

# Ixia iBypass 1Gb

Ixia iBypass 1Gb switch with Heartbeat technology protects against power, link, and application loss. The iBypass switch features remote interfaces that allow remote switching and provide access to baseline traffic statistics, including utilization levels from anywhere in the network.

## Heartbeat Technology

The configurable heartbeat feature verifies that traffic is moving through the attached IPS appliance by sending packets through the appliance. If you disconnect the appliance, heartbeat packets do not return from it and the switch automatically enters Bypass Enabled Mode. Now the switch maintains power but sends network traffic flows around the appliance until it detects another heartbeat from the appliance.

## Seeing is Believing

The display and alarm LEDs provide a quick visual check that the utilization levels are not exceeding the capacity of the monitoring device or a pre-determined threshold. From the display, you can view the current bandwidth utilization of each side of a full-duplex link with the size and time of the highest peak. A quick check of the display lets you know if there was an event that requires further investigation. After taking action on a utilization or peak event, you can reset the data from a recessed reset button on the front panel or from a remote interface. The iBypass switch is ready to detect and display the next critical event.

## Highlights

- Secure monitoring with any in-line appliance
- Protect against downtime due to power, link, and application failure
- Maintain link integrity during IPS redeployments and upgrades
- Graphical representation of link status and monitor port connections
- LEDs show power, speed, link and activity status
- Disable remote interfaces from a password-protected command line interface
- Control all iBypass switches in your enterprise with easy-to-use GUIs
- Web Manager offers complete user interface on one page
- System Manager gives control and access to multiple iBypass switches
- Compatible with third-party SNMP management tools
- Redundant power ensures monitoring uptime
- Tested and compatible with all major manufacturers' intrusion detection and prevention systems



## Remote Control

The iBypass switch Web Manager and System Manager allow you to remotely set parameters, view status information, and monitor traffic statistical data. These interfaces provide security and performance information such as the number of over- and under-sized packets, packet collisions, and CRC errors. You can remotely set the alarm thresholds, clear the traffic data counters, and turn on or off a Monitor Port. This access is also available via an optional wireless link from your wireless PDA or laptop.

The Web Manager is a browser-based interface accessible from any PC with a browser and access to the iBypass switch's IP address. System Manager is an SNMP-based management interface. Once you have configured the iBypass switch and set the desired connections, you can disable the remote interfaces from the RS232 command line interface (CLI).

## Web Manager

Web Manager allows you to change settings, view status, and change port connections with simple-to-use controls. When you access an iBypass switch with Web Manager, all configuration, status, and port connection information is displayed on a single page. Changes to the configuration can be made with a few clicks of the mouse.



The iBypass Switch is available in both fiber (shown here) and copper

## System Manager

Ixia System Manager is an SNMP management tool that offers central management of all Ixia iBypass switches in the network. iBypass switches can be organized into groups according to workgroup, location, or any other criteria. As with Web Manager, you can view status information and change configuration options. iBypass switches can be fully accessed with third-party SNMP management tools after loading Ixia's Management Information Base (MIB) file.

## Uninterrupted Traffic

The iBypass switch supports fail-open monitoring with any in-line device when it shares the same power source as the in-line appliance. For as long as the iBypass switch is receiving power, it diverts network traffic to attached in-line devices. In this state, all in-line traffic is routed directly to the device connected to the iBypass switch. When power is lost, Fast Path maintains network link integrity with high-speed switching. When the iBypass switch loses power, in-line traffic continues to flow through the network link, but is no longer routed through the device. This allows the network device to be removed and replaced without network downtime. Once power is restored to the iBypass switch, network traffic is seamlessly diverted to the in-line device, allowing it to resume its critical functions.

## Specifications

Electrical	
Power Input	100-240VAC, 0.5A, 47-63Hz
Power Output	12V, 1.5A
Environmental	
Operating Temperature	0°C to 40°C
Storage Temperature	-10°C to 70°C
Relative Humidity	10% min, 95% max, non-condensing
Optical Interface	
Fiber Cable Type	Corning Multimode 62.5/125µm, 850nm
Transceiver Specifications	1. Gigabit SX 850nm, VCSEL, supports 62.5/125µm 2. Gigabit LX 1310nm, VCSEL, supports 9/125µm
Insertion Loss	< 4.5dB
Monitor Port Output Power	-9.5 dBm
Split Ratio	50/50
Link Distance Supported	220 meters
Copper Interface	
Copper Cable Type	22-24 AWG unshielded twisted pair cable, CAT5e
Link Distance Supported	100 meters (includes network and monitor segments)
Connectors	
10/100/1000BaseT iBypass Switch	<ul style="list-style-type: none"> <li>• (1) RJ45, 8-pin connector (management port)</li> <li>• (2) RJ45, 8-pin connectors (monitor ports)</li> <li>• (2) RJ45, 8-pin connectors (network ports)</li> <li>• (2) DB9 serial control interfaces</li> </ul>

GigaBit SX/LX iBypass Switch	<ul style="list-style-type: none"> <li>• (1) RJ45, 8-pin connector (management port)</li> <li>• (2) SFP monitor ports</li> <li>• (2) Duplex LC connectors (network ports)</li> <li>• (2) DB9 serial control interfaces</li> </ul>
Indicators	
<ul style="list-style-type: none"> <li>• (1) 2x16 Character LCD (3 or 8) Link LEDs</li> <li>• (2) Threshold Alarm LEDs</li> <li>• (2) Power LEDs</li> </ul>	
Software	
Command Line Interface	Any terminal emulation software
iBypass Web Manager	Any browser
iBypass System Manager	Windows 98, Windows 2000, Windows XP
Certifications	
Fully RoHS compliant	

## Ordering Information

**IBP-HBCU3** 10/100/1000BaseT iBypass Switch

**IBPO-HBSX-SFP** Gigabit Fiber SX SFP iBypass Switch

**IBPO-HBLX-SFP** Gigabit Fiber LX SFP iBypass Switch

Learn more at: [www.keysight.com](http://www.keysight.com)

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: [www.keysight.com/find/contactus](http://www.keysight.com/find/contactus)

