

IXIA IBYPASS 10GB

DATA SHEET

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 10G. 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 10G provides built-in tap and bypass functions and the following unique capabilities:



- **Smart Management** - The iBypass 10G is a fully managed device and allows the user to view and change settings through a CLI, user-friendly Web UI, and SNMP browsers.
- **Security** - CLI/SSH, HTTPS and SNMP V3 and V2.
- **Customizable and Pre-programmed Heartbeats** - Each bypass switch enables users to create and customize heartbeats right in the Web Interface.

HIGHLIGHTS

- **Reduce setup times** with configurable Heartbeats in the Web UI
- **Increase reliability** by adding fail-safe inline protection to critical network links
- **Remote management** through SSH, Web Interface (HTTPS) and SNMP Browsers
- **Field upgradable software** and firmware
- **View size and time** of the peak traffic
- **View status** for power, link, activity, and activity status
- **Bi-directional Heartbeats**
- **Minimize traffic interruption** with high-speed forwarding
- **Save on maintenance costs** with field replaceable power supplies
- **Optimize rack space** using 1U rack mount for two bypass switches

AUTOMATIC PROTECTION AND RECOVERY

The iBypass 10G switch continuously checks the responsiveness of the inline tool by sending it “heartbeat” packets, expecting to receive those packets back. If the iBypass 10G detects that the tool is not responding, it will bypass the inline tool, allowing network traffic to flow without interruption. Should that happen, the iBypass 10G will also issue an alert to indicate that the tool became unavailable, allowing network or security personnel to take appropriate actions.

The iBypass 10G will continue to send heartbeat packets to the inline tool even after the tool stopped responding. As soon as the tool becomes operational again, the iBypass 10G will re-route traffic back through the tool to ensure that the tool is continuing to monitor and/or protect the network.

SMART MANAGEMENT

The iBypass 10G is a fully managed device and allows the user to view and change settings through a Command Line Interface, a user- friendly Web UI, and SNMP browsers. Remote management security is provided through Role Based User Access, 1024-bit SSL encryption, HTTPS, SNMP, SSH, and an IP Access List to prevent unwanted access to management interfaces. The iBypass 10G can be configured to disable access to each of the interfaces. In the event there are system, link, power, or threshold changes the iBypass 10G issues SNMP traps, that are directed to the desired management devices, set in any of the interfaces.

The iBypass 10G comes with different LED indicators for power, link, bypass status, and activity status. The LCD provides peak and real time network utilization information for both of the network ports enhancing local, on-site, device monitoring options.

The screenshot shows the web dashboard for the iXia iBypass 10G. At the top, there is a navigation bar with 'DASHBOARD', 'STATUS', and 'CONFIGURATION' tabs. The main content area displays a network topology diagram with a central 'System Switch' box showing 'Bypass State: On' and 'Bypass Mode: FAS-CLOSE'. It is connected to 'Network Port A' and 'Network Port B' on the left, and 'Port 1' and 'Port 2' on the right, which are in turn connected to a 'Palo Alto Networks M340' device. Below the diagram is a 'Device Information' table.

Device Information	
Model	IQDP-HDR-XFP: 10 GigaBit Fiber iBypass Switch with Heartbeat and XFP Monitor Ports
Serial Number	144444
MAC Address	C8:E7:3B:A1:9E:36
IP Version	IPv4
IP Address	10.219.118.126
Netmask	255.255.254.0
Date	2017-01-09 10:08:53

[Login Dashboard](#)

NETWORK INTELLIGENCE

The iBypass10G includes Remote Monitoring (RMON) statistics and Ixia ProPush™ statistics. ProPush statistics provide key network statistics every second. The combination of the many RMON and ProPush statistics provides great visibility into the network and allows integration with existing network management tools.

	PORT A		PORT B		PORT 1		PORT 2	
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx
Total Bytes	157,722,964,480	157,722,964,496	164,580,639,648	164,580,639,648	164,580,502,136	164,580,502,112	161,151,898,552	161,151,898,552
Total Pkts	2,464,421,326	2,464,421,320	2,571,572,497	2,571,572,491	2,571,570,342	2,571,570,348	2,517,998,418	2,517,998,418
Broadcast Pkts	0	0	0	0	0	0	0	0
Multicast Pkts	0	0	0	0	0	0	0	0
64 Byte Pkts	2,464,421,321	2,464,421,321	2,571,572,492	2,571,572,492	2,571,570,348	2,571,570,348	2,517,998,418	2,517,998,418
65-127 Byte Pkts	0	0	0	0	0	0	0	0
128-255 Byte Pkts	0	0	0	0	0	0	0	0
256-511 Byte Pkts	0	0	0	0	0	0	0	0
512-1023 Byte Pkts	0	0	0	0	0	0	0	0
1024-1518 Byte Pkts	0	0	0	0	0	0	0	0
1519-Max Byte Pkts	0	0	0	0	0	0	0	0
Undersized Pkts	0	0	0	0	0	0	0	0
Oversized Pkts	0	0	0	0	0	0	0	0
CRC Errs	0	0	0	0	0	0	0	0
Runt Errs	0	0	0	0	0	0	0	0
Fragment Errs	0	0	0	0	0	0	0	0
Reset Statistics	Reset		Reset		Reset		Reset	

RMON Display

	PORT A	PORT B	PORT 1	PORT 2
Port Peak Rate	96	90	91	90
Port Peak Time	2017-02-01 01:28:03	2017-02-01 02:42:32	2017-02-01 00:36:25	2017-02-01 00:33:19
Reset Peak Rate	Reset	Reset	Reset	Reset
Port Current Utilization	90	90	90	90
Port Rx Total Packets	1,607,231,332	1,714,380,064	1,714,380,187	1,553,657,063
Port Rx Total Bytes	102,862,805,248	109,720,323,928	109,720,331,976	99,434,051,840
Port Rx Broadcast Packets	0	0	0	0
Port Rx CRC Errors	0	0	0	0
Port Rx Undersized Packets	0	0	0	0
Port Rx Oversized Packets	0	0	0	0
Port Rx Dropped Packets	0	0	0	0
Port Tx Total Packets	1,607,231,339	1,714,380,058	1,714,380,188	1,553,657,061
Port Tx Total Bytes	102,862,805,064	109,720,323,936	109,720,332,040	99,434,051,752
Port Tx Broadcast Packets	0	0	0	0
Reset Statistics	Reset	Reset	Reset	Reset

Statistics Display

FLEXIBLE DEPLOYMENTS

Having an iBypass 10G deployed in front of inline tools provides greater deployment flexibility. When the inline tool needs to be taken out for maintenance the iBypass10G can be configured to bypass the inline tool and let network traffic flow uninterrupted. Once maintenance is complete, the iBypass10G can route traffic back through the upgraded tool.

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	<p>Dimensions: 1.125”high x 14”deep x 6.5”wide</p> <p>Weight: 2.26lbs (1.03kg)</p>
Connectors	<ul style="list-style-type: none"> • Monitoring Ports: 2 x XFP connectors • Network Ports: 1 x Quad LC connector
Insertion Loss (Power Failure ONLY)	<p>Multimode 50um OM3 & 62.5um 850nm:</p> <ul style="list-style-type: none"> • Network Port: 1.25 dB • Monitoring Port: 1.25dB <p>Single Mode 8.5um 1310nm:</p> <ul style="list-style-type: none"> • Network Port: 1.25 dB • Monitoring Port: 1.25dB
Power Supply	<p>AC Power Input: 100-240VAC, 47-63Hz, 1A@120VAC</p> <p>Output: 5A @ 12VDC</p> <ul style="list-style-type: none"> • Power Dissipation 103 BTU/Hr 30W
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

IBPO-HBSR-XFP

10 Gigabit SR iBypass Switch with Heartbeat

IBPO-HBLR-XFP

10 Gigabit LR iBypass Switch with Heartbeat

IBPO-HB50SR-XFP

10 Gigabit SR iBypass Switch with Heartbeat, 50µm

ACCESSORIES

RK-ITP2

Two-slot rack-mounted panel

XFPKT-SR

10 Gigabit Multimode Fiber XFP 62.5µm w/ cable

XFPKT-50SR

10 Gigabit Multimode Fiber XFP 50µm w/ cable

XFPKT-LR

10 Gigabit Singlemode Fiber XFP 1310nm w/ cable

XFPKT-ER

10 Gigabit Singlemode Fiber XFP 1550nm w/ cable

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