



CUBRO
NETWORK VISIBILITY

CUBRO OPTOSLIM TAPS



```
01001011101
00010010001
00100100001
01001001010
```

DATA SHEET

Network TAPs At a glance

Definition

A network TAP (Test Access Point) is an external monitoring device that mirrors the traffic that passes between two network nodes to a number of monitor ports. A TAP is a hardware device inserted at a specific point in the network to monitor data.

Advantages of OPTOSLIM TAPs

- Full transparency allows the user to use optical TAPs for all protocols or data rates up to 100 Gbit
- No power supply needed
- Flexible and scalable
- Every splitter used inside the optical TAP is carefully handled
- Insertion loss is measured for each individual TAP produced and the test results are included with the TAP
- Split ratio can be delivered on demand for singlemode version
- Every Cubro Optical TAP supports speeds from 10 Mbps to 100 Gbps
- Passive optical TAPs do not modify or affect traffic in any way. They pass exact copies of all frames/packets including errors.

Product Overview



Optoslim LC 8L



Optoslim MTP 8L

The Cubro OPTOSLIM TAP Series offers real-time monitoring access to a physical optical data link with zero performance degradation or disruption. Since an optical TAP is fully passive (no power supply needed) there is no risk associated with placing them inline on an active link. The TAPs do introduce additional optical power loss on the active link which varies with the split ratio used; otherwise, the TAP is completely transparent to the network.

Cubro introduced the new OPTOSLIM form factor for optical TAPs in order to maximize link capacity for a given 1RU space while simultaneously offering a flexible solution for the end user.

The OPTOSLIM TAP units have a height of 1/3 RU which allows for up to 24 optical link with LC connectors in a 1RU space. This also allows the user to combine varying split ratios, fiber type, and/or connector type as the user requires.

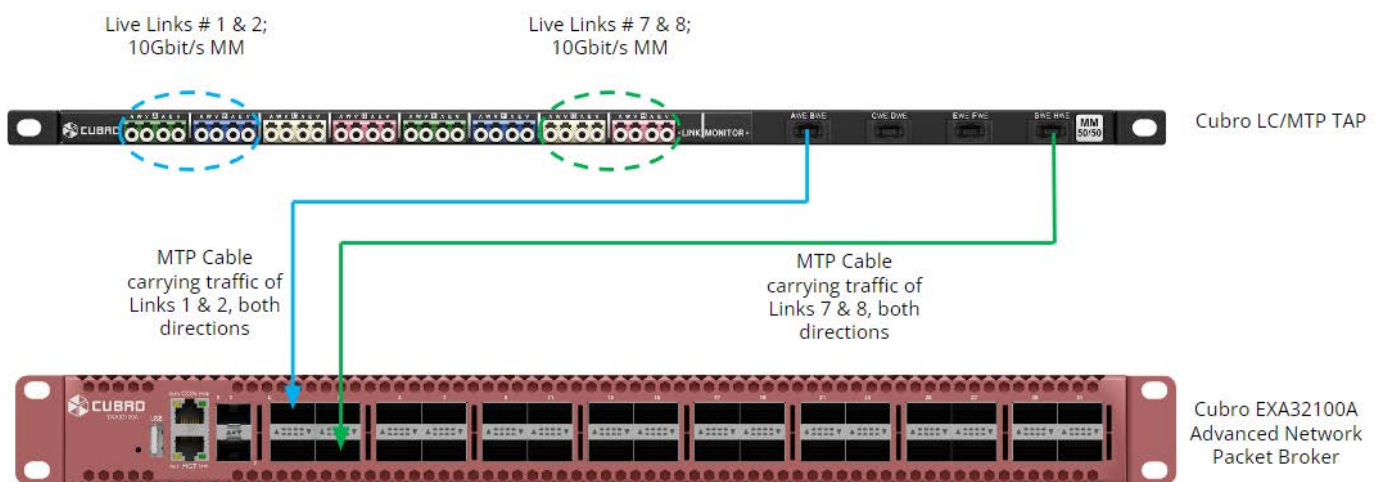
The Cubro OPTOSLIM TAPs are available with either LC connectors (4 and 8 link models) in Singlemode (1310/1550) fiber or Multimode (850/1300nm) fiber. For Multimode both 50/125 μ and 62.5/125 μ fiber types are available. The standard split ratio for a Singlemode TAP is 80/20 with 50/50, 70/30, and 90/10 also available. The standard split ratio for Multimode is 50/50 with 70/30 as an available option as well. The OPTOSLIM TAPs are also available with MTP connectors (2 and 4 link models).

Functions / Benefits:

- The OPTOSLIM TAPs passively mirror 100% of network traffic including errors and non-standard network traffic.
- These TAPs rely on passive full duplex fiber optic splitters, which results in non-point-of-failure operation. It requires no power source to operate.
- The OPTOSLIM TAPs give network operators the ability to passively monitor full duplex fiber optic links for a combination of multimode (mm) and/or singlemode (sm).

LC/MTP Special Version:

Cubro's 100G Advanced Packet Brokers models EXA32100A, EXA64100 or C32 allow to use a 100G port in split-mode as 4 x 10G (or 4 x 25G). Together with the OptoSlim LC/MTP TAP this split feature results in a perfect solution for massive 10G link handling. While live link side is still deployed as usual 10G LC connections, the monitoring outputs from the TAP to the Network Packet Broker are done as MTP connection. As a result, cabling work is much easier because less cables run between TAP and Network Packet Broker (NPB) and less ports are consumed on the NPB.



Requires only 4 MTP Cables and 4 Ports on EXA32100A Advanced Packet Broker to handle 8 full duplex 10Gbit/s links

Product Capabilities / Features

Optical connector	Link Side: LC (Duplex) Monitoring Outputs: LC or MTP
Certifications	Fully RoHS compliant
Linksave	No switching mechanism is included, the link is always connected. The TAP cannot lose any traffic on the link, even if the monitoring ports get damaged or destroyed or in case of a power failure
Link Fault Propagation	Due to its fully passive design the TAP is fully transparent to any faults. Thus, if one network side fails, the second link side will also fail without any delay. Re-routing within the network can be initiated within shortest possible time
Power	No power needed
Wavelengths	Singlemode version 1310/1550nm; Multimode version 850/1300nm.
Typical insertion loss link path	Singlemode (80/20) 1.5dB; Multimode version (50/50) 3.8dB
Operating Temperature	0 to 65°C
Operating Humidity	80% maximum relative humidity
Rugged 19" housing	19" 1/3 U high
Dimensions	480 x 147 x 14,5 mm
Weight	1,18 kg

Ordering Information

Product Type & Number	Description
CUB.OPTOSLIM-4L-SM	Optical TAP, 4 Links SM; LC connectors, 19" 1/3U height, splitting ratio 80/20
CUB.OPTOSLIM-4L-SM-5	Optical TAP, 4 Links SM; LC connectors, 19" 1/3U height, splitting ratio 50/50
CUB.OPTOSLIM-4L-SM-7	Optical TAP, 4 Links SM; LC connectors, 19" 1/3U height, splitting ratio 70/30
CUB.OPTOSLIM-8L-SM	Optical TAP, 8 Links SM; LC connectors, 19" 1/3U height, splitting ratio 80/20
CUB.OPTOSLIM-8L-SM-5	Optical TAP, 8 Links SM; LC connectors, 19" 1/3U height, splitting ratio 50/50
CUB.OPTOSLIM-8L-SM-7	Optical TAP, 8 Links SM; LC connectors, 19" 1/3U height, splitting ratio 70/30
CUB.OPTOSLIM-4L-MM	Optical TAP, 4 Links MM 50/125 μ ; LC connectors, 19" 1/3U height, splitting ratio 50/50
CUB.OPTOSLIM-4L-MM6	Optical TAP, 4 Links MM 62,5/125 μ ; LC connectors, 19" 1/3U height, splitting ratio 50/50
CUB.OPTOSLIM-4L-MM-7	Optical TAP, 4 Links MM 50/125 μ ; LC connectors, 19" 1/3U height, splitting ratio 70/30
CUB.OPTOSLIM-8L-MM	Optical TAP, 8 Links MM 50/125 μ ; LC connectors, 19" 1/3U height, splitting ratio 50/50
CUB.OPTOSLIM-8L-MM6	Optical TAP, 8 Links MM 62,5/125 μ ; LC connectors, 19" 1/3U height, splitting ratio 50/50
CUB.OPTOSLIM-8L-MM-7	Optical TAP, 8 Links MM 50/125 μ ; LC connectors, 19" 1/3U height, splitting ratio 70/30
CUB.OPTOSLIM-4L-MIX	Optical TAP, 2 Links SM 80/20 and 2 Links MM 50/50, LC connectors, 19" 1/3U height
CUB.OPTOSLIM-8L-MIX	Optical TAP, 4 Links SM 80/20 and 4 Links MM 50/50, LC connectors, 19" 1/3U height
CUB.OPTOSLIM-8L-SM-MT	Optical TAP, 8 Links Singlemode LC; Monitor Ports MTP, 19" 1/3U height, splitting ratio 80/20
CUB.OPTOSLIM-8L-SM-5-MT	Optical TAP, 8 Links Singlemode LC; Monitor Ports MTP, 19" 1/3U height, splitting ratio 50/50
CUB.OPTOSLIM-8L-MM-MT	Optical TAP, 8 Links Multimode LC; Monitor Ports MTP, 19" 1/3U height, splitting ratio 50/50