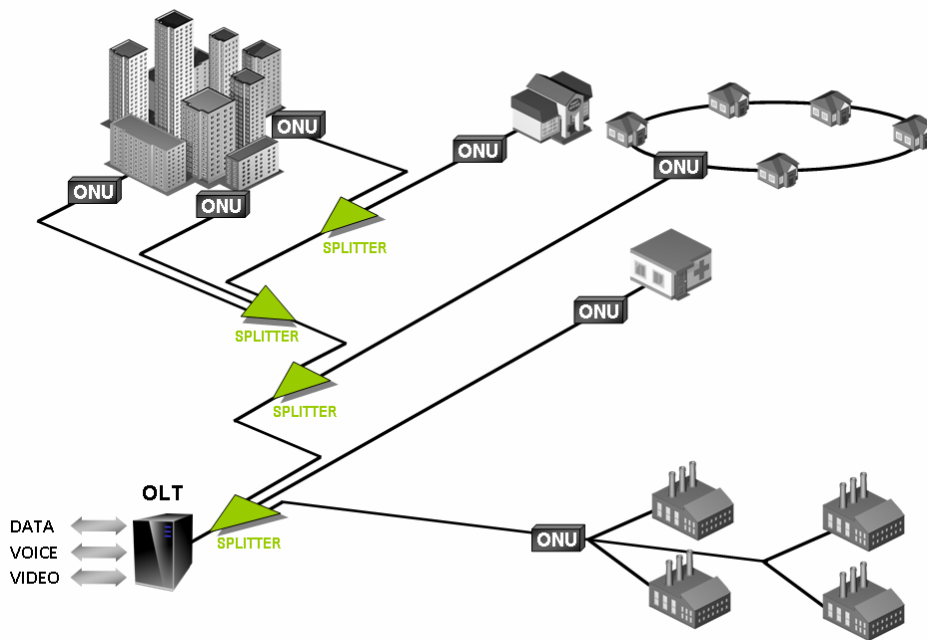


GPON/ODN Splitter Series

DESCRIPTION

GPON (Gigabit ethernet Passive Optical Network) - EPON is Fast Ethernet (100 Mbps) PON, while GPON is Giga bits Ethernet (10 Gbps) PON. Ethernet PONs build on the ITU standard G.983 for ATM PONs and seek to bring to life the dream of a full services access network that delivers converged data, video and voice over a single optical access system.



There are several primary components of a last-mile PON -- the OLT, the fiber and splitters, and the ONU:

- ▶ **OLT (Optical Line Terminal)** - located at the CO, the OLT interfaces with the metropolitan network. The main functionality of the OLT is to adapt the incoming traffic (Voice/Data/Video) from the metropolitan rings into the PON transport layer.
- ▶ **ONU (Optical Network Unit) and ONT (Optical Network Termination)** - ONU and ONT are basically the same device – ONT is located at the customer premise, and ONU is located outside the home. ONU receives optical signal and converts it into an electrical signal for use in the customer premises.
- ▶ **PON Splitters** - With a single PON splitter, 32 subscribers can be served with two-way ATM. This way, it is not necessary to include a lot of add/ drop multiplexers and install the dreaded OSP cabinet. The PON splitters can be arranged in star, ring, or tree configurations to increase reliability.

PLANK'S OPTICAL SOLUTION

As an experienced professional fiber optics components manufacturer, PLANK is providing passive optical splitter modules in a class of herself in the past decade. We are proudly launching a series of integrated, high reliability and affordable GPON/ODN splitter solutions for all our customers to meet with fast growing demand of GPON deployment.



GPON/ODN Splitter Series

PLANK G-SPLITTER SERIES

PLANK is providing GPON/ODN optical splitting 1XN and 2XN solutions for a variety of fiber deployment requirements.

1 X N TYPE G-SPLITTER Series		1008S	1008L	1016S	1016L	1032S	1032L	1064L
Splitting		1 x 8	1 x 8	1 x 16	1 x 16	1 x 32	1x 32	1 x 64
Connector Type		SC/PC	LC/PC	SC/PC	LC/PC	SC/PC	LC/PC	LC/PC
Operating wavelength (nm)		1260-1650						
Insertion Loss (dB)	Max.	11.0	11.0	14.0	14.0	17.0	17.0	21.0
Loss Uniformity (dB)	Max.	1.0	1.0	1.5	1.5	2.0	2.0	2.8
Polarization Dependent Loss (dB)	Max.	0.3	0.3	0.3	0.3	0.4	0.4	0.5
2 X N TYPE G-SPLITTER Series		2008S	2008L	2016S	2016L	2032S	2032L	2064L
Splitting		2 x 8	2 x 8	2 x 16	2 x 16	2x 32	2 x 32	2 x 64
Connector Type		SC/PC	LC/PC	SC/PC	LC/PC	SC/PC	LC/PC	LC/PC
Operating wavelength (nm)		1260-1650						
Insertion Loss (dB)	Max.	11.8	11.8	14.8	14.8	18.1	18.1	21.9
Loss Uniformity (dB)	Max.	1.8	1.8	2.0	2.0	2.2	2.2	2.8
Polarization Dependent Loss (dB)	Max.	0.4	0.4	0.4	0.4	0.5	0.5	0.5
GENERAL SPECIFICATIONS								
Directivity (dB)	Min.	55						
Return loss (dB)	Min.	55						
Operating Temperature (°C)		-15 to 70						
Storage Temperature (°C)		-40 to 85						
Optical Fiber Type		Corning SMF-28e						
G-SPLITTER Series		EIA RS-310C 19" Rackmount Standard 1U Form Factor 482 x 44 x 278mm (W x H x D)						
GX-SPLITTER Series		LGX-Compatible Standard EIA RS-310C 19" Rackmount 3U, For 12 LGX Slots						



GPON/ODN Splitter Series



**G-SPLITTER
1064L**

1 x 64 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
LC/PC ADAPTERS



DESCRIPTION

G-Splitter 1064L is a high stability 1 X 64 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 1064L is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 1 X 64 Ports is built-in the G-Splitter 1064L. All ports are terminated by standard LC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability duplex(COM port) and quadplex LC adapters.

PARAMETERS		G-SPLITTER 1064L
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	21.0
Uniformity (dB)	Max.	2.8
Polarization Dependent Loss (dB)	Max.	0.5
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

■ **G-SPLITTER 2064L**

2 x 64 Optical Splitter by LC/PC fiber termination.

■ APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
2064L**

2 x 64 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
LC/PC ADAPTERS



DESCRIPTION

G-Splitter 2064L is a high stability 2 X 64 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 2064L is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 2 X 64 Ports is built-in the G-Splitter 2064L. All ports are terminated by standard LC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability duplex(COM port) and quadplex LC adapters.

PARAMETERS		G-SPLITTER 2064L
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	21.9
Uniformity (dB)	Max.	2.8
Polarization Dependent Loss (dB)	Max.	0.5
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

■ **GX-SPLITTER 1064L**

1 x 64 Optical Splitter by LC/PC fiber termination.

■ APC Termination.



G-SPLITTER 1032S

1 x 32 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
SC/PC ADAPTERS



DESCRIPTION

G-Splitter 1032S is a high stability 1 X 32 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 1032S is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 1 X 32 Ports is built-in the G-Splitter 1032S. All ports are terminated by standard SC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability simplex(COM port) and duplex SC adapters.

PARAMETERS		G-SPLITTER 1032S
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	17.0
Uniformity (dB)	Max.	2.0
Polarization Dependent Loss (dB)	Max.	0.4
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 1032L**
1 x 32 Optical Splitter by LC/PC fiber termination.
- **G-SPLITTER 2032S**
2 x 32 Optical Splitter by SC/PC fiber termination.
- APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
1032L**

1 x 32 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
LC/PC ADAPTERS



DESCRIPTION

G-Splitter 1032L is a high stability 1 X 32 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 1032L is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 1 X 32 Ports is built-in the G-Splitter 1032L. All ports are terminated by standard LC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability duplex LC adapters.

PARAMETERS		G-SPLITTER 1032L
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	17.0
Uniformity (dB)	Max.	2.0
Polarization Dependent Loss (dB)	Max.	0.4
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 1032S**
1 x 32 Optical Splitter by SC/PC fiber termination.
- **G-SPLITTER 2032L**
2 x 32 Optical Splitter by LC/PC fiber termination.
- APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
2032S**

2 x 32 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
SC/PC ADAPTERS



DESCRIPTION

G-Splitter 2032S is a high stability 2 X 32 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 2032S is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 2 X 32 Ports is built-in the G-Splitter 2032S. All ports are terminated by standard SC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability duplex SC adapters.

PARAMETERS		G-SPLITTER 2032S
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	18.1
Uniformity (dB)	Max.	2.2
Polarization Dependent Loss (dB)	Max.	0.5
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 2032L**
2 x 32 Optical Splitter by LC/PC fiber termination.
- **G-SPLITTER 1032S**
1 x 32 Optical Splitter by SC/PC fiber termination.
- APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
2032L**

2 x 32 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
LC/PC ADAPTERS



DESCRIPTION

G-Splitter 2032L is a high stability 2 X 32 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 2032L is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 2 X 32 Ports is built-in the G-Splitter 2032L. All ports are terminated by standard LC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability duplex LC adapters.

PARAMETERS		G-SPLITTER 2032L
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	18.1
Uniformity (dB)	Max.	2.2
Polarization Dependent Loss (dB)	Max.	0.5
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 2032S**
2 x 32 Optical Splitter by SC/PC fiber termination.
- **G-SPLITTER 1032L**
1 x 32 Optical Splitter by LC/PC fiber termination.
- APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
1016S**

1 x 16 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
SC/PC ADAPTERS



DESCRIPTION

G-Splitter 1016S is a high stability 1 X 16 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 1016S is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 1 X 16 Ports is built-in the G-Splitter 1016S. All ports are terminated by standard SC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability simplex SC adapters.

PARAMETERS		G-SPLITTER 1016S
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	14.0
Uniformity (dB)	Max.	1.5
Polarization Dependent Loss (dB)	Max.	0.3
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 1016L**
1 x 16 Optical Splitter by LC/PC fiber termination.
- **G-SPLITTER 2016S**
2 x 16 Optical Splitter by SC/PC fiber termination
- APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
2016S**

2 x 16 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
SC/PC ADAPTERS



DESCRIPTION

G-Splitter 2016S is a high stability 2 X 16 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 2016S is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 2 X 16 Ports is built-in the G-Splitter 2016S. All ports are terminated by standard SC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability simplex SC adapters.

PARAMETERS		G-SPLITTER 2016S
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	14.8
Uniformity (dB)	Max.	2.0
Polarization Dependent Loss (dB)	Max.	0.4
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 2016L**
1 x 16 Optical Splitter by LC/PC fiber termination.
- **G-SPLITTER 1016S**
1 x 16 Optical Splitter by SC/PC fiber termination
- APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
1008S**

1 x 8 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
SC/PC ADAPTERS



DESCRIPTION

G-Splitter 1008S is a high stability 1 X 8 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 1008S is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 1 X 8 Ports is built-in the G-Splitter 1008S. All ports are terminated by standard SC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability simplex SC adapters.

PARAMETERS		G-SPLITTER 1008S
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	11.0
Uniformity (dB)	Max.	1.0
Polarization Dependent Loss (dB)	Max.	0.3
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 1008L**
1 x 8 Optical Splitter by LC/PC fiber termination.
- **G-SPLITTER 2008S**
2 x 8 Optical Splitter by SC/PC fiber termination
- APC Termination.

GPON/ODN Splitter Series



**G-SPLITTER
2008S**

2 x 8 OPTICAL SPLITTER
STANDARD 19"/1U RACKMOUNT
SC/PC ADAPTERS



DESCRIPTION

G-Splitter 2008S is a high stability 2 X 8 optical splitter in an industrial standard 19" rackmount chassis at 1U height. Built-in an advanced Plank Planar Lightwave Circuit module together with superior fiber termination technology, G-Splitter 2008S is ability to operate at highest performance at all times.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank Optical Coupler 2 X 8 Ports is built-in the G-Splitter 2008S. All ports are terminated by standard SC/PC connectors.

ADAPTERS

Equipped with Low insertion loss, high reliability/durability simplex SC adapters.

PARAMETERS		G-SPLITTER 2008S
Operating wavelength (nm)		1260-1650
Insertion Loss (dB)	Max.	11.8
Uniformity (dB)	Max.	1.8
Polarization Dependent Loss (dB)	Max.	0.4
Directivity (dB)	Min.	55
Return loss (dB)	Min.	55
Operating Temperature (°C)		-15 to 70
Storage Temperature (°C)		-40 to 85
Optical Fiber Type		Corning SMF-28e
Dimension W x H x D (mm)		482 x 44 x 278

ALSO AVAILABLE

- **G-SPLITTER 2008L**
2 x 8 Optical Splitter by LC/PC fiber termination.
- **G-SPLITTER 1008S**
1 x 8 Optical Splitter by SC/PC fiber termination
- APC Termination.

GPON/ODN Splitter Series



GX-SPLITTER SERIES

HIGH FLEXIBILITY OPTICAL SPLITTING SOLUTION
STANDARD 19"/3U RACKMOUNT



DESCRIPTION

GX-Splitter Series is based on a LGX-compatible standard mechanism that provides a high flexibility for integrating a modern GPON system.

Plank's LGX base chassis meets EIA RS-310C 19" rackmount standard at 3U form factor that is compatible with industrial standard 19" cabinets. Each LGX base chassis is capable of installing 12(6+6) slots of LGX modules.

According to the optical splitting requirements, the optical coupler(s) could be built-in a single-slot, double-slot, triple-slot or hex-slot size LGX module then integrated into LGX base chassis.

SPECIFICATIONS

MATERIAL

Housing, dust cover and mounting hasp are precision-machined from corrosion-resistant aluminum.

FINISH

All housing aluminum parts are polyester powder coating that meets all major environmental protection regulations.

OPTICAL SPLITTER MODULE

A Plank optical coupler will be built-in the LGX module. All ports are terminated by standard SC/PC or LC/PC connectors.

ADAPTERS

Equipped with a variety of low insertion loss, high reliability, high durability SC or LC adapters.

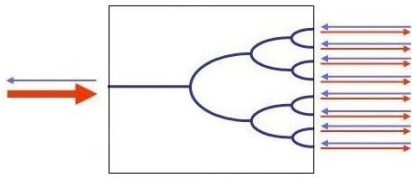
COMBINATION

SPLITTING	CONNECTOR TYPE	SINGLE SLOT	DOUBLE SLOT	TRIPLE SLOT	HEX SLOT
1 x 2	SC / LC	●			
1 x 4	SC / LC	●			
1 x 8 / 2 x 8	SC		●		
1 x 8 / 2 x 8	LC	●			
1 x 16 / 2 x 16	SC			●	
1 x 16 / 2 x 16	LC		●		
1 x 32 / 2 x 32	SC				▲
1 x 32 / 2 x 32	LC			●	
1 x 64 / 2 x 64	SC	N/A			
1 x 64 / 2 x 64	LC				▲

● is a standard item.

▲ is built to order.

GPON/ODN Splitter Series



PLANK PLC MODULE SERIES

HIGH FLEXIBILITY

ENVIRONMENTAL INDEPENDANT

OPTICAL SPLITTER/COUPLER



DESCRIPTION

Planar Lightwave Circuit (PLC) is a key component of functional devices for use in a variety of optical communication systems since, compared with bulk optics devices, they offer compactness and excellent stability in addition to intrinsic high functionality. When a PLC device is composed of a silica glass waveguide, its insertion loss is very low by its little absorption and scattering in waveguide and providing high fiber coupling efficiency. PLC devices also come with long-term reliability that is comprised by the excellent physical and chemical stability of silica glass. These benefits are substantiated by the widespread use of array-waveguide grating (AWG) wavelength multiplexers in current Dense Wavelength Division Multiplexing (DWDM) systems and optical splitters and couplers in the subscriber lines of fiber-to-the-home systems (e.g. GPON system).

HOW PLANK MAKS A QUALITY PLC MODULE ?

Passing the Telcordia GR-1209-CORE and GR-1221-CORE specifications is fundamental necessity of our PLC splitters.

The keys to produce high quality PLC modules are simple in literature but need absolute attention deficit on daily operation :

- ▶ Selected the world-class materials from MOCIE approval list (Splitter module & PLC fiber array).
- ▶ Perform a strict quality assurance SOP following by ISO9001:2008 Definitions..

QUALITY ASSURANCE

