Cubro MeDiCon 10 G

Mini Mediaconverter up to 10 Gbit

Cubro MeDiCon 10 G

SFP - SFP Mediaconverter combining data rate independent connectivity with support for SFP and SFP+ transceivers. The CUBRO MeDiCon 10 G defines a new level of deployment flexibility and inventory management. Enabling the implementation of an extremely wide range of optical infrastructure solutions from media conversion and signal boosting to lambda conversion, Wavelength Division Multiplexing (WDM) and Optical Add/Drop Multiplexing (OADM).

Sync-E and IEEE1588 ready

The Cubro MeDiCon 10 G is also usable in Sync-E networks if no copper SFP's are used. If your network is carrying IEEE 1588 Sync traffic standard mediaconverters with switches inside could produce a delay depending on the traffic load. This delay variation has a bad impackt on the quality of the sync signal. The Cubro MeDiCon 10 G has a very small delay 500 ps. This delay is stable and is not depending on the traffic load.

Applications: (see page 3 / 4 for details)

Converting one mediatype into an other mediatype, the most common use is optical to electrical. If you want to connect with a laptop to a optical network, or changing multimode to singlemode.

Amplification of poor signals to work over longer distances, especial in multimode fiber networks this can be a useful option.

Converting dual fiber to a **BIDI** system with only one fiber to double the bandwith of the installation.

Converting from one **CWDM** wavelength to an other wavelength.

CUBRO

Functions

USB powered

Media Conversion

You can select the media by changing the SFP. The unique design supports also CWDM / DWDM and BIDI SFP.

Supported SFP and SFP+

Gbit optical single mode
Gbit optical multi mode
10 Gbit optical single mode
10 Gbit optical multi mode
Gbit electrical
STM1 - STM 64 optical
OTN (OTU1, OTU2, OTU1e, OTU2e)
Fibre Channel
STM1/OC3 - STM64/OC192

We support any MSA conform SFP & SFP+

Full Duplex support

The unit supports full duplex in line speed

Zero Delay (500 ps = 10 cm cable)

The unit does not add any delay or jitter/wander to the traffic.

Layer 1 to Layer 7 transparent

All packets pass the unit without any change.

Jumbo Frame Support

Supports jumbo Ethernet frames with any size.

Rugged Metal Housing

The unit is delivered in a ruggedized metal housing with precise connector labeling on the front panel
Very slim form factor 100 x 55 x 27 mm.

Power Versions

The „MeDiCon 10G" comes with a 5V DC External Power Supply or can be supplied with a USB adapter. Power consumption depends on the used SFPs and ranges from 500mA for Gbit up to 1.5A for 10G.
USB power can only be used with Gbit SFPs.

More details about the CUBRO Mediaconverter can be found on **www.cubro.net.** Contact us if you miss a feature or if you have a special request.

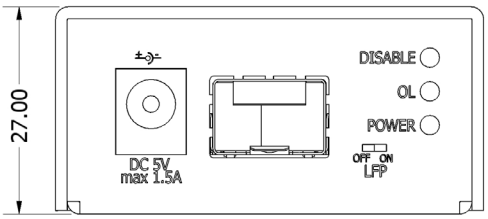
Cubro MeDiCon 10 G

Operating Specifications

Operating Temperature: 0ºC to 40ºC

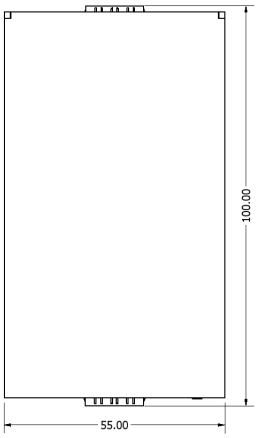
Storage Temperature: -10ºC to 70ºC

Relative Humidity: 10% min, 95% max, non-condensing



Mechanical Specifications:

Dimensions: 27 mm high x 100 mm deep x 55 mm wide



Electrical Specifications:

5 VDC external Power Supply or USB adapter
Power consumption is SFP dependent

typical 500 mA for Gbit up to 1500 mA in 10 Gbit.

Certifications

Fully RoHS compliant

CE compliant

Ordering option and parts

CBR. MEDSFP Mediaconverter (no SFP included)
includes international power supply

CBR.MEDSFP-USB
USB power cable

CBR.MEDSFP-KIT Includes Mediaconverter
international power supply
USB Power cable
1 SFP Gbit Copper
1 SFP Gbit Fiber 1300 nm (single mode)
1 SFP Gbit Fiber 850 nm (multi mode)

Avaliable CUBRO SFP, SFP+:

Order number	Data rate	Media Type		Distance
Standard SFP´s				
CUB.GP8524S5CD-C	1.25G	850 nm	SX	(550m)
CUB.GP3124L2CD-C	1.25G	1310 nm	LX	(20km)
CUB.GP3124L4CD-C	1.25G	1310 nm	LHX	(40km)
CUB.GP5524L6CD-C	1.25G	1550 nm	ZX	(60km)
Standard SFP´s				
CUB.GEGBP1RC-C	10/100/1000M		UTP	0,1km
CUB.GEGBP3RC-C	1000M		UTP	0,1km
CWDM´s				
CUB.GPCXX2408CD-C	1.25G	1270-1610 nm		80km
CUB.GPCXX2412CD-C	1.25G	1270-1610 nm		120km
CUB.GPCXX4804CD-C	2.5G	1270-1610 nm		40km
CUB.GPCXX4808CD-C	2.5G	1270-1610 nm		80km
SFP+				
CUB.GPP31192LR-C	10G	1310 nm		10km
CUB.GPP85192SR-C	10G	850 nm		0,3km
CUB.GPP55192ER-C	10G	1550 nm		40km
BIDI (BX) SFPs				
CUB.GPB3524LL2CD-C	1.25G	1310/1550 nm		20km
CUB.GPB5324LL2CD-C	1.25G	1550/1310 nm		20km
CUB.GPB3424LL2CD-C	1.25G	1310/1490 nm		20km
CUB.GPB4324LL2CD-C	1.25G	1490/1310 nm		20km

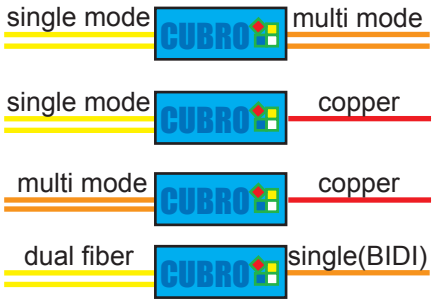
Many Others on Request

Applications

Cubro MeDiCon 10 G

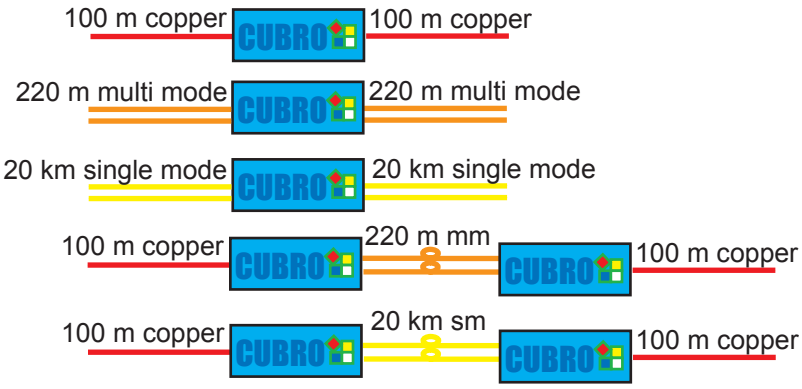
Media Conversion

You can select the media by changing the SFP. The unique design supports also CWDM / DWDM and BIDI SFP.



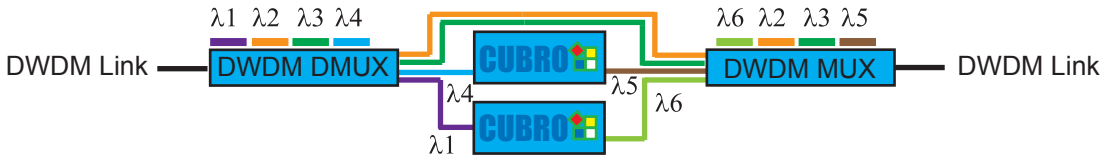
Amplification

You can enlarge the transfer range of your media dramatically without risking errors on your data. The examples below show some common options, but a lot more combinations are possible .



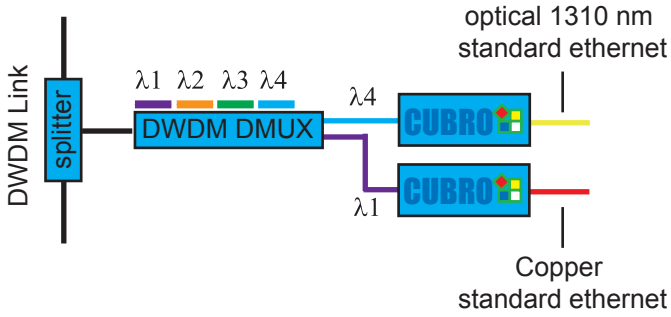
Wavelenght conversion on a DWDM / CWDM System

With the Cubro MeDiCon 10 G and a Cubro MUX / DEMUX you have the posibilty to change wavelength in a DWDM / CWDM system. Pricewise a very nice option and it is also very flexibel .



Monitoring Traffic in a DWDM / CWDM System

With the Cubro MeDiCon 10 G and a Cubro MUX / DEMUX you have the posibilty to look into a DWDM / CWDM system, and analyse the data.



Applications

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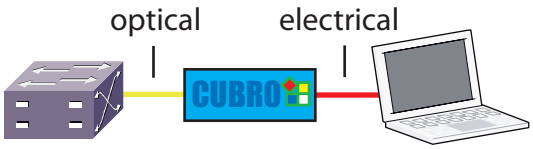
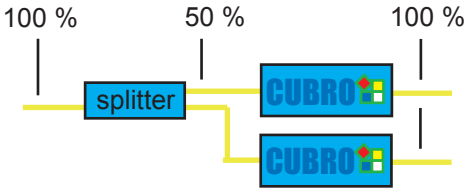
Media Conversion (USB Power)

With this feature it is easy to connect a standard laptop to a switch with optical interfaces. Because of the low power consumption it is possible to power the Cubro MeDiCon 10 G from the USB port of the laptop.



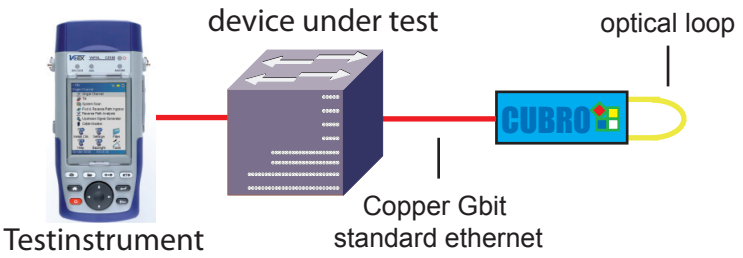
Amplification for monitoring

It is very common to use optical splitters to monitor the traffic in a network, but a splitter also reduces the optical power on the aktiv link. Especially in multimode networks with higher bandwiths (10 Gbit) this could cause transmission problems. You can overcome this problem by using a CUBRO MeDiCon 10 G for amplification.



Layer 1 loop for testing devices

This is not an everyday application but it shows the flexibility of the Cubro MeDiCon 10 G . If you only have one tester and you had to test on copper gbit, links you can use the mediaconverter to make a layer 1 loop.



Asymmetric delay for testing devices

To test applications it is sometimes usefull to simulate asymmetric delay. Asymmetric delay can be done with expensive instruments as well, but if you need just a simple solution you can use two MeDiCon 10 G and two different fibers in length. In our example you get a asymmetric delay in the range of 70 µsec. Longer fibers produce longer delay.