iBypass Copper
4th Generation 10/100/1000Mbps

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 reliable bypass platform

Get fail-safe inline protection for all network monitoring tools with Keysight's iBypass 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.

With a best in class GUI deploying, configuring, and operating all the bypass is streamlined and efficient.

Highlights

- Protects network availability when deploying inline tools
- Easy deployment with pre-configured heartbeat settings
- Simple to configure with best in class GUI and centralized management capability devices
- TAA Compliant
- Saves space: 4 units can be put in a single 1U rack
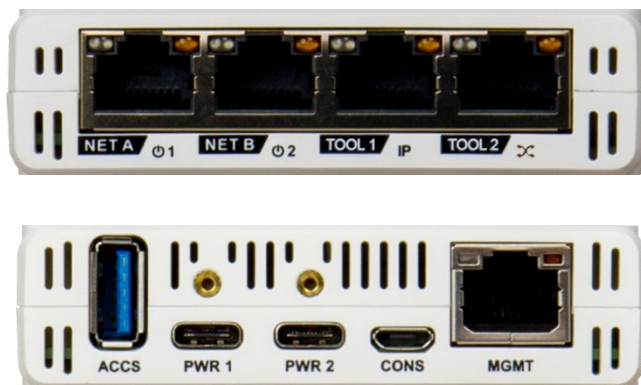
iBypass Copper Capabilities

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

1. **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.

2. **Standalone architecture –** Each bypass switch operates off its own power and management. This improves resiliency by isolating each bypass from other switches or network packet brokers.
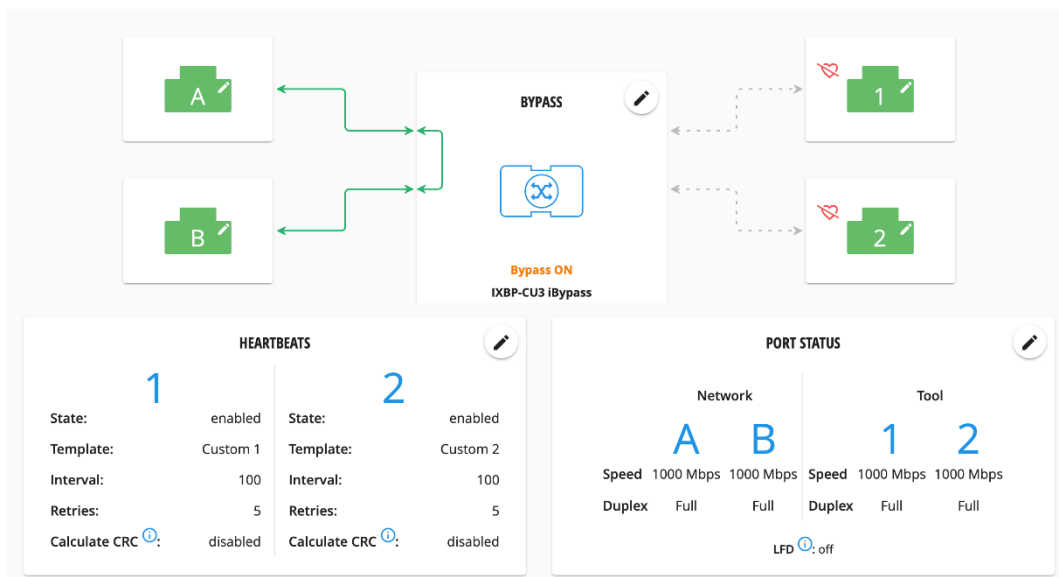
Dashboard view

Figure 1. iBypass copper dashboard

3. **Easy to use GUI –** Best in class GUI has dashboard view with configuration via point and click. Heartbeat and port status are available on a single screen, and a separate statistics page shows a variety of packet data counters for network and tool ports.

4. **NTP, SCP, and AAA support –** Setup system time using an NTP server. Use secure copy to transfer configuration or log files, and authenticate users via a AAA server.

5. **ALFD/LFD –** Link fault detect capability, both synchronous and asynchronous are available for users who want to maintain inline management capability at all times.

6. **Inline management mode –** When enabled allows the bypass to be managed through Network Port A.

7. **Operational mode** – iBypass Copper supports the following modes:

   a. **Fail open** – Taffic bypasses the tool when bypass is triggered on due to heartbeats lost or tool ports down.
   b. **Fail close** – Network Ports are linked down when bypass is triggered on due to heartbeats lost or tool ports down.
   c. **Force ON open** – Traffic permanently bypasses the tool irrespective of the state of the bypass. Can be used during planned maintenance of the tool device.
   d. **Force ON close** – This mode disables the network ports. 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.
   e. **Force Off** – This mode ensures that network traffic flows uninterruptedly to monitor ports back and forth regardless of heartbeat/tool port status.
   f. **Simple tap** – In this mode the iBypass Copper 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.
   g. **Aggregated tap** – Traffic from Network Port A is forwarded out Network Port B as well as both Tap Ports. Traffic from Network Port B is forwarded out Network Port A as well as both Tap Ports.

Key Specifications

Specification	Details
Operating	Operating Temp: • Operating temperature: 0 ºC to 40 ºC • Relative humidity: 10% min, 95% max, noncondensing Non-operating Temp: • Storage temperature: -10 ºC to 70 ºC • Relative humidity: 10% min, 95% max, noncondensing Power Consumption: • Max 12W
Mechanical	• Dimensions: 0.9" high x 5.8" deep x 3.25" wide • Weight: 0.73 lbs (0.33 kg)
Connectors	• Network ports: (2) RJ45, 8-pin connectors • Tool ports (2) RJ45, 8-pin connectors • Management port (1): RJ45, 8-pin connectors • Console port (1): 1 micro USB connector • ACCS port (1): 1 USB3.0 type A connector
Power Supply	• AC power input: 100-240VAC, 50-60 Hz, 0.5A Max • DC output: USB-C 5V @ 3A • Power dissipation less than 34 BTU/Hr 10W • 0.32 lbs per supply (2 supplies included per unit)
Certifications	• Safety, EMC, and environmental: IEC 60950- 1/62368-1, UL 60950-1/62368-1, CSA C22.2 No.60950-1/62368-1, CE (LVD, EMC, RoHS, WEEE), EN/IEC 55032, EN/IEC 55024, CFR 47, FCC Part 15B, ICES-003, CISPR 32/24

Ordering Information

Catalog part number	Product name
IXBP-CU3	Ixia, TAA compliant iBypass copper switch - 10/100/1000Mbps (956-0074)
RK-4IXCU3	Ixia TAA compliant. 1U, 4 slot rack mount for IXTP-CU3, IXTP-CU3, or IXPR-CU3. (955-8039)

Learn more at: 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

KEYSIGHT
TECHNOLOGIES