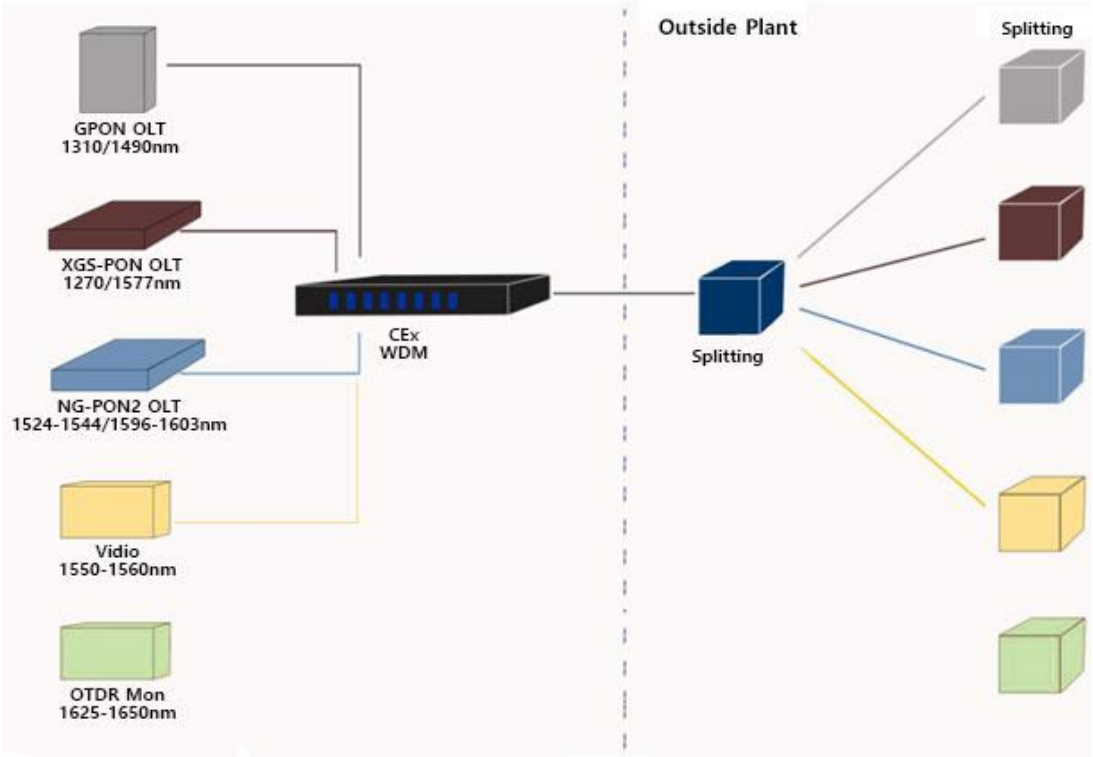
CEx Module for Upgrading PON networks

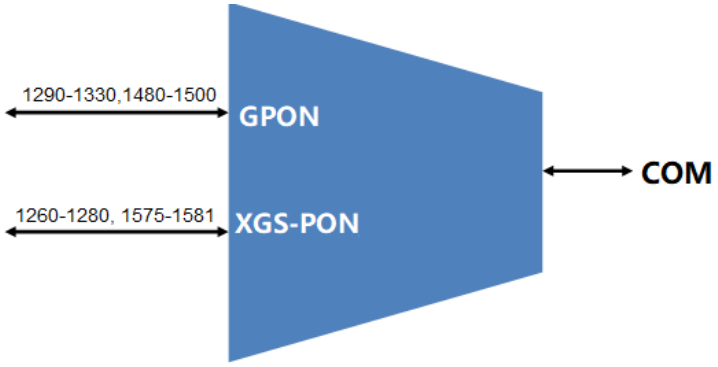
Upgrading the existing passive optical network (PON) enables increased data speed and the delivery of additional services without fully replacing existing PON infrastructure. The Coexistence Element (CEx) is a single WDM device to combine current GPON with emerging XGS-PON and Next Generation NG-PON2. Additional provisioning wavelengths with the Coexistence Element include RF video and OTDR monitoring.

The CEx module enables the convergence of multiple services over a common access network. Customers can choose different configurations as per their demands.

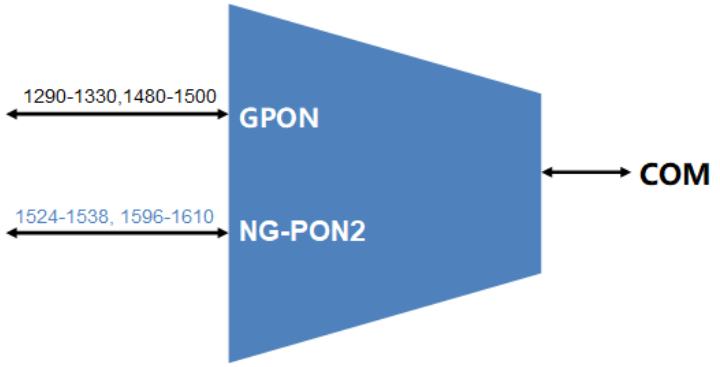
Co-Existence Module Application System

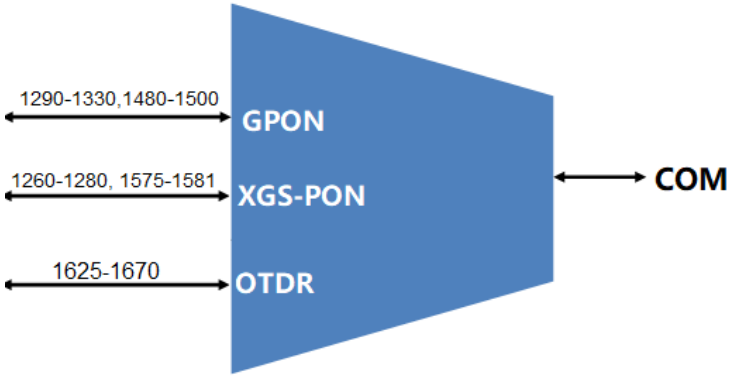


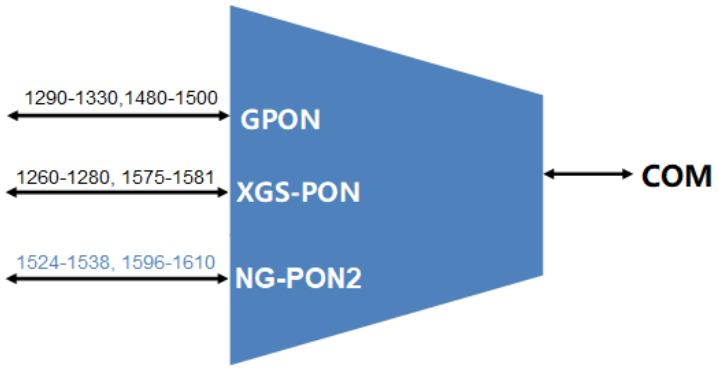
Different Donfigurations

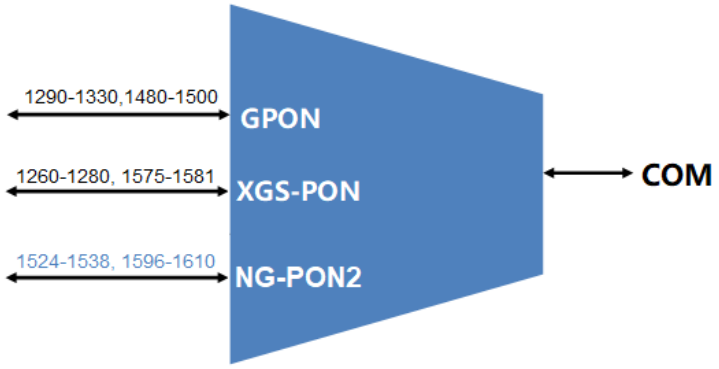
Model 1: CEX-GX GPON: 1290-1330,1480-1500nm XGS-PON: 1260-1280, 1575-1581nm	
IL: COM - GPON	<0.8 dB

IL: COM- XGS-PON	<1.2 dB
Isolatoin: COM-GPON	≥30 dB (@1270/1577)
Isolation: COM- XGS-PON	≥30 dB (@1310/1490)

Model 2: CEX-GN GPON: 1290-1330,1480-1500nm NG-PON2: 1524-1538, 1596-1610nm	
IL: COM - GPON	<0.8 dB
IL: COM- NG-PON2	<1.2 dB
Isolatoin: COM-GPON	≥30 dB (@1532-1540/1596-1603)
Isolation: COM- NG-PON2	≥35 dB (@1310/1490)

Model 3: CEX-GXO GPON: 1290-1330,1480-1500nm XGS-PON: 1260-1280, 1546-1586nm OTDR: 1625-1670nm	
IL: COM-GPON	<1.2 dB
IL: COM-XGS-PON	<1.6 dB
IL: COM-OTDR	<0.8 dB
Isolatoin: COM-GPON	≥30 dB
Isolation: COM- XGS-PON	≥30 dB
Isolation: COM-OTDR	≥30 dB

Model 4: CEX-GXN GPON: 1290-1330,1480-1500nm XGS-PON: 1260-1280, 1575-1581nm NG-PON2: 1524-1538, 1596-1610nm	
IL: COM-GPON	<1.2 dB
IL: COM- XGS-PON	<2.2 dB
IL: COM- NG-PON2	<1.2 dB
Isolatoin: COM-GPON	⩾30 dB
Isolation: COM- XGS-PON	⩾30 dB
Isolation: COM- NG-PON2	⩾35 dB (@1270/1310/1490/1577)

Model 5: CEX-GXN2 GPON: 1290-1330,1480-1500nm XGS-PON: 1260-1280, 1575-1581nm NG-PON2: 1524-1538, 1596-1610nm	
IL: COM-GPON	<1.2 dB
IL: COM- XGS-PON	<2.2 dB
IL: COM- NG-PON2	<1.2 dB
Isolatoin: COM-GPON	⩾30 dB
Isolation: COM- XGS-PON	⩾30 dB
Isolation: COM- NG-PON2	⩾35 dB (@1270/1310/1490/1577)