

IXIA IBYPASS 3

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 iBypass 3 Copper. 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 3 Copper - provides built-in tap and bypass functions and the following capabilities:

- **Preconfigured Heartbeats** - Connect 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.
- **Standalone Architecture** - Each bypass switch operates off its own power and management. This improves resiliency by isolating each bypass from the events of the other bypass switches.
- **High Density** - High-density 1G copper bypass switch, supporting up to 8 x 1G copper 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 VHD

HIGHLIGHTS

- **Reduce setup times and eliminate potential errors** with preconfigured multi-vendor security tool heartbeats
- **Increase reliability** by adding fail-safe inline protection to critical network links
- **Minimize traffic interruption** with high-speed forwarding
- **Save on maintenance costs** with field replaceable power supplies
- **Optimize rack space** using a high-density 1U rackmount



- **Link Fault Detect Cascade (LFDC)** - An option to link down tool ports when the network ports are down. This allows security tools to immediately recognise they are no longer connected to a live network.
- **Heartbeat Settings** – Heartbeats frequency can be set down to 1 mSec and the number of ‘missed’ heartbeats can be varied.
- **Easy to Use GUI** – Easy to use GUI simplifies set up and avoids configuration errors.
- **SNMP Traps** – V2 and V3 SNMP supported for the notification of status changes.
- **CLI/SSH Supported.**
- **Traffic Statistics** – Full range of traffic statistics are available.
- **Operational Modes** – iBypass 3 supports the following modes:
 - **TAP** – In this mode the iBypass 3 operates as a duplex breakout Tap, copying the traffic received at Network Port A to Monitor Port 1, and traffic received at Network Port B to Monitor Port 2.
 - **FAIL OPEN** - When the number of Heartbeat retries is exceeded, monitor link is brought down, and traffic is routed through the network ports.
 - **FAIL CLOSE** - With this mode, when the heartbeat packet is not detected on either monitor ports, network ports are disabled. Network ports are enabled after the in-line device has responded to the heartbeat.
 - **FORCE BYPASS OFF** - This mode ensures that network traffic flows uninterruptedly to monitor ports back and forth regardless of Heartbeat status.
 - **FORCE BYPASS ON-OPEN** - In this mode the device is forced into bypass mode regardless of the heartbeat status. This mode allows users to intentionally bypass the connected tool, for example to upgrade the tool’s software without interruption to network traffic.
 - **FORCE BYPASS ON-CLOSED** - This mode instructs the system to not let traffic ingress port A nor ingress port B. This mode allows users to intentionally stop network traffic while traffic cannot be inspected by the connected tool, for example to upgrade or otherwise maintain the tool’s software.

Example Screen Shots

Dashboard

The dashboard shows a network diagram with a central 'Bypass Switch' connected to 'Network Port A' and 'Network Port B' on the left, and 'Port 1' and 'Port 2' on the right. An 'Inline Tool' is connected to the right side. Below the diagram is a 'Device Information' table:

Device Information	
Model	I3BP-CU3: iBypass 3 Copper
Serial Number	301393
MAC Address	68:C9:0B:2C:6C:7F
IP Version	IPv4
IP Address	10.215.116.239
Netmask	255.255.254.0
Date	2017-07-03 12:27:26

Configuration Screen

The configuration screen is divided into several sections:

- Network:** IP Version (IPv4), DHCP (DHCP), IP Address (10.9.151.154), Netmask (255.255.255.0), Default GW (10.9.151.1). Action: Apply, Reboot.
- System:** Link Fault Detect (On), Link Fault Detect - Cascade (On), Monitor Ports (Enable), Network Ports (Enable), Bypass Mode (TAP). Action: Apply.
- TIME:** Set Date Time (YYYY-MM-DD HH:MM). Action: Apply.
- Ports:** Utilization Threshold (80), Port Speed (Auto), Port Duplex (Full). Action: Apply.
- Heartbeat:** PORT 1 and PORT 2 settings for Type, Interval, Retries, and Packet. Action: Apply.

SPECIFICATIONS

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Operating	<p>Operating:</p> <ul style="list-style-type: none"> Operating Temperature: 0°C to 40°C Relative Humidity: 10% min, 95% max, non-condensing <p>Non-Operating:</p> <ul style="list-style-type: none"> Non-Operating Storage Temperature: -10°C to 70°C Relative Humidity: 10% min, 95% max, non-condensing
Mechanical	<ul style="list-style-type: none"> Dimensions: 0.9" high x 9.4" deep x 4" wide Weight: 0.73lbs (0.33kg)
Connectors	<ul style="list-style-type: none"> Monitoring Ports: (2) RJ45, 8-pin connectors Network Ports: (2) RJ45, 8-pin connectors
Power Supply	<ul style="list-style-type: none"> AC Power Input: 100-240VAC, 47-63Hz, 0.3A@120VAC Output: 1.5A @ 12VDC Power Dissipation 65 BTU/Hr 19W
Certifications	<ul style="list-style-type: none"> Safety: UL 60950, cUL 60950, CE, CB Emissions and Immunity: FCC, EN, ICES-003 Class A Environmental: RoHS, WEEE, Fully IEEE 802.3 compliant

ORDERING INFORMATION

I3BP-CU3

iBypass 3, Copper, 10/100/1000Mbps

RK-8V2

Eight-Slot Rack Mount Frame

PWR12-350

Power Chassis, AC Input, 1U, 350W, Supplies 12 Taps or iBypass 3s

PWR12-350-DC

Power Chassis, -48V Input, 1U, 350W, Supplies 12 Taps or iBypass 3s

**IXIA WORLDWIDE
HEADQUARTERS**

26601 AGOURA RD.
CALABASAS, CA 91302

(TOLL FREE NORTH AMERICA)

1.877.367.4942

(OUTSIDE NORTH AMERICA)

+1.818.871.1800
(FAX) 818.871.1805

www.ixiacom.com

**IXIA EUROPEAN
HEADQUARTERS**

IXIA TECHNOLOGIES EUROPE LTD
CLARION HOUSE, NORREYS DRIVE
MAIDENHEAD SL6 4FL
UNITED KINGDOM

SALES +44.1628.408750

(FAX) +44.1628.639916

**IXIA ASIA PACIFIC
HEADQUARTERS**

101 THOMSON ROAD,
#29-04/05 UNITED SQUARE,
SINGAPORE 307591

SALES +65.6332.0125

(FAX) +65.6332.0127