East Photonics

East Photonics

We will make the globe linked with fiber optics

Optical Module

Measurement Instrument

Network Measurement System

Why East Photonics?

We do not provide you
with only the hardware products,
but we do support your business
by co-working and
following you for better solution.

East Photonics Company Information

Why East Photonics?

With the rise of the cloud computing, the internet using, and the new development of 5G, the demands for high-bandwidth, and speedy data flows are significantly increasing.

Fiber-optic cable is the main solution to supporting today's bandwidth-intense applications. However deploying new fiber causes too much time-consuming and high-cost. Then, how do you support and add new network services with your existing fiber infrastructure while you guarantee the network performance.

Company History

- 01 2022 | ISO45001 Certification
- 02 2018 | TL9000 Certification Mass Production for NG-PON2
- 03 2015 | Mini DWDM Module
- 04 2014 | CEx for RFoG
- 05 2013 | WDM1r
- 06 2012 | Award of Optical Industry Expo
- 07 2011 | Award of Promising Company
- 08 2010 | Award of 500 Export Enterprise
- 09 2009 | WDM-PD
- 10 2008 | ROSM
- 11 2007 | 18ch CWDM PM
- 12 2006 | R&D Center
- 13 2005 | WDM Packaging Patent
- 14 2004 | Band Pass WDM
- 15 2003 | GFF, Isolator
- 16 2002 | Founded in South Korea

The answer : Passive Optical Components(POCs)

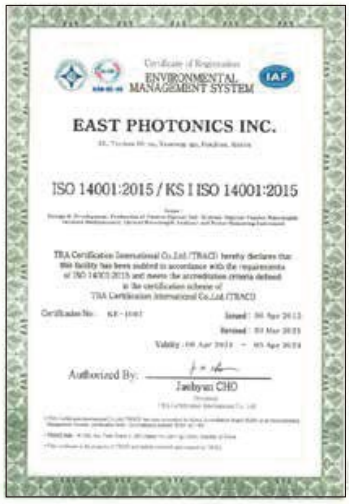
East Photonics has developed excellent Passive Wavelength Division Multiplexing (WDM) technologies. Passive Optical Devices(PODs) and Passive Optical Components(POCs) make you to integrate your network services easy and fast.

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.

Certificate

TL9000 / ISO 9001:2015



ISO 14001:2015

ISO 45001:2008

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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

Device Curing Line

Collimator Production Line

PLC Packaging Line

Optical Measurement Line

Device Packaging Line

East Photonics Main Technology

FTTH Passive Network Solution

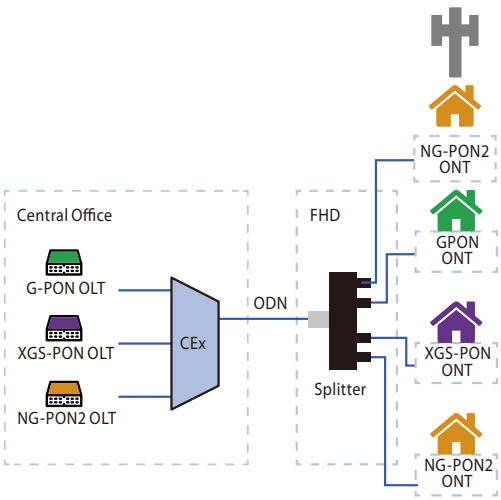
Network Design & Planning

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 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.

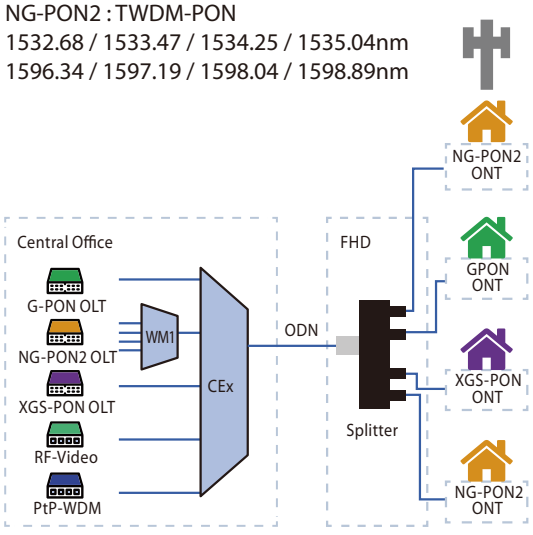
Basic CEx

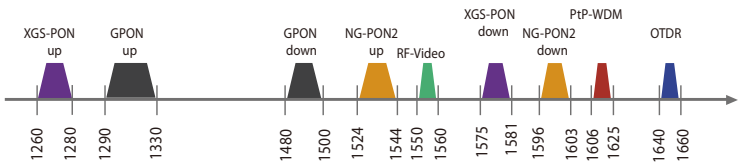
G-PON : 1310/1490nm
XGS-PON : 1270/1577nm
NG-PON2 : TWDM-PON
1532.68 / 1533.47 / 1534.25 / 1535.04nm
1596.34 / 1597.19 / 1598.04 / 1598.89nm



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

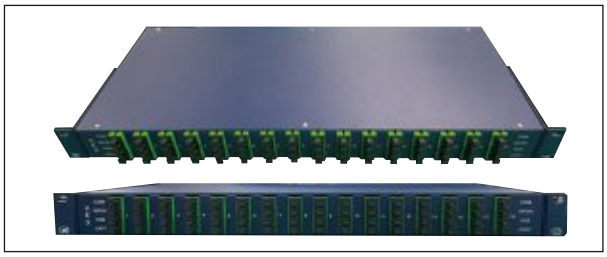


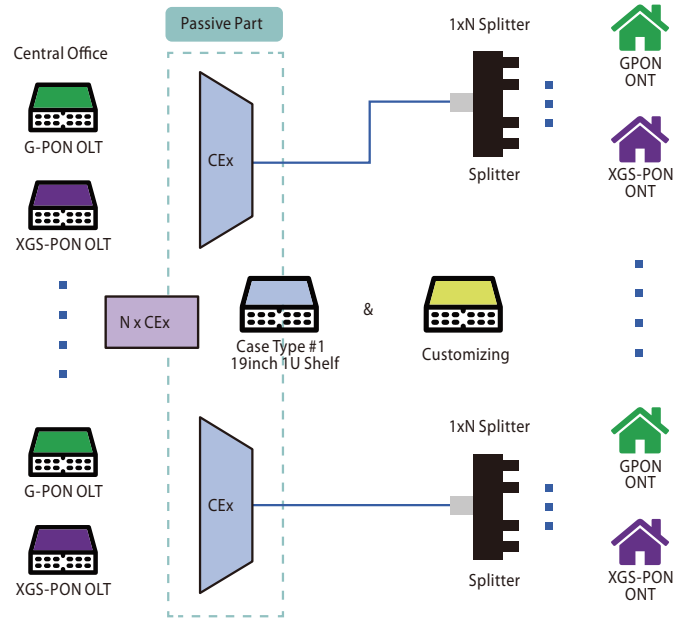


FTTx Access Network Passive Solution

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 let you adding 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 Installing & Maintaining

▶ 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

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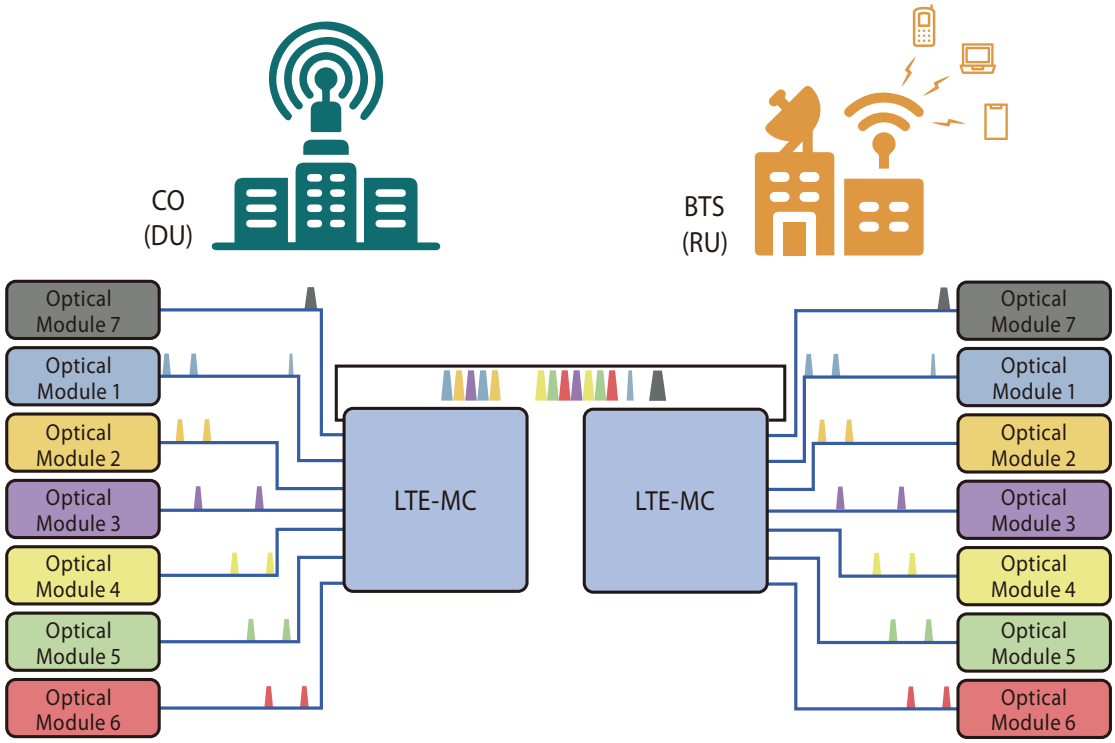
Optical Line Share Module & Solution

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.



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" One core optical line share service "

Optical Line Share Module

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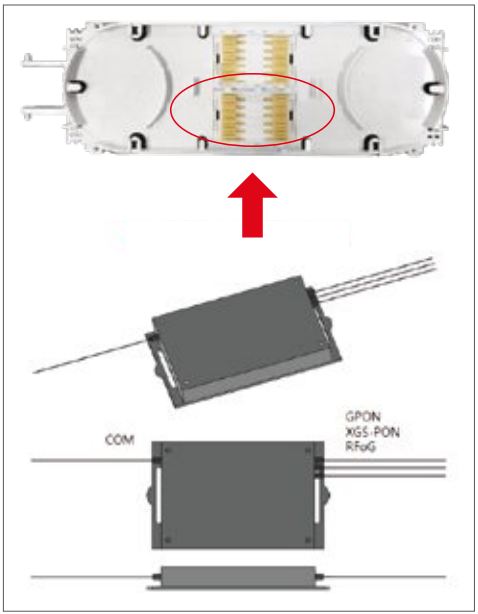
Optical Passive Component



RCM [RF Combo Module]

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

▶ Features
- Simple field installation and operation.
- Not change Service existing.
- No additional equipment required to install

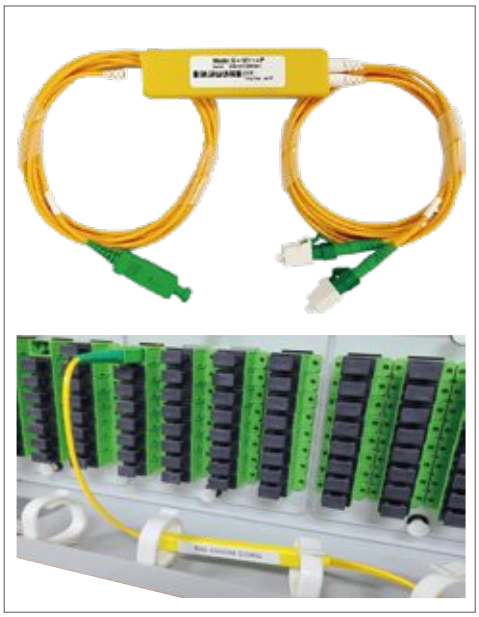
▶ Application
- Not Coaxial Cable
- One Fiber Cable with Multiplexed Communications
- Immune to RFI/EMI
- Resistant to environmental issues

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

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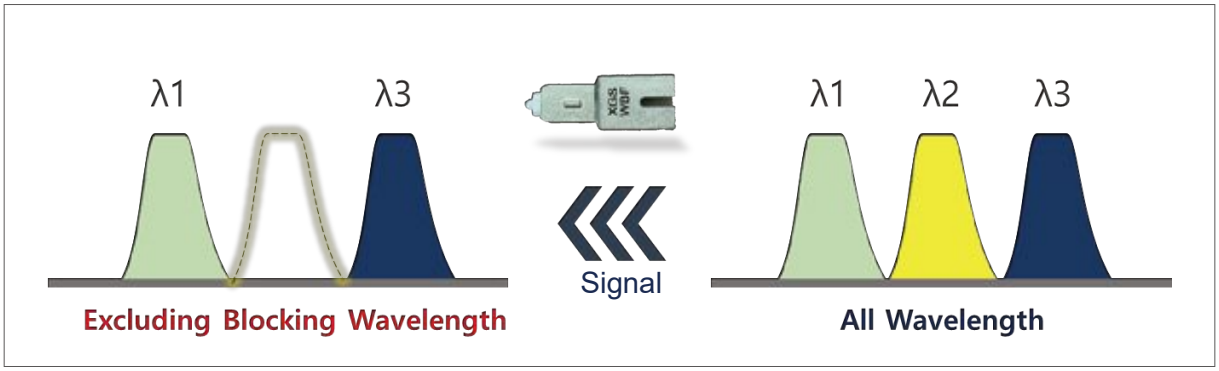
Wavelength Blocking Filter

This pluggable adapter will completely block specific wavelength

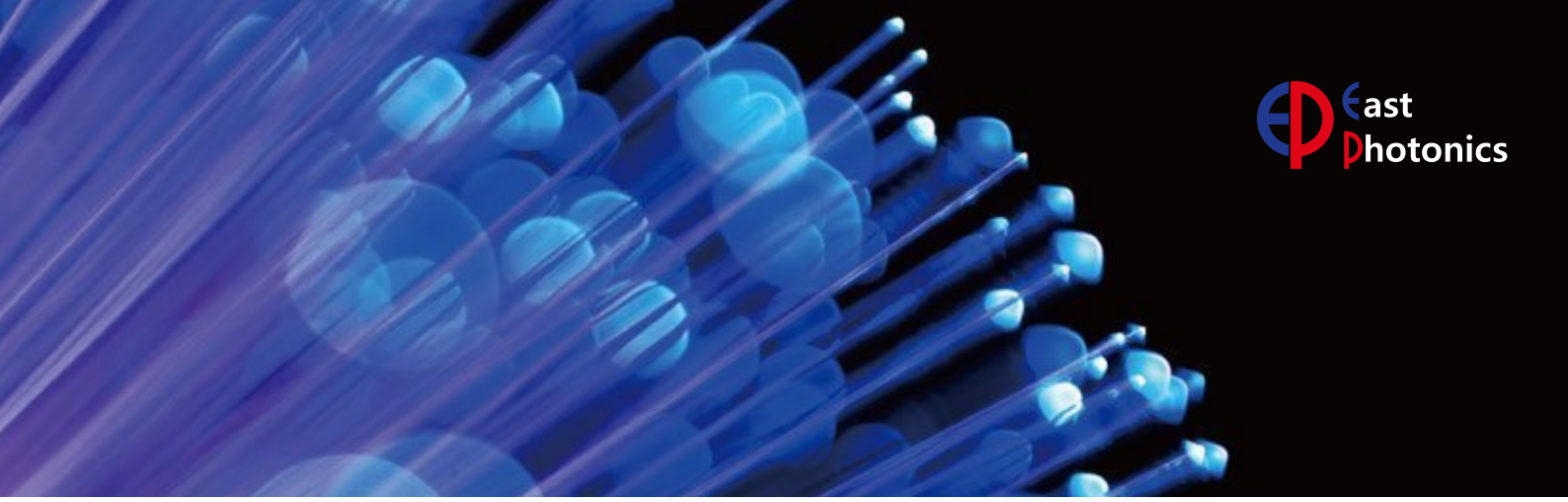
▶ Features
- Low Cost & Low Insertion Loss
- Easy Operation & Installation
- High Reliability & Performance
- Wide-Bandwidth

▶ 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.



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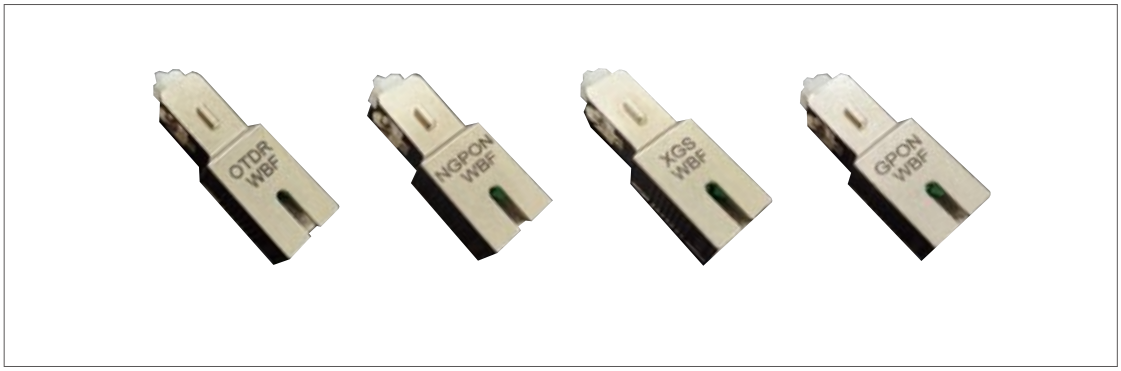

General Specifications					
Parameter	Unit	XGS-PON Blocking	GPON Blocking	NG-PON2 Blocking	OTDR Blocking
Operating W/L Range	nm	1260 ~ 1660			
Pass W/L	nm	1260~1560	1290~1330	1260~1565	1260~1610
Blocking W/L	nm	1575~1581	1480~1500	1575~1660	1625~1660
Max Insertion Loss	dB	1.5			
Operating Temp.	℃	-10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

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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.

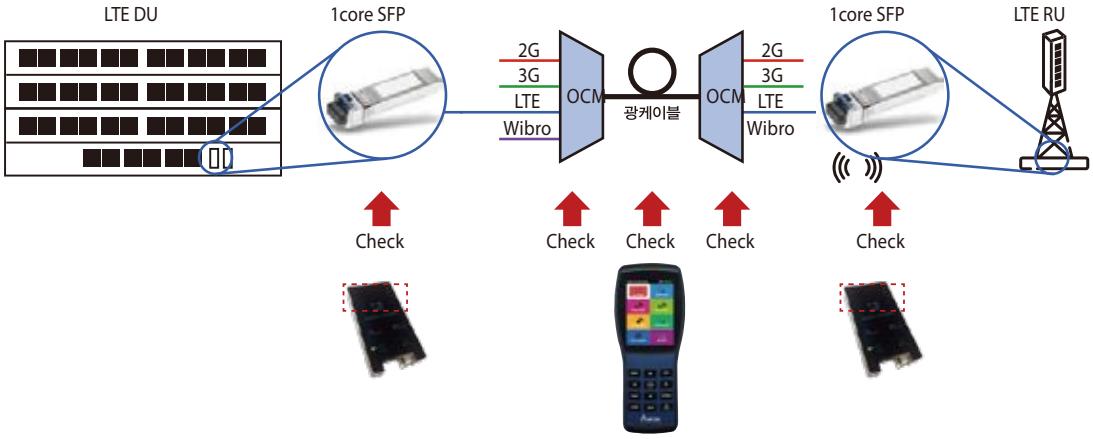
▶ Features
- Customized wavelength depends on users
- Measuring multi-wavelengths and optical power (CWDM & DWDM)
- Low cost with high performance
- Compact size with great portability
- Simple PC interface with color display
- High reliability

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

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 coverted 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

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Protection Optical Line System [POLS]

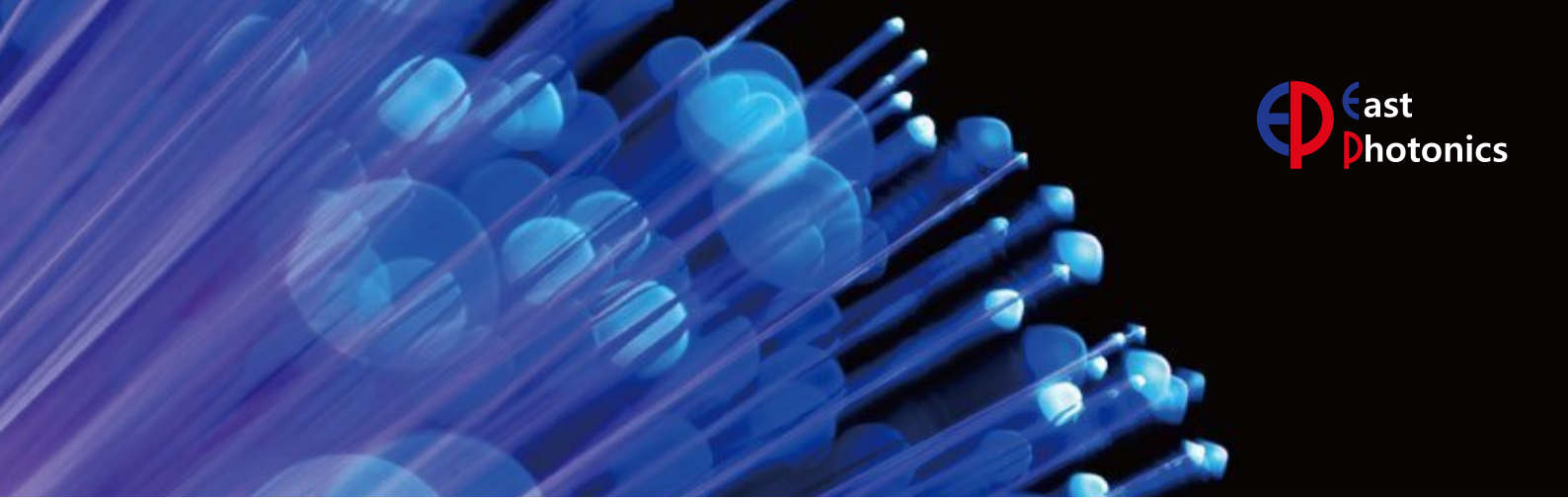
FTTH Access Network Passive Solution

POLS provides a high level of secured network for the application of optical line backup protection network by switching optical fiber circuits between primary and secondary automatically with optical power level monitoring.

With instantaneous interchange switch, it can keep the system running as normal as before when the main optical links completely break down, which improves the service quality of the network operator. POLS is highly flexible in customization providing automatic / remote changeover switching ofoptical fiber cables, automatic / remote bypass protection to various optical network paths and swiftness, safety and stability in operation and maintenance.

Key Function

- Automatic change over / bypass protection switching by detecting real time optical power level change
- Self-latching optical switching devices maintain switching status in case of power shutdown.
- With plug-in module design, optimum configuration can be selected to suit the scale of your application. (Selectable modules: 1×2/2×4/2×2 switches, single-mode/multi-mode fibers, with/without optical power detection, SC/SC-APC/LC/MU connectors)
- Indicator light shows the status of optical line at the port
- Dual hot redundancy power supply and hot-swappable.
- SSH CLI function & Web-based remote control.
- Up to Max. 8 optical switches (1×2, 2×4 or 2×2) can be accommodated in 1U chassis



Web-based remote control

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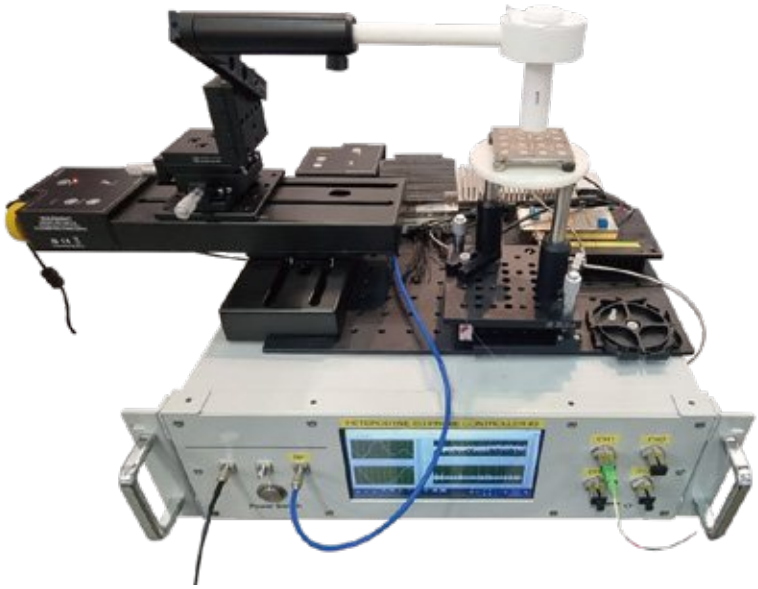
EO Sensor

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 minimalimpact 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.

Special Purpose Cable Assembly

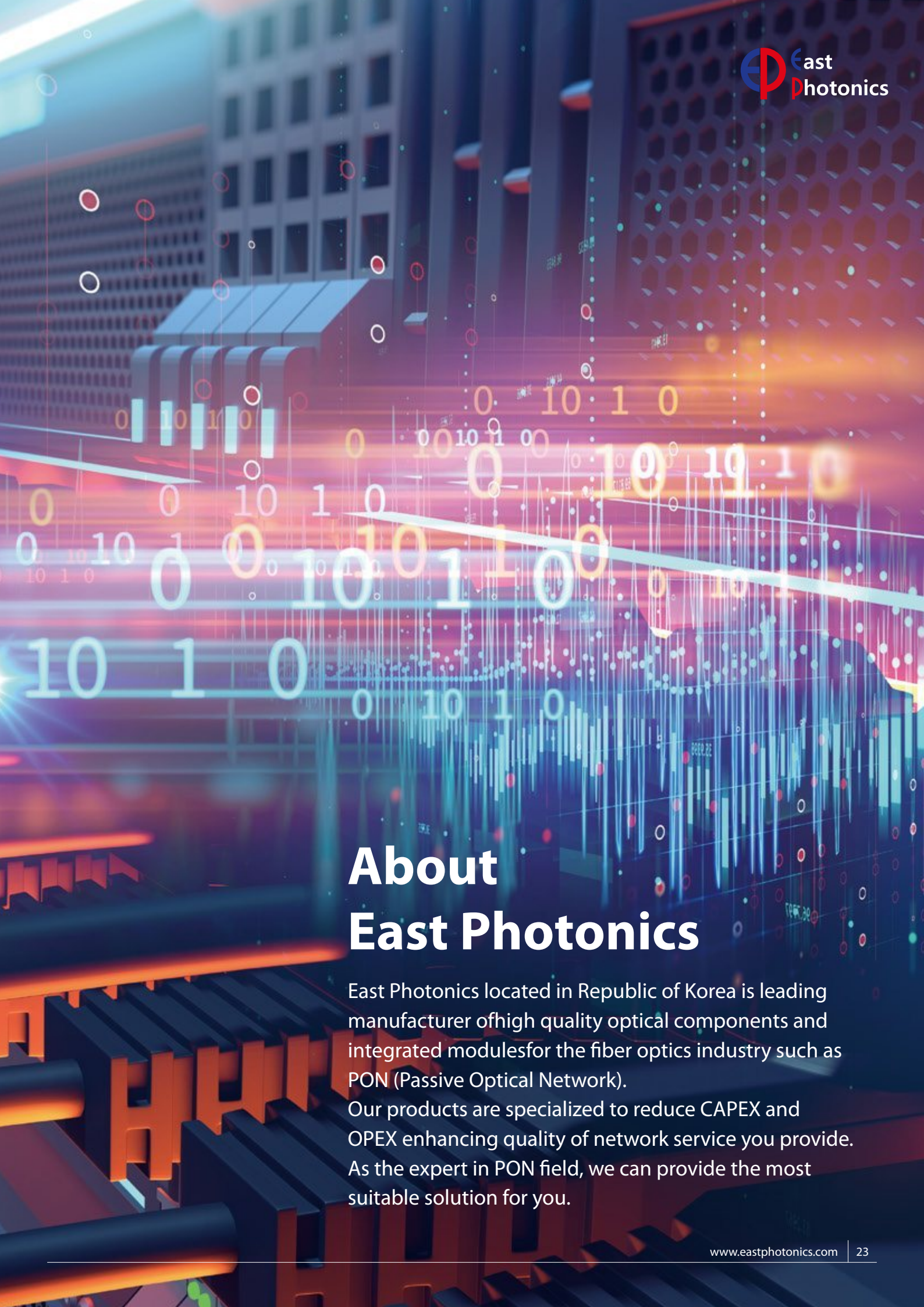
Responsive to customers' specific needs, East Photonics offers customized interconnect solutions. Depending on customers specification, we provide customized interconnect solutions based on a standard product, integrating new functions in existing ranges (like fiber optics, high density, miniaturization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

Solution Consultancy and flexible support

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.



About East Photonics

East Photonics located in Republic of Korea is leading manufacturer ofhigh quality optical components and integrated modulesfor 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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