network link to two serial inline tools and creates copies of the same traffic that is regenerated to two additional out-of-band tools.

## Specifications

| Key Features | Power for iBypass VHD Chassis |
|---|---|
| • 1U Inline Bypass Appliance – 1G or 10G<br>• Inline or out-of-band deployment<br>• Full line-rate across all ports<br>• Fail-safe bypass, tap, aggregation, or regeneration operation<br>• Tool Watch enabled | • Dual AC power supplies<br>• Operating input voltage: 100 to 200 VAC<br>• AC Input: 100-240VAC, 5.29-2.2A, 50/60Hz<br>• DC Input: -40VDC nominal -40 to -72VDC, 13.9A<br>• Power dissipation for fully populated unit at 100% traffic load: maximum 520W / 1,775 BTU/hour |
| **Management** | **Operating Environment** |
| • Serial console interface<br>• Remote management Ethernet interfaces<br>• LED indicators on each Interface Module for Link, Activity, and Battery Status<br>• Software upgradeable via FTP, SFTP or SCP | • Temperature<br>• Operating: 5°C to 40°C<br>• Storage: -20°C to 75°C<br>• Humidity<br>• Operating: 10% to 85%, (non-condensing) |
| **Physical Specifications** | |
| • 1U-high 19” chassis<br>• Dimensions: 19.0W x 22.5L x 1.72H (inches)<br>• Unit Weight: 16 lbs (7.26 kg)<br>• Packaged Weight: 41 lbs (18.6 kg) | |

## Supported Ixia Transceivers

| Ixia Transceiver | Speed | Medium | Fiber Type |
|---|---|---|---|
| SFPKT-GCU, SFPKT-GCU-LOS | 1G | Copper | N/A |
| SFPKT-LX | 1G | Fiber | Single Mode |
| SFP-SX-I-XCVR-T<br>SFPKT-SX<br>SFPKT-50SX | 1G | Fiber | Multi-Mode |
| SFP-PLUS-LR-XCVR-T<br>SFP-PLUS-KT-LR | 10G | Fiber | Single Mode |
| SFP-PLUS-SR-XCVR-T<br>SFP-PLUS-KT-SR | 10G | Fiber | Multi-Mode |

## Ordering Information

**IBPVHD-CH-AC / IBPVHD-CH-DC**

iBypass VHD, 3 slot modular chassis with one iBypass Module (IM-21-BYP), either AC or DC power

**IM-21-BYP**

iBypass Module, (16) SFP+ Port and Bypass Battery, includes Port, Tap, and Bypass license entitlements

**IBPVHD-FAN**

Replacement Fan for iBypass VHD modular chassis

**IBPVHD-BLANK**

Blank module filler plate for iBypass VHD modular chassis

**IBPVHD-PWR-AC / IBPVHD-PWR-DC**

Replacement AC or DC Power Supply for iBypass VHD modular chassis

**IM-21-BATT**

Replacement Battery for a single IM-21 Module

## Learn more at: www.keysight.com

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