

Ixia iBypass HD

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 High-Density Bypass Platform

Get fail-safe inline protection for all network monitoring tools with Ixia's high-density bypass switch, iBypass HD. 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.



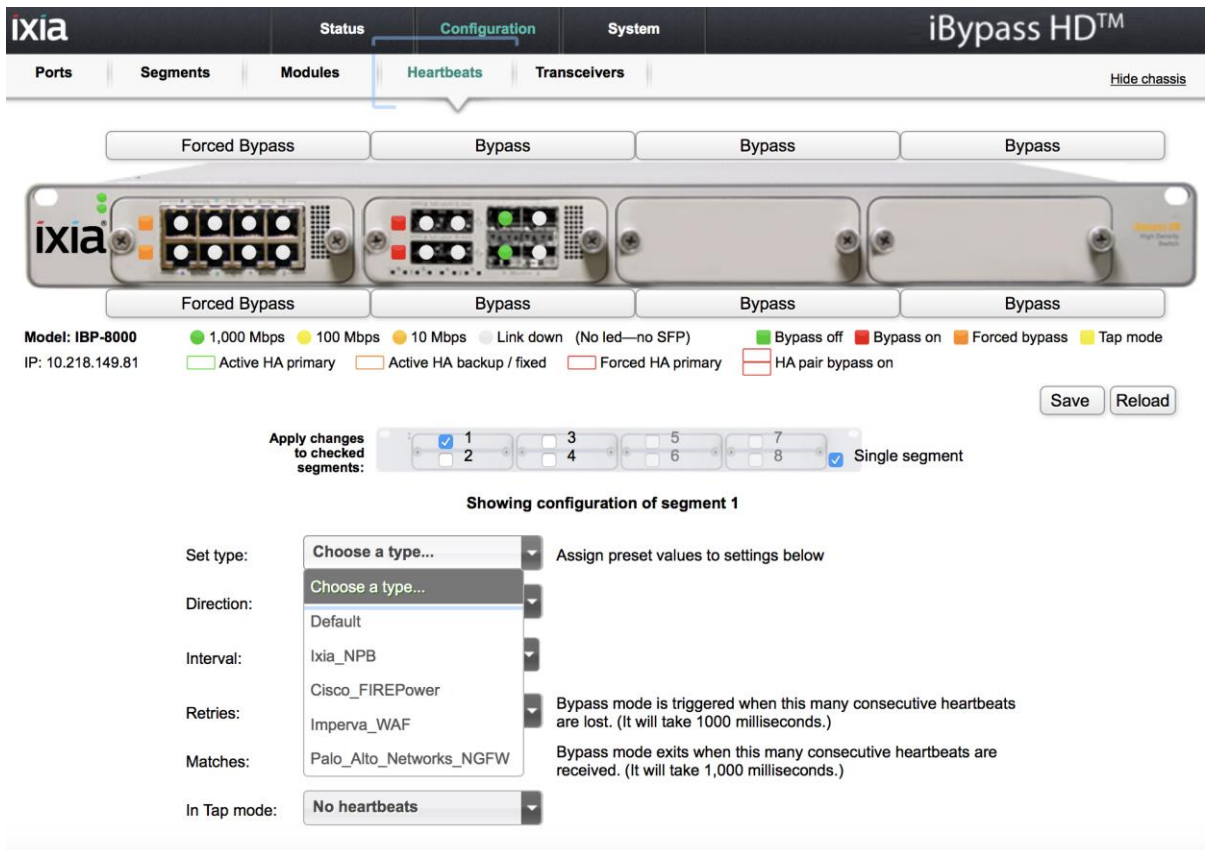
iBypass HD: fail-safe protection for your inline security tools

iBypass HD provides built-in tap and bypass 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. The total number of heartbeat retries and their frequency can be fully configured.



- **Reduces setup times and eliminates potential errors**—Preconfigured multi-vendor security tool heartbeats
- **Increases reliability**—Adds fail-safe inline protection to critical network links
- **Minimizes traffic interruption**—High-speed forwarding
- **Ensures monitoring uptime**—Failover mode and redundant power
- **Saves maintenance costs**—Modular, field replaceable power supplies and fans
- **Supports easy installation and operation**—Front-mounted connectors
- **Optimizes rack space**—High-density 1U rack enclosure with slide rails



- **Central Management Support** – Ixia’s Indigo Pro, the only central management tool for bypass switches, simplifies and speeds iBypass HD 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.
- **High Density** – High-density 1G bypass switch, supporting up to 8 x 1G bypass switches in 1U. This maximizes valuable data center real estate, reducing rack cost for large-scale deployments.
- **Link Fault Detect (LFD)** – An option to mirror the status of network links across the device. Ensures that network link failures are readily detected by communications equipment connected to the iBypass HD.
- **Media Choice** – Modular basis allows support of a mix of Copper, and Fiber (1Gbps) networks and tools.
- **RMON Statistics** – For utilization, total bytes, total packets, jumbo packets and CRC errors.
- **SNMP** – SNMP V1, V2 and V3 are supported to allow integration with 3rd party network management and ticketing systems.
- **TAP Mode** – iBypass HD can operate each segment in tap mode – allowing the switch to passively monitor a network link without putting the security tool “In-line”.
- **TACACS+/Radius** – Support for AAA servers for additional security.
- **Redundant or Active/Standby Tool Support** - Manage multiple or redundant security tools in a single device, which is critical for more resilient architectures and required by many organizations.

Centralized Management

The iBypass is integrated into the Ixia Fabric Controller Centralized Manager (IFCCM) [Ex. Indigo Pro] which is a highly versatile tool for managing and monitoring the multitude of Ixia devices from a single screen. The easy-to-use graphical user interface makes configuring and upgrading multiple iBypass switches simple.

The screenshot displays the Ixia iBypass HD configuration interface. At the top, there are navigation tabs for 'Ports', 'Segments', 'Modules', 'Heartbeats', and 'Transceivers'. The 'Modules' tab is active, showing a graphical representation of the device with four modules labeled 'Forced Bypass' and 'Bypass'. Below this is a legend for various status indicators: 1,000 Mbps (green), 100 Mbps (yellow), 10 Mbps (orange), Link down (grey), Bypass off (green), Bypass on (red), Forced bypass (orange), Tap mode (yellow), Active HA primary (green), Active HA backup / fixed (orange), Forced HA primary (red), and HA pair bypass on (red). A 'Save' and 'Reload' button is present. Below the legend is a section for 'Apply changes to checked segments' with a grid of checkboxes for segments 1 through 8, and a note 'Select one module at a time'. Further down, there are settings for 'Module power' (set to 'On') and 'High Availability configuration' (HA mode: 'Tool redundancy only', Primary link: 'Link 1', Primary tool: 'Tool 1'). At the bottom, the software version 'ibp_040202_20170526', copyright '© 2016 Ixia. All rights reserved.', and model number 'IBP-8000-312316' are displayed.

Specifications

Key Features	Power for iBypass HD Chassis
<ul style="list-style-type: none"> • 1U inline bypass appliance • Inline or out-of-band deployment • Full line-rate across all ports • Fail-safe bypass, tap, aggregation, or regeneration operation • Tool Watch enabled 	<ul style="list-style-type: none"> • Dual AC power supplies • AC input: 100-240VAC, 1.45A, 50/60Hz • DC input: -48VDC nominal -36 to -72VDC, 4.0A • Power Dissipation – 1365 BTU/Hr 400W (fully populated)
Management	Operating Environment
<ul style="list-style-type: none"> • Serial console interface • Remote management Ethernet interfaces • LED indicators on each Interface Module for Link and Activity • Software upgradeable via FTP 	<p>Temperature</p> <ul style="list-style-type: none"> • Operating: 0°C to 40°C • Storage: -10°C to 70°C <p>Humidity</p> <ul style="list-style-type: none"> • Operating: 10% to 95%, (non-condensing)
Physical Specifications	Copper Bypass Module (DBM-100)
<ul style="list-style-type: none"> • 1U-high 19" chassis • Dimensions: 19.0W x 27.0L x 1.75H (inches) • Unit weight: 16.5 lbs (7.4 kg) 	<ul style="list-style-type: none"> • Network ports: 4 x RJ45 (10/100/1000Mbps) • Monitor ports: 4 x RJ45 (10/100/1000Mbps)
Fiber Bypass Module (DBM-2XX, DBM-300)	
<p>Multimode</p> <ul style="list-style-type: none"> • 50µm or 62.5µm, 850nm wavelength • Insertion loss: <ul style="list-style-type: none"> ◦ Network port: 1.25 dB ◦ Monitoring port: 1.25 dB 	<p>Single Mode</p> <ul style="list-style-type: none"> • 8.5µm, 1310nm wavelength • Insertion loss: <ul style="list-style-type: none"> ◦ Network port: 1.25 dB ◦ Monitoring port: 1.25 dB

Ordering Information

IBP-8000

iBypass HD, 4 Slot Modular Chassis, AC Power

IBP-8000-DC

iBypass HD, 4 Slot Modular Chassis, DC Power

DBM-100

Dual Bypass Module, Copper, 10/100/1000Mbps, RJ45 Ports

DBM-200

Dual Bypass Module, Fiber, 1GE, Multimode, 62.5um, SFP Monitor Ports

DBM-250

Dual Bypass Module, Fiber, 1GE, Multimode, 50um, SFP Monitor Ports

DBM-300

Dual Bypass Module, Fiber, 1GE, Single Mode, 8.5um, SFP Monitor Ports

Compatible Transceivers

Part Number	Description
SFPKT-GCU	1G SFP Copper Transceiver Kit (955-8128) (SFPKT-GCU)
SFPKT-SX	1G SFP Transceiver Kit 850nm, 62.5 um (955-8130) (SFPKT-SX)
SFPKT-50SX	1G SFP Transceiver Kit 850nm, 50 um (955-8125) (SFPKT-50SX)
SFPKT-LX	1G SFP Transceiver Kit 1310nm, 8.5 um (955-8129) (SFPKT-LX)

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