SOURCE

Global Fiber Interconnection
FTTX, Fiber to YOU!

SHENZHEN USOURCE TECHNOLOGY CO., LTD

深圳市优索思科技有限公司

www.usourcetech.com

Auto production line/ Full solutions

Company profile

➢ USource is founded by professionals who have been engaged in optical fiber communication industry for more than 12 years, focusing on the R&D and production of CWDM DWDM FWDM PWDM MWDM LWDM， etc. The leading professional technology and excellent micro optical design and manufacturing capabilities enable our WDMs popular used for 5G networking.

➢**Corporate objectives：** USource never lower quality, only reduce cost by improving technology and productivity. USource help customers save 20% costs comparing with other competitors.

☐ FWDM 3 port component
☐ CWDM 3 port component
☐ DWDM 3 port component
☐ mini 3 port component

➢ **mini ABS box**

➢ **steel tube package**

➢ **glass package**

➢ **mini glass package**

Packaging
- ☐ ABS box
- ☐ Cartridge box
- ☐ CCWDM mini metal box
- ☐ LGX metal box
- ☐ 1RU chassis
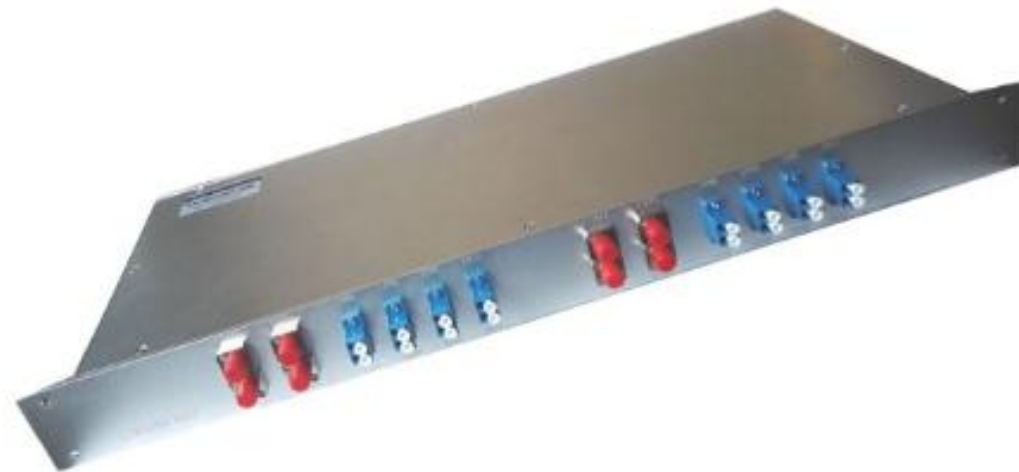
Mini CWDM Modules

Packaging: Mini metal box

☐ 8 Channels box size: 55*28*7 mm
☐ 18 Channels box size: 55*45*6 mm

➢ Operating Temperature : -5~70°C

➢ Insertion Loss:

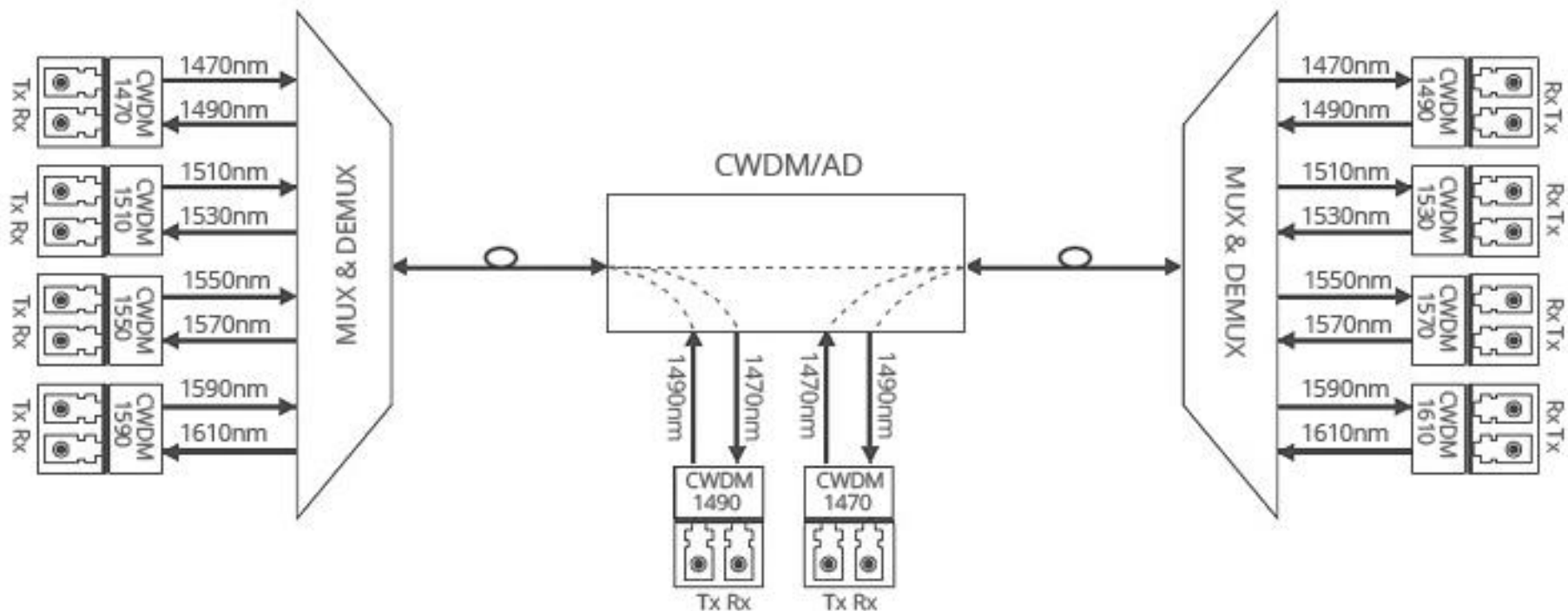   4Ch < 0.8 dB

                8Ch < 1.4 dB

                18Ch < 2.0 dB

OADM Modules

➤ Packaging: LGX metal box (for 1U
Rack mount)
➤ Add/Drop for east and west
➤ CWDM/DWDM optional
➤Operating Temperature : -40~85°C

1-Channel Simplex BIDI-Transmission Add/Drop MUX/DEMUX

Tri-networks Integration，PON + CATV

- Packaging: 1U 19" Rack mount
- 1 port for CATV 1550nm input
- 8/16/32 input ports for GPON (1310/1490nm) or XGS-PON (1270/1577nm)
- 8/16/32 output ports for COM (1310/1490+1550) or (1270/1577+1550)
- Operating Temperature：-40~85°C

- Packaging: 3 ports components
- Pass for CATV 1550nm
- Reflect for GPON (1310/1490nm) or XGS-PON (1270/1577nm)
- COM (1310/1490+1550) or (1270/1577+1550)
- Operating Temperature：-40~85°C

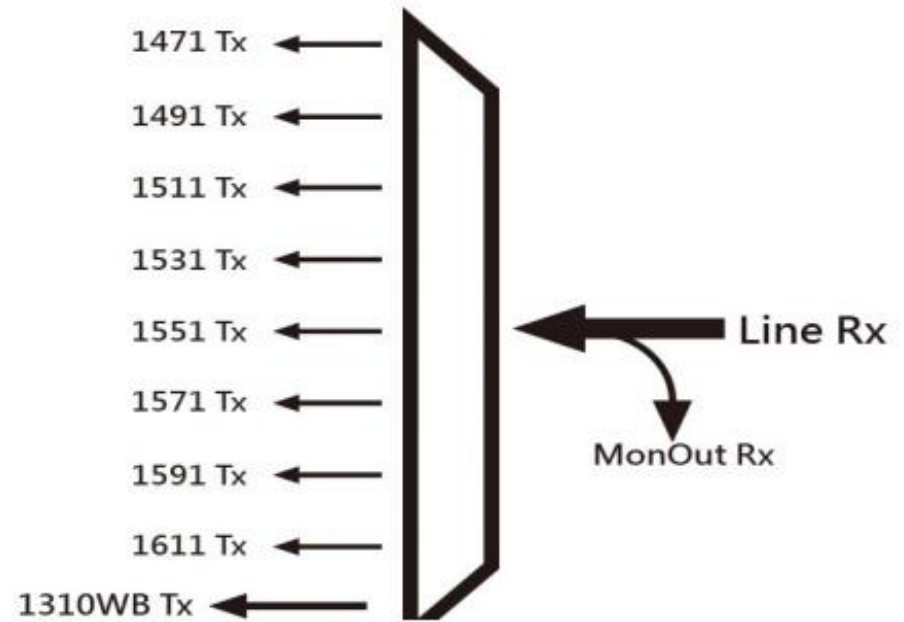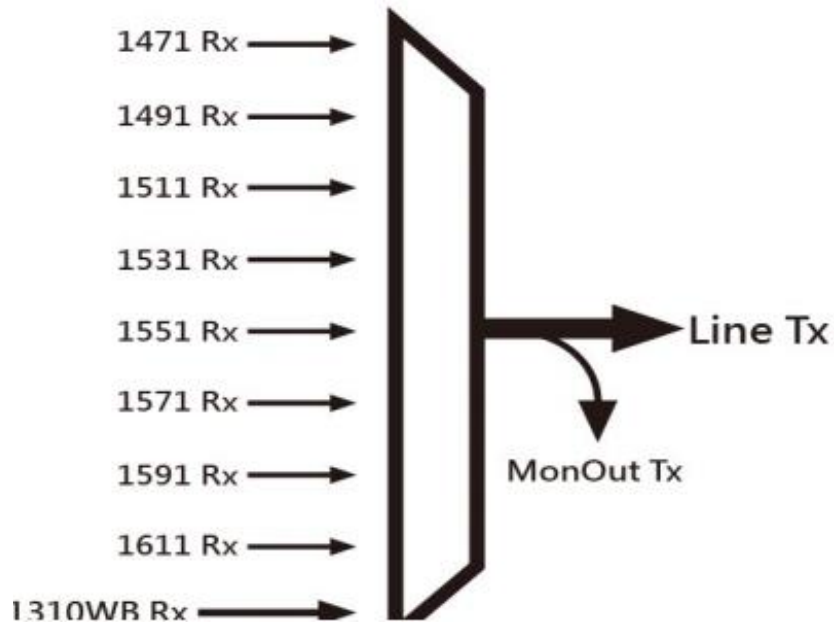- **PWDM**: Pass port with PD, COM & Reflect port with SC connector
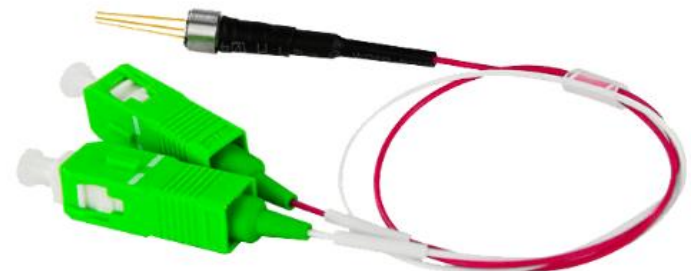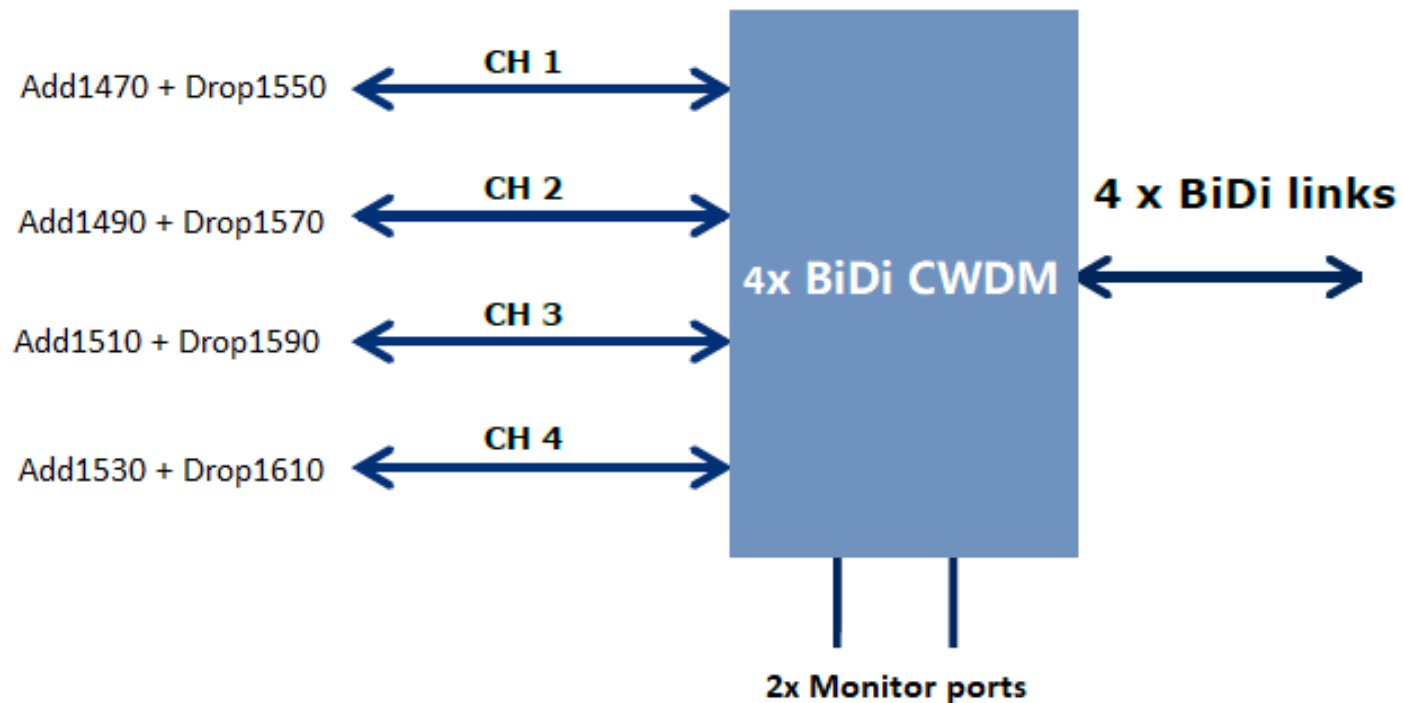
CWDM with 1310 wide band

- Packaging: LGX metal box (for 1U Rack mount
- 1310 wide band: 1260-1457nm (isolation>30 dB)
- Monitor port (2% splitter)
- Operating Temperature : -40~85°C

1471 Rx →
1491 Rx →
1511 Rx →
1531 Rx →
1551 Rx →
1571 Rx →
1591 Rx →
1611 Rx →
1310WB Rx →

→ Line Tx
↓ MonOut Tx

1471 Tx ←
1491 Tx ←
1511 Tx ←
1531 Tx ←
1551 Tx ←
1571 Tx ←
1591 Tx ←
1611 Tx ←
1310WB Tx ←

← Line Rx
↓ MonOut Rx

Bi-directional CWDM modules

- Packaging: LGX metal box (for 1U Rack mount
- 2 wavelengths on each Channel
- Monitor port (Send/Receive)
- Operating Temperature :
  -40~85°C

Com   L Mon   R Mon   47+55   49+57   51+59   53+61

Add1470 + Drop1550 — CH 1

Add1490 + Drop1570 — CH 2

Add1510 + Drop1590 — CH 3

Add1530 + Drop1610 — CH 4

4x BiDi CWDM

4 x BiDi links

2x Monitor ports

3 ports ODC (Optical Direction Coupler)

- Pass port: 1551,1571,1591,1611 (1544~1618nm)
- Reflect port: 1471 1491 1511 1531 (1450~1538nm)
- COM port: Bi-direction wavelengths
- Operating Temperature : -40~85°C

The ODC is based on thin film filter technology. They can be used in high-power applications in WDM systems, which is used for dividing two groups of wavelengths into single fiber.
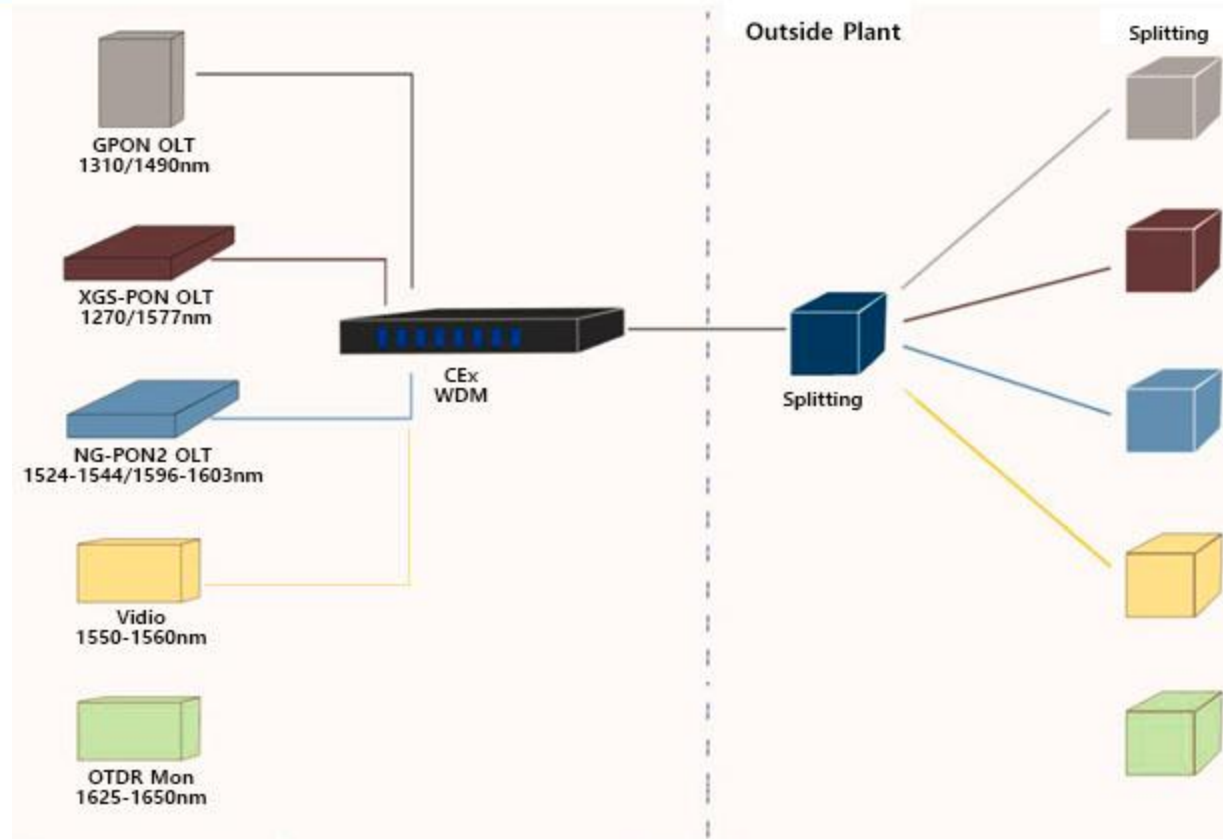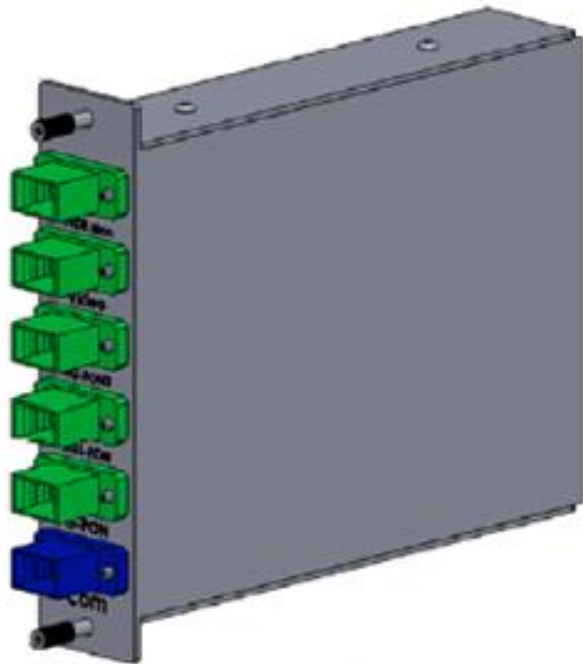One group is 1471/1491/1511/1531, the other is 1551/1571/1591/1611.
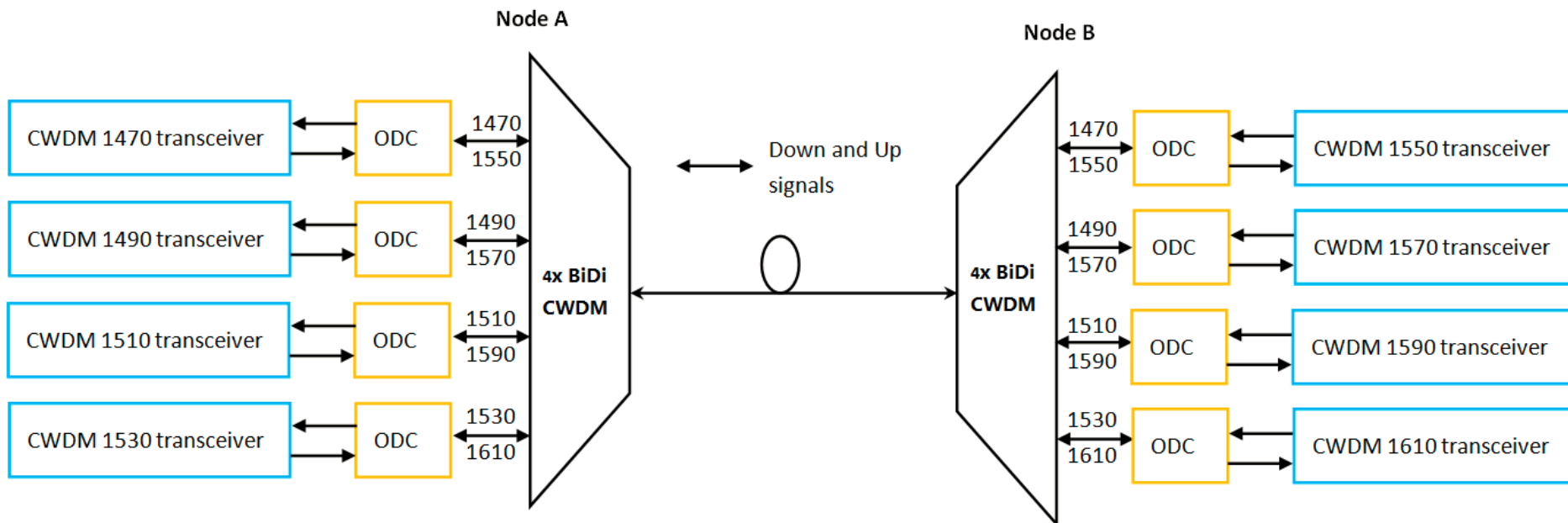
DWDM AAWG channels up to 96CH max

➤ Packaging: 1U 19" Rack mount

➤ Channels: 32/40/48/96 C/L-band, ITU-T grid

➤ Gaussian Type: Insertion loss < 4dB

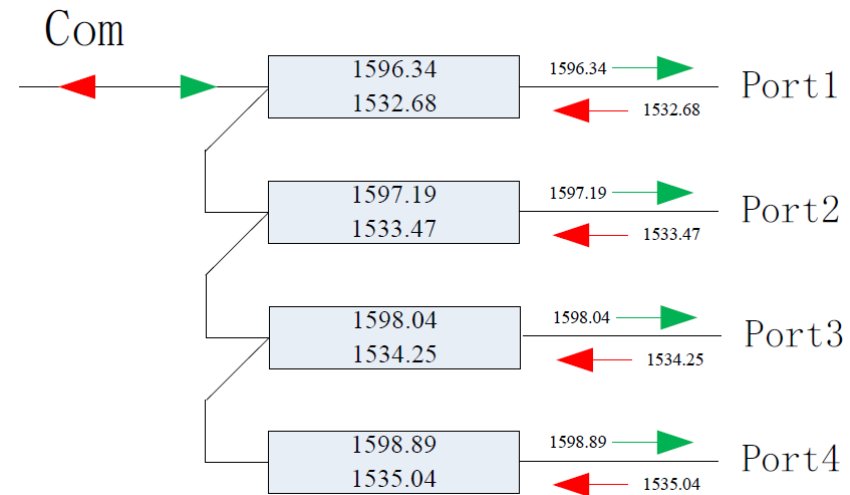➤ Flat-Top Type: Insertion loss <6 dB

➤ Operating Temperature : -5~65°C
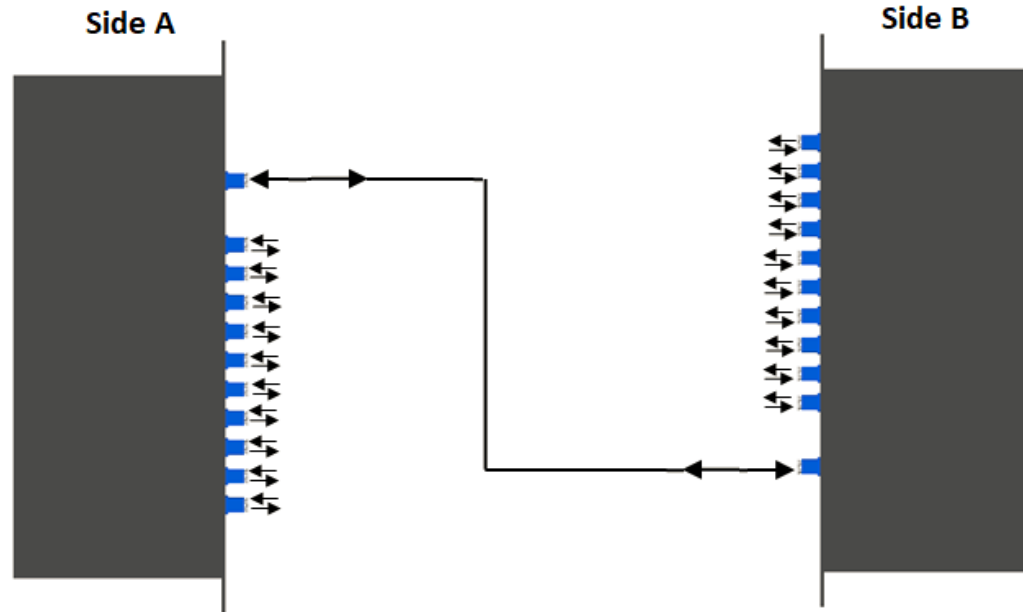
□ CEx WDM

Parameter		Units	Wavelength (US)	Wavelength (DS)
Working Wavelength Range		nm	1260 ~ 1650	
Pass Band	G-PON	nm	1290 ~ 1330	1480 ~ 1500
	XGS-PON		1260 ~ 1280	1575 ~ 1581
	NG-PON2		1524 ~ 1544	1596 ~ 1603
	Video		1550 ~ 1560	
	OTDR Mon		1625 ~ 1650	

WDM modules for NGPON2 solution

Com

	1596.34	1596.34 →	Port1
	1532.68	← 1532.68	
	1597.19	1597.19 →	Port2
	1533.47	← 1533.47	
	1598.04	1598.04 →	Port3
	1534.25	← 1534.25	
	1598.89	1598.89 →	Port4
	1535.04	← 1535.04	

Parameters	Unit	Specifications
Operating Wavelength	nm	1520~1610
Channel Number	NA	4
Channel Spacing	GHz	100
Bandwidth @ 0.5dB	nm	ITU ±0.125
Insertion Loss	dB	≤2.5
Ripple	dB	≤ 0.5
Adjacent Channel Isolation	dB	≥ 30
Non-adjacent Channel Isolation	dB	≥ 45
PDL	dB	≤ 0.2
Directivity	dB	>50
Return Loss	dB	≥ 50

5G：DWDM O-band，for Korea Telecom

□ 800Ghz 25G COT/RT module
□ 100Ghz 10G COT/RT module

Thank you!