



40G iBypass Switch designed for fail-safe deployment

Net Optics 40G iBypass is an intelligent bypass switch that provides the inline tool it protection of the network links with inline deployments. The 40G iBypass augments network-monitoring capability through the use of microsecond resolution heartbeat packets, SNMP Traps, field upgradable software, and an easy-to-use Web UI.

Failsafe Inline Tool Deployment

Today's networks are delivering more services and carrying greater amounts of multi-protocol traffic at higher data rates. A single set of wires now carries data, voice and streaming video simultaneously. Increased security threats and tighter regulatory compliance requirements further complicate network operations. Monitoring tools and security tools need to be deployed inline to inspect every packet and block incoming threats before these threats affect the network and potentially disrupt business.

Deployment of any inline tool in the network carries the risk of the tool becoming a point of failure. Should the inline tool become unavailable it can bring the network link down, making a critical segment of the network unavailable and affecting uptime. To avoid this risk, customers need a fail-safe solution that can protect the network from tool failures while allowing inline tools to protect the network from incoming threats.

The 40G iBypass switch addresses this need by sitting in front of any inline security or monitoring tool and guaranteeing network availability. The iBypass switch essentially serves as a bridge between the network and the inline tool. It lets the inline tool inspect and control network traffic as needed while protecting the network from failures within the tool itself.

Automatic Protection and Recovery

The iBypass switch continuously checks the responsiveness of the inline tool by sending it "heartbeat" packets, expecting to receive those packets back. If the iBypass switch 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 switch will issue an alert to indicate that the tool became unavailable, allowing network or security personnel to take appropriate actions.

The iBypass switch 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 will re-route traffic back through the tool to ensure that the tool is continuing to monitor and/or protect the network.

Flexible deployments

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

Network Intelligence

The 40G iBypass includes Remote Monitoring (RMON) statistics and Net Optics 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.

Smart Management

The 40G iBypass is a fully managed device and allows the user to view and change settings through a user-friendly Web UI, CLI, and SNMP browsers. Remote management security is provided through Role Based User Access (RBAC), 1024-bit SSL encryption, HTTPS, SNMPV3, SSH V2, and an IP Access List and to prevent unwanted access to management interfaces the 40G iBypass can be configured to disable access to each of the interfaces. In the event there are system, link, power, or threshold changes the 40G iBypass issues SNMP traps that are directed to the desired management devices, set in any of the interfaces.

The 40G iBypass comes with different LED indicators for power, link, bypass status, and utilization threshold alarms. The LCD provides peak and real time network utilization information for both of the network ports enhancing local, on-site, device monitoring options.

Centralized Management

The 40G Bypass is integrated into the Net Optics Indigo Management Platform which is a highly versatile tool for managing and monitoring the multitude of Net Optics devices from a single screen. The easy-to- use graphical user interface makes configuring multiple 40G Bypass Switches simple.

At a Glance

- Protects network availability when deploying inline tools
- Forced Bypass, and Bypass Off (no auto-recovery)
- Full configuration access through the user-friendly Web interface, CLI, and SNMP V3 interface
- Remote management through SSH V2, Web Interface (HTTPS) and SNMP Browsers
- RMON Statistical Counters
- · Bi-directional Heartbeats
- SNMP V2c and SNMP V3 supported
- SNMP traps indicate status changes for system, link, power, and threshold
- Audit Logs collect user and system changes
- Field upgradable software and firmware
- Pro Push statistics

- Field-replaceable, hot-swappable fans and power supply
- View size and time of the peak traffic
- View status for power, link, activity, and utilization alarms
- Management and network cables included
- LCD display
- One micro-second Heartbeat resolution



Security Tool

Specifications

Operating

Operating Temperature: 0°C to 40°C Relative Humidity: 10% min, 95% max, non-condensing

Non-Operating

Storage Temperature: -10°C to 70°C Relative Humidity: 10% min, 95% max, non-condensing

Mechanical Dimensions: 1.724" high x 24" deep x 9.5" wide Weight: 2.25 lbs

Cable Interface Fiber Type Core Size: 50µm OM4; Wavelength: 850nm

Electrical AC Power Supply Input: 100-240VAC, 1A, 47-63Hz Output: 12V, 9A

Indicators

(2) Link / Activity LEDs (2) Threshold Alarm LEDs (2) Bypass State (2) Power LEDs (1) LCD

Management Interfaces

Serial Console: RJ45 Management: RJ45

Device Management

Web UI (HTTPS), Serial Console, SSHv2, SNMPv2c, SNMPv3, Remote Software Upgrades

Network/Monitor Interface Network Interface

2 x Multimode MTP 12 Fiber Adapters

Monitor Interface

2 x QSFP+ Cages

Certifications:

Fully RoHS compliant Regulatory Certifications: UL, CB, CE, FCC, VCCi

Part Number

12BP-40-SR-50-QSFP

iBypass Switch, Fiber, 40G, SR, 50µm, QSFP+ Cages



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