



**CUBRO**  
NETWORK VISIBILITY

# CUBRO 1 LINK UNIVERSAL OPTICAL BYPASS

DATA SHEET



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## Optical Bypass At a glance

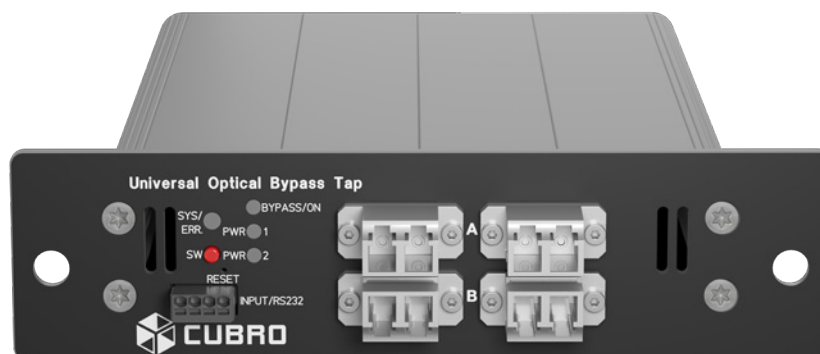
### Definition

A bypass switch (or bypass TAP) is a hardware device that provides a fail-safe access port for electrical links.

### Advantages of Cubro 1 Link Universal Optical Bypass

- Increased reliability on critical network links
- Fail-safe inline protection
- High-speed switching
- LED indicators show power, speed, link, and activity status
- Tested and compatible with most of the monitoring devices
- Management via Web UI
- Bypass, TAP
- Available in Single- & Multimode

## Product Overview



The Cubro Universal Optical Bypass for up to 100 Gbit line speed is the perfect choice to protect sensitive data-links in case of electrical power and/or link problems. Usually, it is deployed together with a network security appliance such as an intrusion detection system (IDS) or an Intrusion prevention system (IPS). Whenever these security devices need to be rebooted or go offline for any reason, the Cubro Universal Optical Bypass will make sure that faulty or unavailable devices are bypassed so that data traffic will continue to flow.

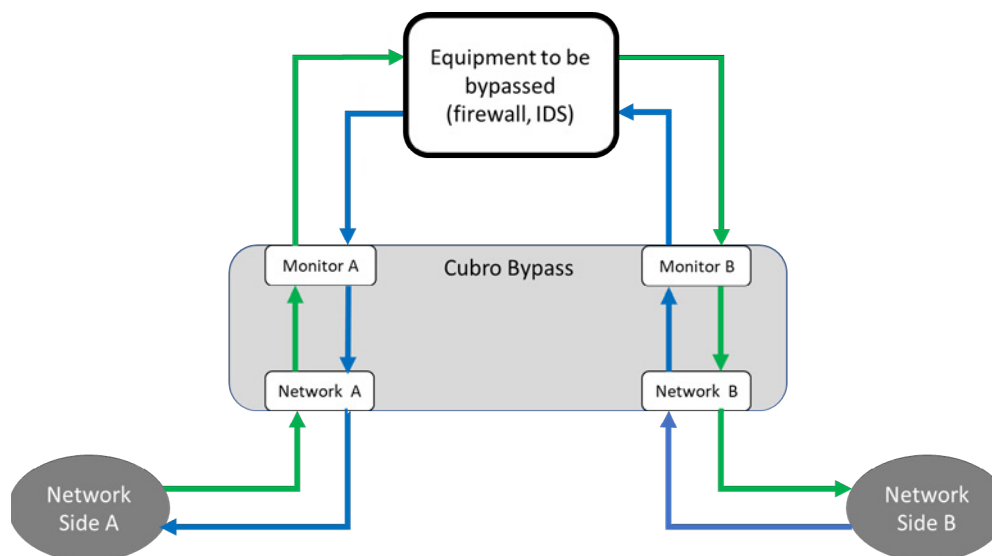
In stand-alone mode, the Cubro Universal Optical Bypass will be able to offer secure and fast protection against electrical power failures and also against link failures. Whenever such a problem is detected the extremely fast switching relays will make sure that the link is closed.

Moreover, the Cubro Universal Optical Bypass can be controlled by an Web UI and REST interface to read-out the status of the Bypass and or to control it.

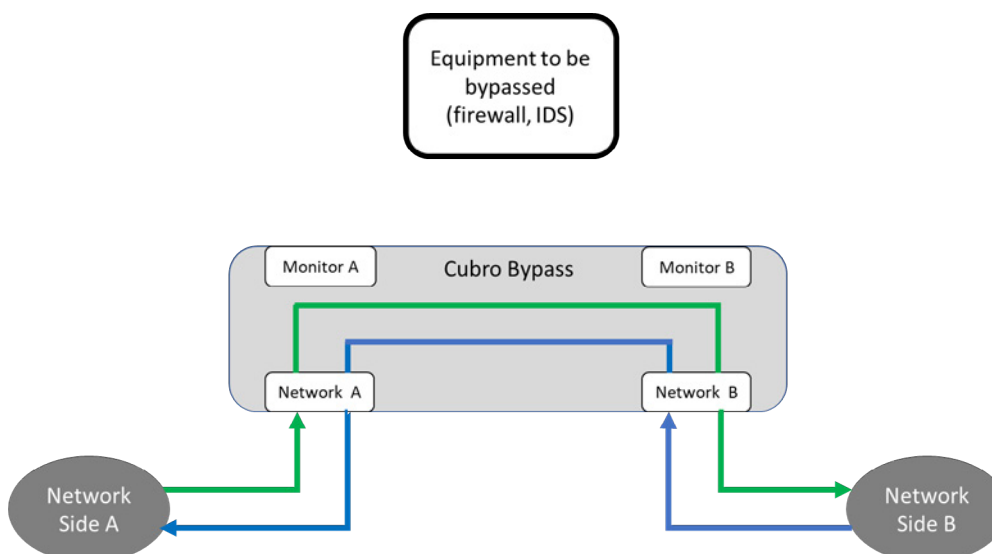
## Standalone mode

In stand-alone mode, the Cubro Universal Optical Bypass is the perfect protection against power outage and also for device link failures. Super fast switching relays will close the live circuit to avoid data loss on the live link.

Traffic flow in normal mode



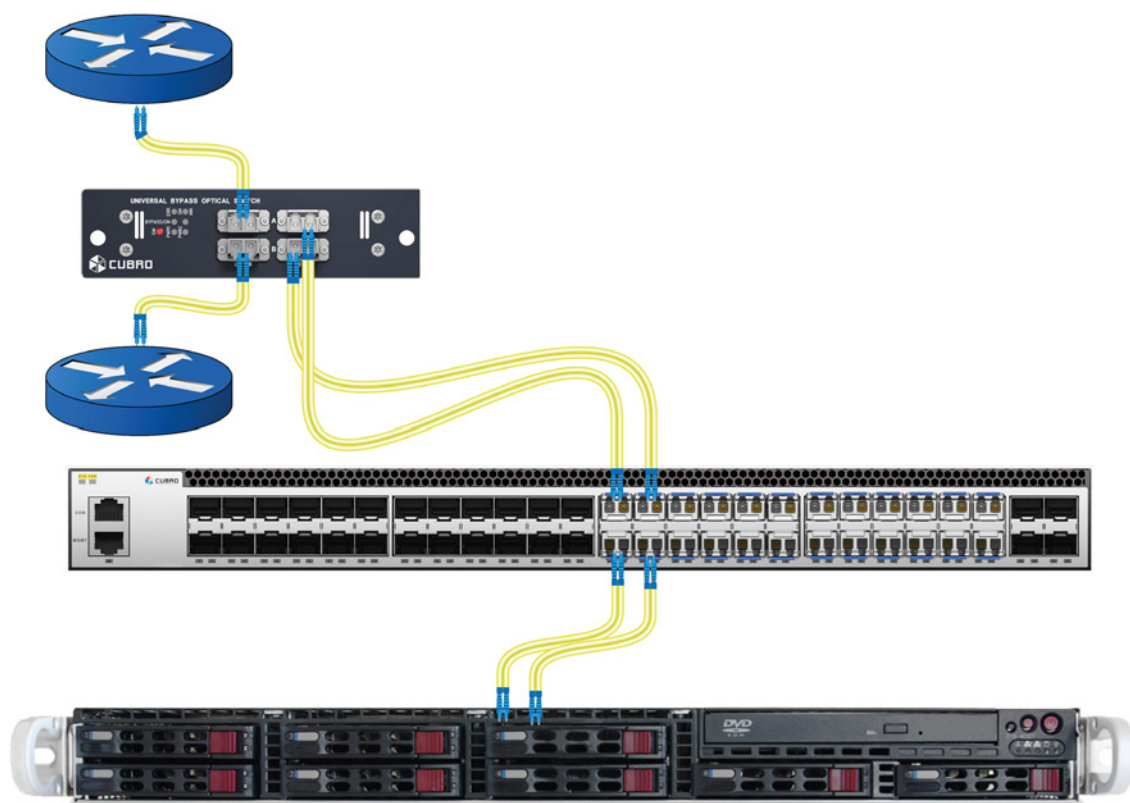
Traffic Flow in failure mode (electrical power and/or configurable triggers)



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## Together with Cubro Packetmaster EX Series

When the Cubro Universal Optical Bypass is used together with the Packetmaster EX family, it adds Heartbeat capabilities. Heartbeats generated by the Packetmaster will be sent through the monitor link and will also be received and analysed by the Packetmaster EX allowing to detect any failures of the bypassed devices.



### Specifications:

- Operating Temperature: -5°C to 55°C
- Storage Temperature: -10°C to 70°C
- Relative Humidity: 10% min, 95% max, non-condensing
- Input Power: 12V DC, 15W

### Certifications:

- EMC Emissions: EN55022 (CISPR22) Class B, EN61000-3-2,-3
- EMC Immunity: Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024,
- Safety Standards: UL60950-1, EN60950-1 approved
- Fully RoHS compliant

## Product Capabilities / Features

|                                |   |
|--------------------------------|---|
| Port                           | 4 x LC connector  |
| Supported line rates           | 1 / 10 / 25 / 40 / 100 Gbit in Singlemode option<br>1 / 10 Gbit in Multimode option                             |
| Easy use and operation         | Straight-forward operation via remote connection  |
| 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 labelling on the front panel.                  |
| Power                          | 12 V DC dual (redundant) power supply   |
| Options to activate the bypass | 1) via Ping<br>2) via REST<br>3) via GPIO<br>4) power fail<br>5) heartbeat loss (controlled by Packetmaster EX) |
| Management                     | Web UI  |

## Ordering Information

| Product Type & Number | Description   |
|-----------------------|---|
| CBR.BYSW-SM-100-1-R3  | Optical Bypass switch, SM, 1 Link, LC connector; 1/3 19" rackmount housing (rackmount kit not included) |
| CBR.BYSW-MM-10-1-R3   | Optical Bypass switch, MM, 1 Link, LC connector; 1/3 19" rackmount housing (rackmount kit not included) |
| CBR.RM19-3            | Cubro 19" Rackmount Kit for 3x 1/3 19" units  |

For more information please check our website [www.cubro.com](http://www.cubro.com)