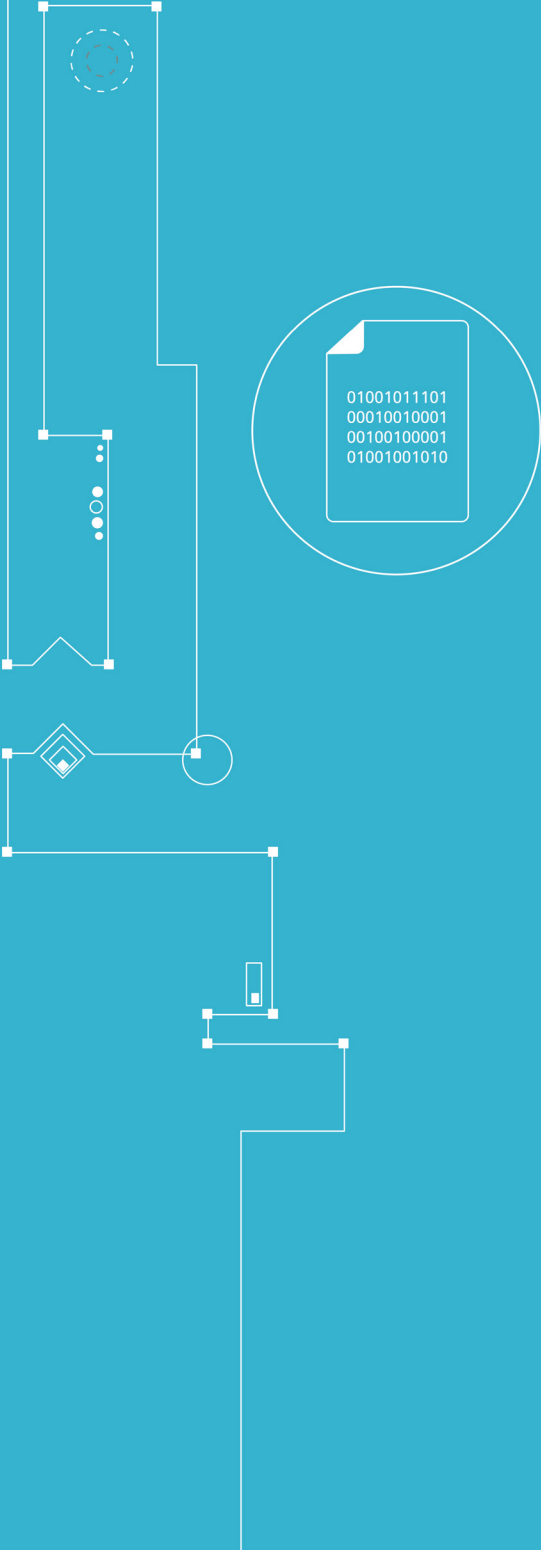




CUBRO
NETWORK VISIBILITY

CUBRO ADVANCED OPTICAL BYPASS 100/40GBIT

DATA SHEET



01001011101
00010010001
00100100001
01001001010

Bypass At a glance

Definition

A bypass switch (or bypass TAP) is a hardware device that provides a fail-safe access port for fiber links. A closed optical switch creates a path for light to flow unimpeded through the device when power is absent.

Advantages of Cubro Optical Bypass

- Increased reliability on critical network links
- High-speed optical switching with minimal insertion loss
- Fail-safe inline protection
- Safeguards the network against unanticipated downtime
- Link Loss Carry Forward function
- Simple management via CLI and WebUI

Product Overview



The advanced 100/40Gbit Bypass solution meets the increasing demand of high-speed network. The new Advanced Bypass is a better solution based on its Network Packet Broker technology and its affordable price. The new Bypass comes with self-generating heartbeat packets and therefore no driver or management port is required to generate pulses. The device supports up to two 100G Bypass segments in a 1U chassis.

Functions / Benefits:

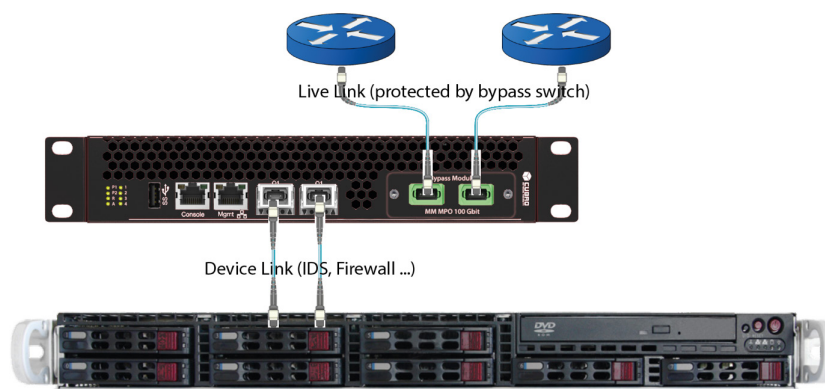
- The Cubro 1 Link Optical Bypass offers trouble free access ports to support inline network security and monitoring devices.
- Self-generating heartbeat packets - No driver or management port is required to generate pulses.
- Sets to Bypass mode when inline system failure is detected
- Sets to Bypass mode when inline system link failure is detected
- Sets to Bypass mode when inline software application system hang is detected
- Sets to Bypass mode in case of power failure
- Sets to Inline mode when inline system recovery is detected
- Software programmable timeout interval
- Supports up to two 100G Bypass segments in a 1U chassis
- SSH management interface via network management port
- Web GUI management interface via network management port
- Two AC redundant power supplies or two 48V DC power supplies
- Make live link A down when Live link B is down. (= Link Loss Carry Forward function)

Technical Details

Supported link types	100/40G LR4 Singlemode 100/40G PSM4 Singlemode 100/40G SR4 Multimode
Layer 1 switching with nearly no delay	2 ps
Easy use and operation	Straight-forward operation via WebGUI
LED Indicators	LEDs on the front panel indicate power, link and activity status.
Rugged 19" Housing	The unit is delivered in a rugged housing with precise connector labeling on the front panel.
Power	48 VDC dual power supply
Optical Parameters	Insertion Loss 1 - 2 dB Crosstalk 75 dB Return loss 55 dB Polarization Dependent Loss 0.03 dB Switching Time 0.4 ms Durability cycles No Wear
Options to activate the bypass	1) Manually via SSH or HTTP 2) Power fail 3) Link Loss 3) Smart detection of the bypassed device
Management	HTTP(S), SSH
Dimensions	440mm x 22mm x 44,45 mm
Weight	4 kg

Applications / Solutions

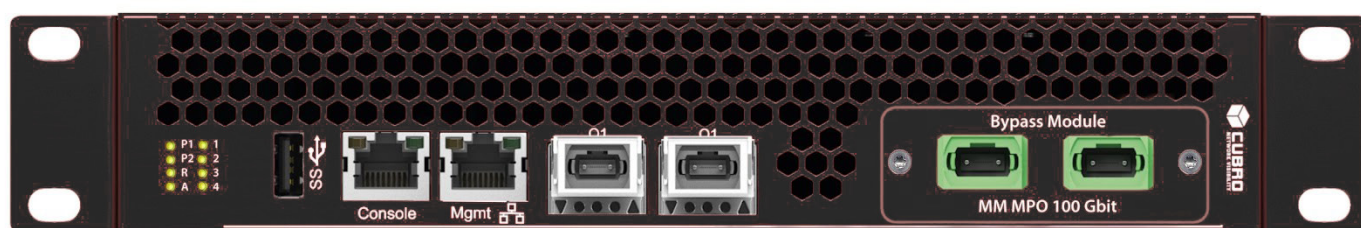
100 Gbit Bypass Application



100 Gbit Bypass application for bypassing an inline firewall in case of any failure.

100/40 Gbit NPB with Optical TAP included

These ports can be changed to 40 Gbit and, with a breakout cable, we can also support 10 Gbit
- Application » 100 Gbit filter to 10/40 Gbit capture.

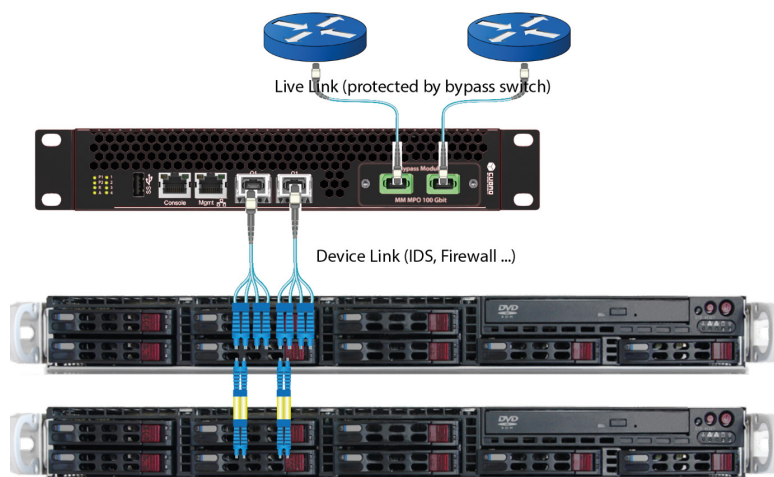


Optical TAP card

100G-QSFP28-SR4 MTP connector
100G-QSFP28-LR4 (10KM) LC connector
100G-QSFP28-PSM4 (2KM) MTP connector

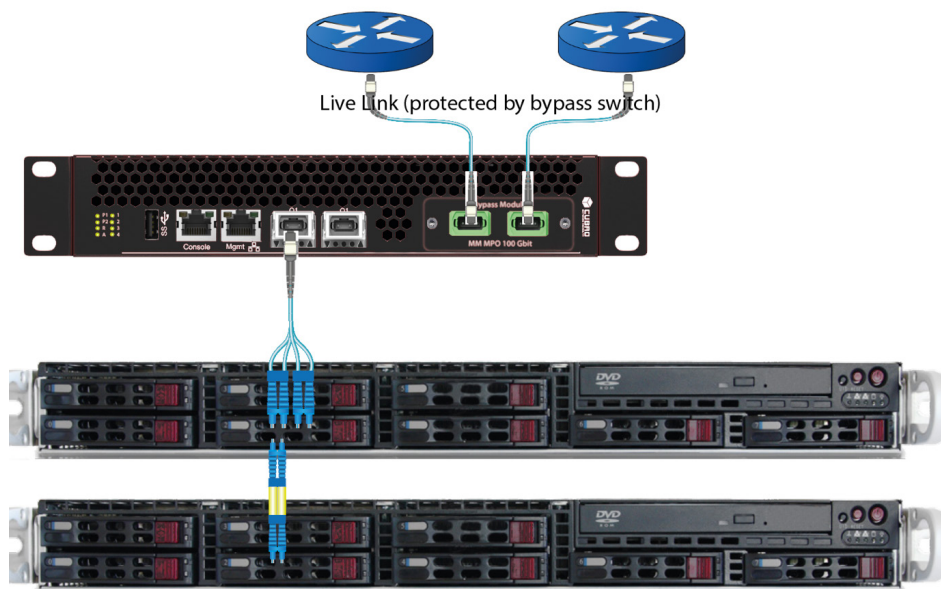
Bypass Application & Load Balancing

In some cases, the inline device cannot support 100 Gbit because of performance issues. In this case the bypass can support L3 load balancing on the device ports. As output, 10 Gbit and 25 Gbit is supported.



The output for the inline
device load balanced
4 x 25 Gbit or 4 x 10 Gbit

TAP Aggregation Filter Option



Aggregated, filtered and/or load balanced output
For security or capture and any kind of analytic devices.

Media Converter & Amplifier



Media converter options

- 100 Gbit - 100 Gbit SM / MM / DWDM
- 100 Gbit to 40 Gbit
- 40 Gbit to 100 Gbit
- 100 Gbit to 10 Gbit single or 4 x 10 Gbit LB

Ordering Information

Product Type & Number	Description
CUB.EX400-BY-M-SR4-AC	EX400 Bypass, Multimode, 100G SR4, MPO connector, redundant AC power
CUB.EX400-BY-M-SR4-DC	EX400 Bypass, Multimode, 100G SR4, MPO connector, redundant DC power
CUB.EX400-BY-S-LR4-AC	EX400 Bypass 100G-LR4, LC connector, redundant AC power
CUB.EX400-BY-S-LR4-DC	EX400 Bypass 100G-LR4, LC connector, redundant DC power
CUB.EX400-BY-S-PSM4-AC	EX400, Bypass 100G-PSM4, MPO connector, redundant AC power supply
CUB.EX400-BY-S-PSM4-DC	EX400, Bypass 100G-PSM4, MPO connector, redundant DC power supply

For more information please check our website www.cubro.com