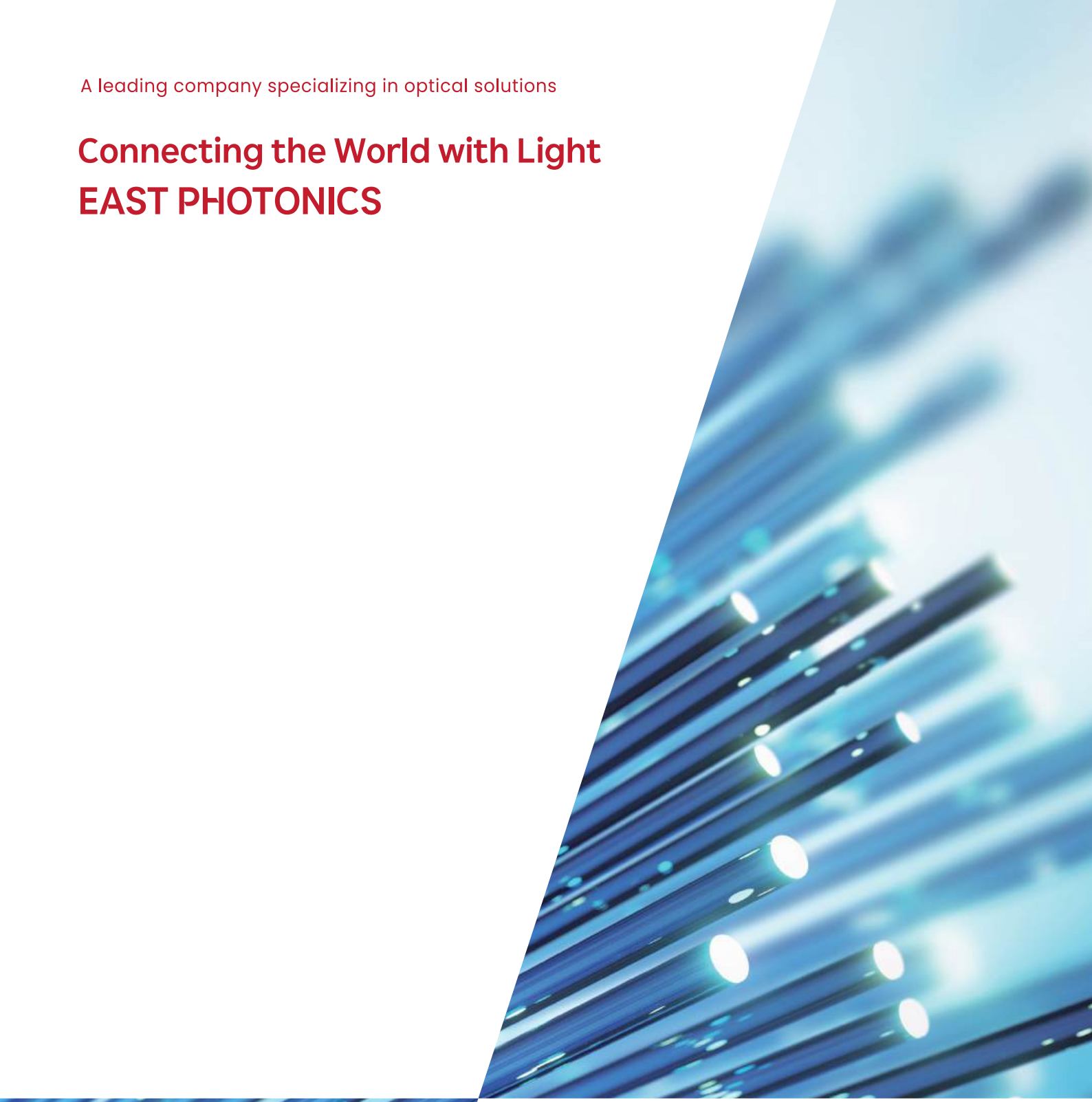
A leading company specializing in optical solutions

Connecting the World with Light
EAST PHOTONICS



East Photonics

Optical Module
Measurement Instrument
Network Measurement System

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East Photonics is a company at the forefront of optical fiber communications and optical application industry with groundbreaking high-quality optical components and integrated modules.

Founded in 2002, East Photonics has established itself as a leader in the design and manufacture of products such as connectors, filters, splitters, attenuators, switches, EO-Sensor, optical modules, and optical application systems.

We design and custom manufacture a wide array of optical communications modules and auxiliary systems for customers. We provide all possible solutions aimed at reducing costs, time, and pressure on customers. High-performance products we offer are exceptionally reliable and available at a reasonable price. We are working hard and making investments to achieve these goals, expanding our manufacturing facilities and jointly building infrastructure with partners.

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Why East Photonics?

With the rise of the cloud computing, the internet usage, and the new development of 5G, the demands for high-bandwidth, and speedy data flows are significantly increasing. Fiber-optic cables are the primary solution to supporting today's bandwidth-intense applications. However, deploying new fiber is time-consuming and costly. Then, how do you support and add new network services with your existing fiber infrastructure while you guarantee the network performance.

The answer : Passive Optical Components(POCs)

East Photonics has developed excellent Passive Wavelength Division Multiplexing (WDM) technologies. Passive Optical Devices(PODs) and Passive Optical Components(POCs) make it easy and fast to integrate your network services. Adding PODs to an existing fiber infrastructure enables you to enlarge capacity and add new network services quickly and efficiently. To increase the performance of today's high-bandwidth fiber networks without high-cost, it is a proven way the world has taken. Now, it's time to meet the specialist of the POCs and PODS,especially for the WDMs.

History

2024	05	Selected for the Korea Trade Insurance Corporation's "KSURE Honors Club."
2023	10	The 18th Electronic and IT Day Minister of Trade, Industry, and Energy Award
	03	Selected as an outstanding company with great labor relations unique to Daejeon
2022	12	Won the Economy and Science Award from Daejeon Metropolitan City Won the $10 million Export Tower Award on the 59th Day of Trade
2019	01	Selected as a Youth-Friendly Unicorn Company
2018	03	Won the Korea Value Management Award 2018
	02	Obtained the TL9000 Certification
2017	12	Won the KCCP Chairman Award for the Productivity Innovation Partnership Project from KCCP
2016	07	Certified as an Outstanding Global Company in Daejeon
2013	03	Named the IP Star Company
2012	10	Won the Minister of Knowledge Economy Award in Photonics Korea 2012
2011	07	Named the Company with Promising Global Technology by Daejeon Metropolitan City
2008	12	Headquarters and plants expanded and moved to Taplip-dong, Yuseong-gu, Daejeon
2007	12	Included in the list of IT companies to be housed in Daedeok Valley
	08	Named the promising SME of Daejeon Metropolitan City in 2007
2006	11	Opened the R&D Center
	04	Obtained the ISO9001 and ISO14000 certificates
2005	05	Set up filter packaging automation facilities
2004	06	Certified as a venture company (Ministry of SMEs and Startups)
	04	Certified as a company specialized in parts and materials (Ministry of Trade, Industry and Energy)
2003	09	Included in the incubator project for startups with new technologies by MOTIE
2002	01	East Photonics was founded

Certificate

TL9000 / ISO 9001:2015

ISO 14001:2015

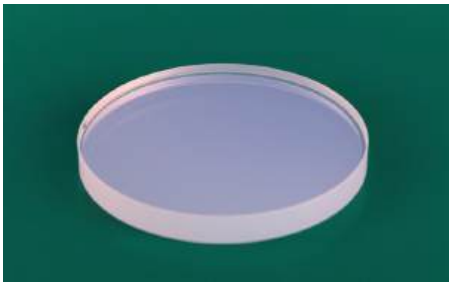
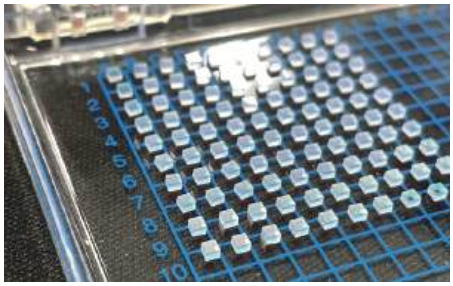
ISO 45001:2015

The feature of process

- Uniform Quality and high reliability guaranteed by Automated Alignment Process
- Combine the Optimized Parts by continuous process from Collimator to Module
- Optical Performance controlled by Automated matching the Inventory
- Easy after service due to Module structure consisting of independent devices

Production Line

Thin Film Filter Deposition Line

Device Packaging Line

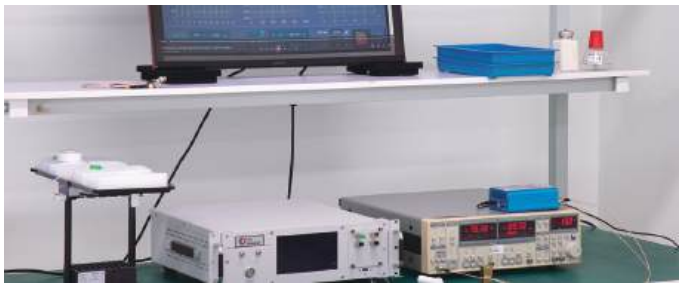


Jumper Cord Assembly Line



Optical Measurement & Test Line


EO Sensor & Quantum Cryptography Line




FTTH Passive Network Solution

Network Design & Planning

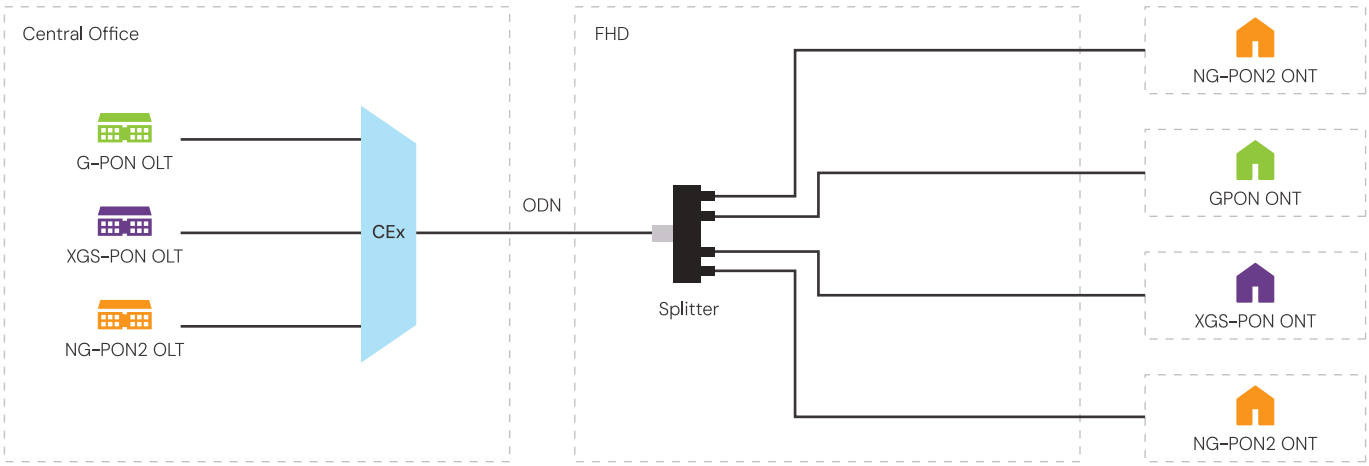
The first key element of PON technology is a well-designed and planned network solution. The points of fiber distribution and access, the architectural elements like PON, and the number of users for the system can be the main consideration for planning to establish the detailed FTTx network design. It is needed for a service provider to make a precise judgment on splicing location and distribution patterns. By closely co-working with our customers, we can help you to find perfect solutions for FTTx network design.

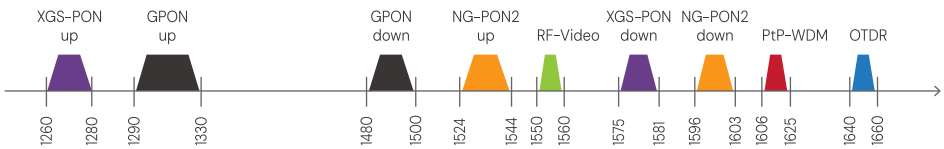
Basic CEx

G-PON : 1310/1490nm
XGS-PON : 1270/1577nm
NG-PON2 : TWDM-PON
1532.68 / 1533.47 / 1534.25 / 1535.04nm
1596.34 / 1597.19 / 1598.04 / 1598.89nm

WM1 and CEx Convergence

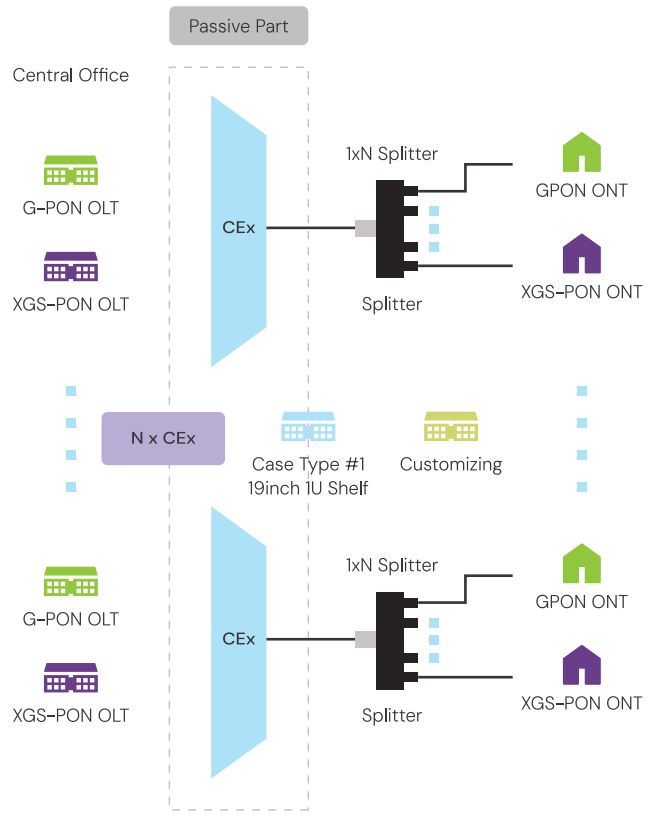
G-PON : 1310/1490nm
RF-Video : 1550nm
XGS-PON : 1270/1577nm
PtP-WDM : 1606~1625nm
NG-PON2 : TWDM-PON
1532.68 / 1533.47 / 1534.25 / 1535.04nm
1596.34 / 1597.19 / 1598.04 / 1598.89nm





FTTx Access Network Passive Solution

Coexistence modules enable you to support multiple services on a single fiber. For example, you can offer XGS-PON and NG-PON2 over the existing PON fiber infrastructure without changing the outside plant.



WM1 and CEx Convergence allow you to add PON services over existing OSP infrastructure, increasing the speed and perform over GPON systems and utilizing unused spectrum.

Features

- Common ODN Solution
- Reducing Total Optical Link Loss
- No Need for Additional Patch cords
- Saving Total Cost of WM1 and CEx
- Easy to Install & Maintain

Application

- Metro Network
- Metro Access Network
- 10GB Ethernet
- CATV Systems

NxCEx: 4, 8, 16, 32, 64, 128CEx can be mounted on one module for purpose depending on the customer's purpose of use

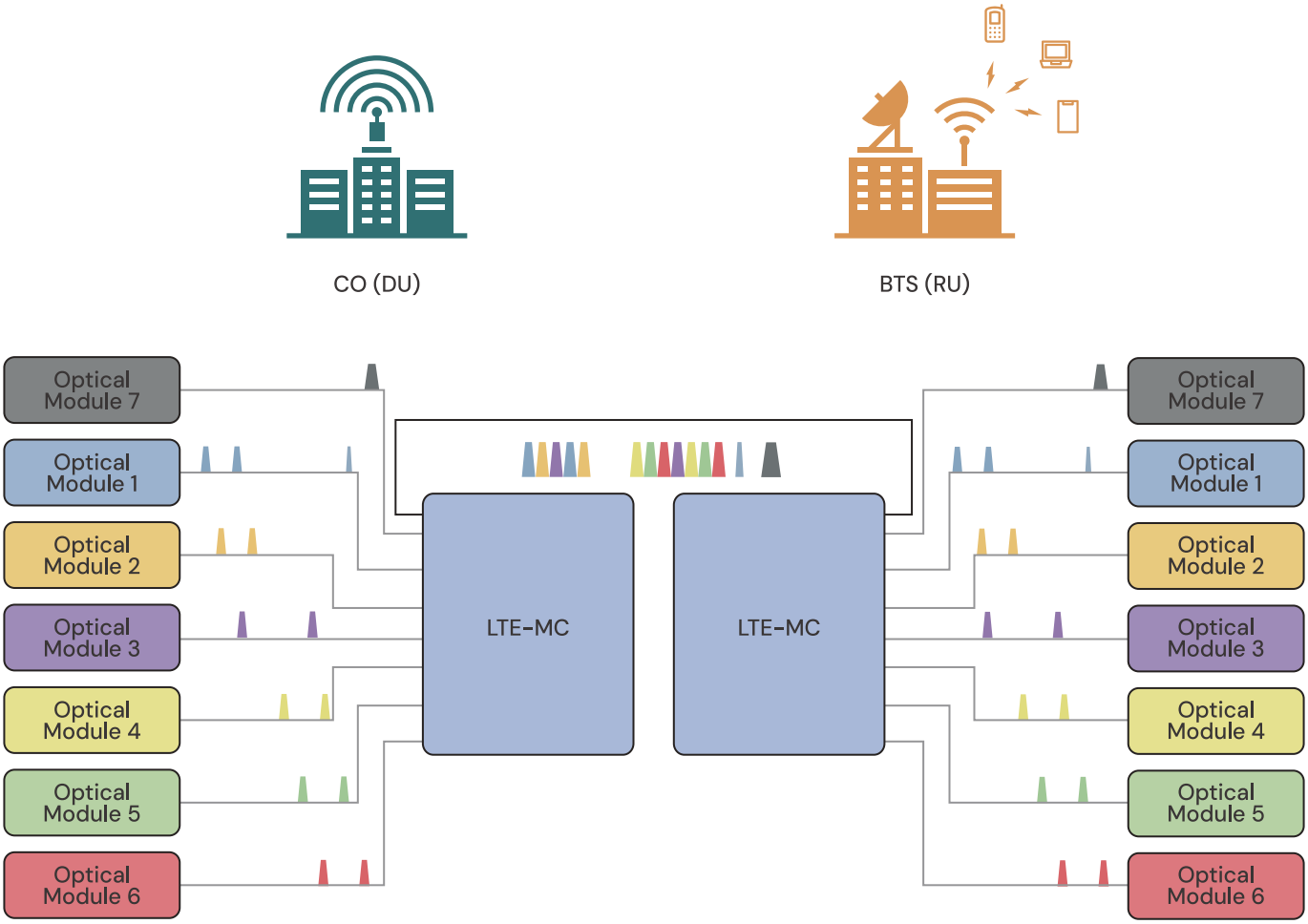
Optical Line Share Module & Solution

Wavelength division multiplexers (WDMs) and de-multiplexers are used to combine multiple signals on a single fiber(multiplexing) and to separate combined signals for distribution to multiple destinations (de-multiplexing). This increases number of bandwidth available on your existing fiber. These devices are designed for long life service under the most demanding field conditions.

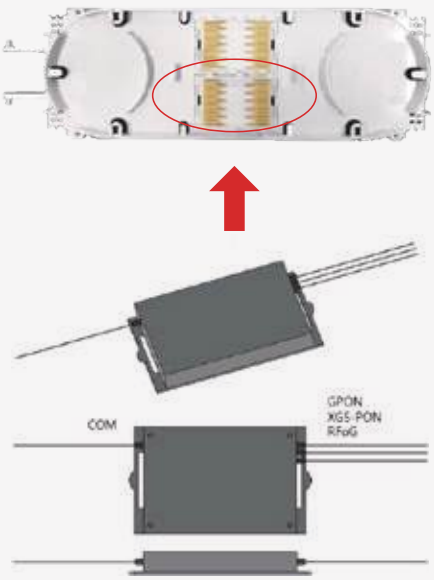
• Using wireless communication services – Fronthaul (LTE, 5G...)

OLS Module [Optical Line Share Module : LG U+_DU/RU(4G), COT/RT(5G)]

Optional Line Share(OLS) Modules Based on thin film technology allow many different services such as Telecommunication, Internet and Wi-Fi to use only one optical fiber line. These devices are designed for long service life under the most demanding field conditions.



Optical Passive Component



RCM [RF Combo Module]

Combined RF + PON Services RCM[RF Combo Module] enables RF service to customers.

Features

- Simple field installation and operation
- No change to existing services
- No additional equipment required to install

Application

- Not Coaxial Cable
- One Fiber Cable with Multiplexed Communications
- Immune to RFI/EMI
- Resistant to environmental issues

Mini Pluggable WDM

Having advantages of compact size, great reliability and low insertion loss, Mini Pluggable WDM is increasingly used in Optical system, CATV system, metro network and access network.

Features

- Pluggable thin film filter device

Application

- PON Network
- Access Network
- CATV Network

Cord-Type WDM

Cord-type WDM has advantages of small size, high reliability, and low insertion loss. It is increasingly used for upgrading space-constrained service locations and some devices.

Features

- Cord-Type thin film filter device

Application

- PON Network
- Access Network
- CATV Network

OADM Module

The OADM module adds and drops wavelength channels from network traffic and passes the other channels.

Features

- Low Optical Insertion Loss
- Cost-effective technology
- MUX/DEMUX four wavelengths
- Monitor port available
- SC or LC connectors for simple interface
- Color coded for ease of installation
- Reliable passive WDM optical technology
- Scalable for ring networks
- Low-profile modular design
- Compliance with RoHS

Optical Passive Component

This pluggable adapter will completely block specific wavelength

The first key element of PON technology is a well-designed and planned network solution. The points of fiber distribution and access, the architectural elements like PON, and the number of users for the system can be the main consideration for planning to establish the detailed FTTx network design. It is needed for a service provider to make a precise judgement on splicing location and distribution patterns. By closely co-working with our customers, we can help you to find perfect solutions for FTTx network design.

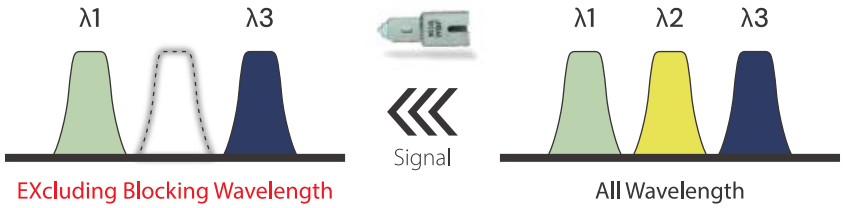
Features

- Low Cost & Low Insertion Loss
- Easy Operation & Installation
- High Reliability & Performance
- Wide-Bandwidth

Application

- FTTH Installation
- G-PON / XGS-PON / RF-Video
- OTDR
- Signal Blocking

Application example



Provides interference free for existing G-PON 'ONU' by completely blocking XGS-PON wavelength inflow.

General Specifications

Parameter	Unit	XGS-PON Blocking	GPON Blocking	NG-PON2 Blocking	OTDR Blocking
Operating W/L Range	nm	1260 ~ 1660			
Pass W/L	nm	1260~1560	1290~1330	1260~1565	1260~1610
Blocking W/L	nm	1575~1581	1480~1500	1575~1660	1625~1660
Max Insertion Loss	dB	1.5			
Operating Temp.	°C	-10 ~ +60			
Storage Temp.	°C	-40 ~ +85			
Isolation	dB	Min 40			
Connector Type	-	SC Male/Female or LC Male/Female			

Optical Connection Machine

New Standard in Fusion Splicing

The OCM-4 is a cladding alignment fusion splicer that combines practicality and cost efficiency. As a standard model, it is optimized for efficient installations and is suitable for both beginners and experienced technicians.

The OCM-6 is a core alignment fusion splicer designed for high-precision applications. Equipped with smart features including auto splicing mode, this high-precision splicer is a premium model ideal for professional, high-quality connections.

2 Years Warranty

Korea Powered

Dust Resistance

Water Resistance

Standard Package

OCM Main Unit / Electrode(1pair) / Cleaver / AC Adaptor / Battery Pack / Power Cable / USB Cable / Carrying Case / Shoulder Strap

General Specifications

Model	OCM-4	OCM-6
Alignment Method	Clad Alignment (4 Motors)	Core Alignment (6 Motors)
Applicable fibers	SM(ITU-T G.652&T G.657) / MM(ITU-T G.651) / DS(ITU-T G.653) / NZDS(ITU-T G.655)	
Cladding Diameter	80~150um	
Cleaved Length	5~16mm	
Typical Splice Loss	SM: 0.03dB / MM: 0.01dB	SM: 0.02dB / MM: 0.01dB
Return Loss	>60dB	
Splice time	Quick Mode: Avg. 4~6sec SM Mode: Avg. 6~8sec	Quick Mode: Avg. 4~6sec SM Mode: Avg. 6~8sec Auto mode: Avg. 8~10sec
Splice Programs	Max 300 Modes	
Electrode Life span	5500 Arcs Discharges	
Heating Programs	Max 100 Modes	
Heating Time	Quick: 15s / Average : 20s (60mm slim)	
Protection Sleeve	20~60mm	
Data Output	USB Type C	
Splice Memory	100,000 Splice data / 10,000 Splice Image	
Battery	Capacity : 7000mAh / Operation Cycle : 280 cycles (Splicing + Heating)	
Power Supply	AC Input 100 ~ 240V / DC input with USB-C port 5 - 20V	
Monitor	5” Color LCD display 800x480 / Full Touch Screen	
Magnification	x180 / x360 / x450 (Double Click)	
Weight	1.88kg (Including Battery)	
Size	157Wx147Dx137H With Rubber Bumper	
Pull Test	1.96~2.25N	

Measurement Instrument

Optical Wavelength Analyzer

The Optical Power Analyzer is a measurement instrument that can measure the wavelength and power of light signals in a light path. The value obtained by the measuring device makes it possible to analyze wavelength of CWDM, DWDM and LWDM with precision. Measurement facilities can also be custom-made for specific wavelengths to suit the customer's purpose.

Features

- Customized wavelength depends on users
- Measuring multi-wavelengths and optical power (CWDM & DWDM)
- Low cost with high performance
- Compact size with great portability
- Simple PC interface with color display
- High reliability

Application

- Long Haul Networks
- Metro Networks
- Data Center
- FTTH Installation

Specification

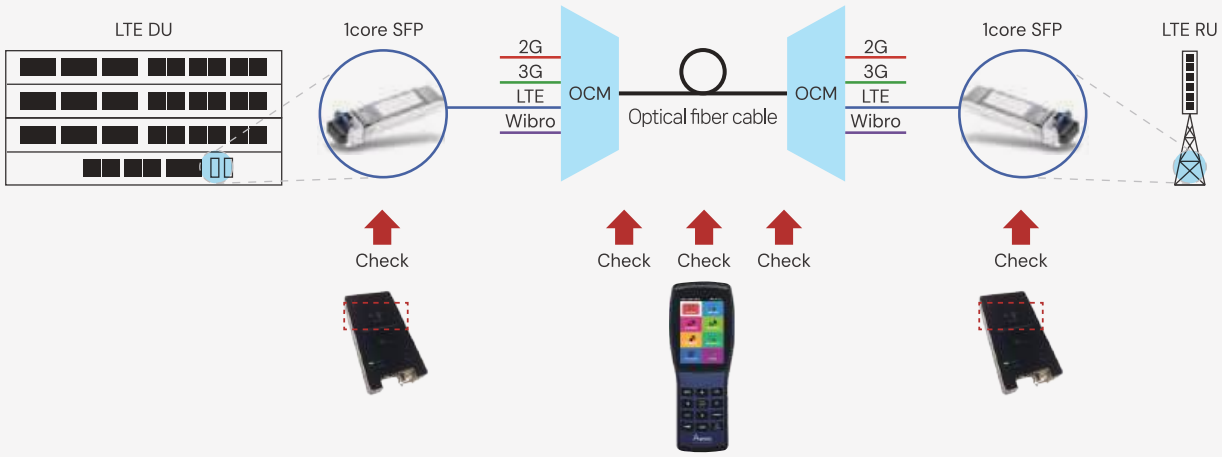
Parameters	Unit	Values
Measuring Center Wavelength	Ch	21~60 (ITU Channels)
Measuring Range	nm	λc±0.11
Power Display Range	dBm	+10 to -70
Accuracy	dB	±0.5
Measurement Unit	-	dBm/dB/mW
Interface Connector	-	SC/UPC, SC/APC, LC/UPC, LC/APC
Operating Temperature	°C	-5~50
Storage Temperature	°C	-10~70

Mechanical

Parameters	Values
Dimension	78x200x50mm
Battery Type	Lithium-Ion 3.7V (USB Rechargeable)
LCD	3.5” IPS (All Viewing Angle, 49.5x74mm)
Interface	C-Type (Data & Recharge)
Weight	0.5Kg

SFP Checker & One Core Loop Tester

It is a measuring instrument that can check the Tx and Rx status of the SFP module currently in use or scheduled to be used, and it can improve the convenience of workers by enabling swift maintenance in all sites where optical fiber lines are deployed. By inserting form-factors in the main device, various functions are operated.



Features

- Checking optical power and identifying CWDM wavelength
- Available to check SFP TX & RX power level
- Loopback the same signal of converted wavelengths into optical one-core structure
- Available light source according to wavelengths of using SFP
- USB rechargeable battery & Low voltage battery warning LED signal
- Pocket-size and handy design

Application

- Installation & maintenance of optical communication network
- Simple optical power measurements
- Checking SFP or bidirectional SFP module operation

EO Sensor

Electro-optic Probing system for minimally invasive E-field measurement. Electro-optic Sensor, All-dielectric Sensor, Sub-millimeter scale sensor, Electrode-coupled sensor

The electro-optic sensor (EOS: Electro-optic sensor) is composed of a fully dielectric electro-optic crystal and is designed for engineers who may not have expertise in options. All components of the sensor, including the optical fiber, are made entirely of dielectric materials. The sensor's size, including the crystal, is miniaturized to the scale of a human hair, ensuring minimal impact on millimeter-wave measurements and minimizing electromagnetic interference caused by the sensor. This design prioritizes reducing electromagnetic disturbances while ensuring user-friendliness for engineers without an optical background.

The probing system demonstrates remarkable versatility in its applications, encompassing not only antennas but also high-power electromagnetic waves (HPM/EMP/IEMI/MRI), plasma electric fields, electrostatic discharge (ESD), high-voltage environments, and various related scenarios. Its ability to adapt to diverse situations makes it well-suited for a wide range of applications beyond the realm of antennas.

Quantum Cryptography

The key to quantum cryptography is for two parties to use bits to share a cryptographic key. With these modules, you can detect malicious attempts to modify the status of quantum bits and prevent leaks that may occur while exchanging the key. Quantum cryptography provides security solutions capable of combating HPC technology of the future, including quantum computers.

Features

- Non-Replicability
- Advanced Cybersecurity
- Real-Time Security Monitoring
- Low Optical Insertion Loss

Special Purpose Cable Assembly

Responsive to customers' specific needs, East Photonics offers customized interconnect solutions. Depending on customers specification, we provide customized interconnect solutions based on a standard product, integrating new functions in existing ranges (like fiber optics, high density, miniaturization etc.) or designing highly customized Product.

Features

- common application of military and civilian industries
- Low Optical Insertion Loss

Application

- Field of Aviation, Vessel and Radar
- Defense industry

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East Photonics supports optimized solutions and network designs that are customized to your situation.
We also support your business precisely and help you to find a better strategy for your network system.

East Photonics located in Republic of Korea is leading manufacturer of high quality optical components and integrated modules for the fiber optics industry such as PON (Passive Optical Network). Our products are specialized to reduce CAPEX and OPEX enhancing quality of network service you provide. As the expert in PON field, we can provide the most suitable solution for you.

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