Optical Network Solutions

VISSEM VISSEM ELECTRONICS

Power of Challenge

Growth energy of enterprise development

VISSEM is constantly challenging and innovating in a spirit of research to create a hopeful future.
We are not satisfied with the present but will move forward and will take crisis as an opportunity.
The future is owned by a dreaming human and a challenging enterprise.

Business Area

Opticube®

LED Business

LED Display Board
- Display Board
- LED Module
- Display Unit

LED Components *ViTron*
- LED LAMP
- SMD LED
- High Power LED

LED Lighting
- Landscape Lighting
- Lighting Tile
- Back Light

Fiber Optic Business

Opticube®

- Fiber Optic Splice Closure
- Fiber Distribution Frame
- Optical Termination Box
- Fiber Optic Accessories

KTX Business

- OBCS (On Board Computerized System)
- Power/ Trailer Car Battery Charger
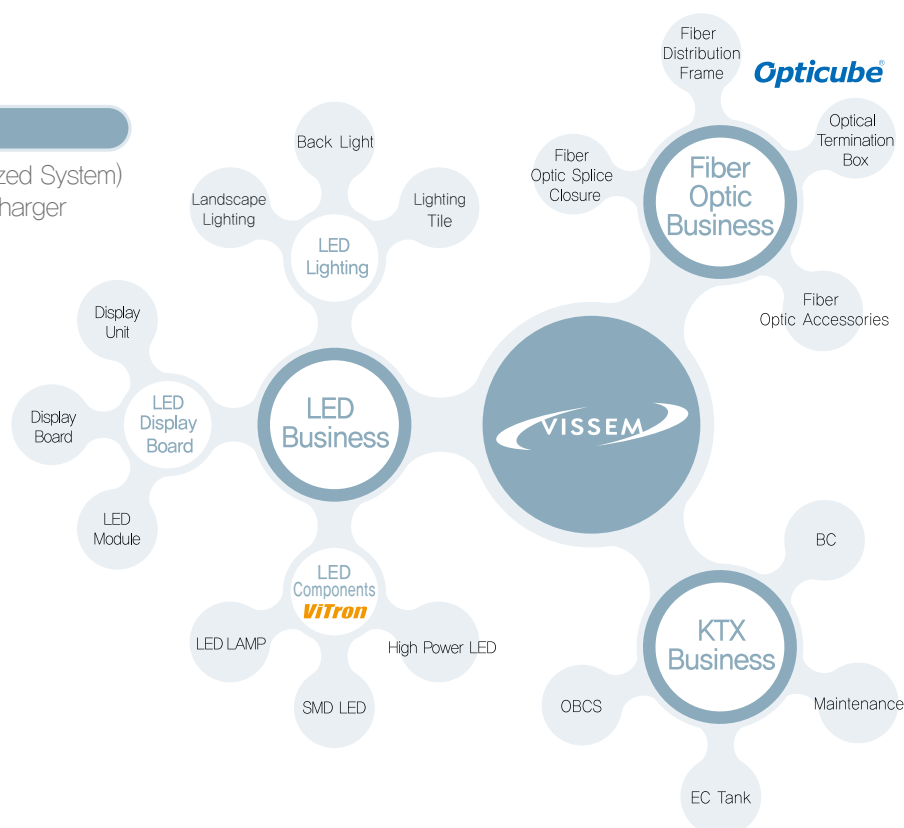- Electronic Cooling Tank
- Maintenance

Table Of Contents

The leader of
NetworkTechnology

We do not settle down today but constantly challenge
and innovate in a spirit of research.

As a company with differentiated product and with high trust for clients, we will do our best to satisfy clients today and
tomorrow as well. We will lead the network technology and become a company moving beyond Korea to the world.

Company Introduction

Since 1994, Our company has participated in major projects for nation–wide optical fiber
network backbone construction and high–speed internet networks for FTTx.

To provide total solutions for fiber optical networks, we started R&D and manufacturing
of passive optical components from 1998, as well as for expanding our business area in
telecommunication business fields. as a result, SAMJIN Information & Communication Co. in
2007, and Dongyang Telecom Co., a leading telecommunication equipment manufacturer in
2014, were acquired and merged.

Our products are recognized as an excellent product in convenience and reliability resulting
of client's positive response to the rapidly changing technologies.

We have been expanding our markets and providing to not only 3 major Korean telecom
companies, but also major telecom companies over 45 countries.

As a leading solution provider of optical fiber network, We, VISSEM will do our best to be
loved by clients through technology innovation and enhanced reliability.

CEO. manjoon, Kang

Company History

Opticube®

1998
· Spun off from Samsung SDI and set up a subsidiary Company in the name of VISSEM

1999
· Acquired ISO 9001 certification
· Certified as promising venture enterprise

2000
· Established new headquarter and plant in Yongin
· International patent registration for FICOC (Germany, Japan, China, USA)

2001
· Partnership with Korea Telecom on IMT−2000 business
· Developed Dome Type fiber optic closure BS604A
· Patent registration for FDF(Fiber Distribution Frame)

2002
· Developed BBC(Broad Band Cabinet) for Korea Telecom

2003
· Signed Supply contract with DCMNR in Ireland

2004
· Signed annual sales contract with KT & SK Networks
· Started to supply fiber optic closure to MSO

2005
· Developed closure BS403A extension type for FTTx network
· Patent registration for Opticube (No.0648362)

2006
· Started to supply closure BS403A and Splitter for FTTx network
· Signed supply contract for Optical Cable with TAIHAN Electric wire
· Acquisition of Samjin Information & Communications Co., Ltd.

2007
· Developed RN402A Closure for FTTH network
· Developed In−line aerial type fiber optic splice closure BS603A
· Developed large size fiber optic splice closure BS606R for ribbon cable

2008
· Developed in−line aerial type small size fiber optic splice closure BS603B
· Developed swing modules FDF for subscriber
· Developed large size dome type fiber optic splice closure BS712A,BS604C

2009
· Rated by KT−Excellent business partner in 2009
· Signed supply contract with LG U+

2010
· Signed supply contract with Nexans
· Rated by KT−Excellent business partner in 2010
· Developed Centralized HUB Rack

2011
· Rated by KT−Excellent business partner in 2011
· Acquired ISO14001 / ROHS certification

2012
· Listed in KOSDAQ(#072950)
· Venture Business Award (premier Award)

2013
· Designated as a Promising Export Firm
· Developed plastic 1U FDF
· Developed LGU+ Optical TAP

2014
· Designated as a Model Taxpayer
· Developed SK hybrid TAP
· Acquisition of Dongyang Telecom co., Ltd

2015
· Developed Multi−core Dome Closures (BS712B, BS710B)

2016
· Signed supply contract of Splitter with VNPT in Vietnam
· Designated as a Small Giant Company of Korea
· Developed Cross Connect Closure CS603A for FTTx network

2017
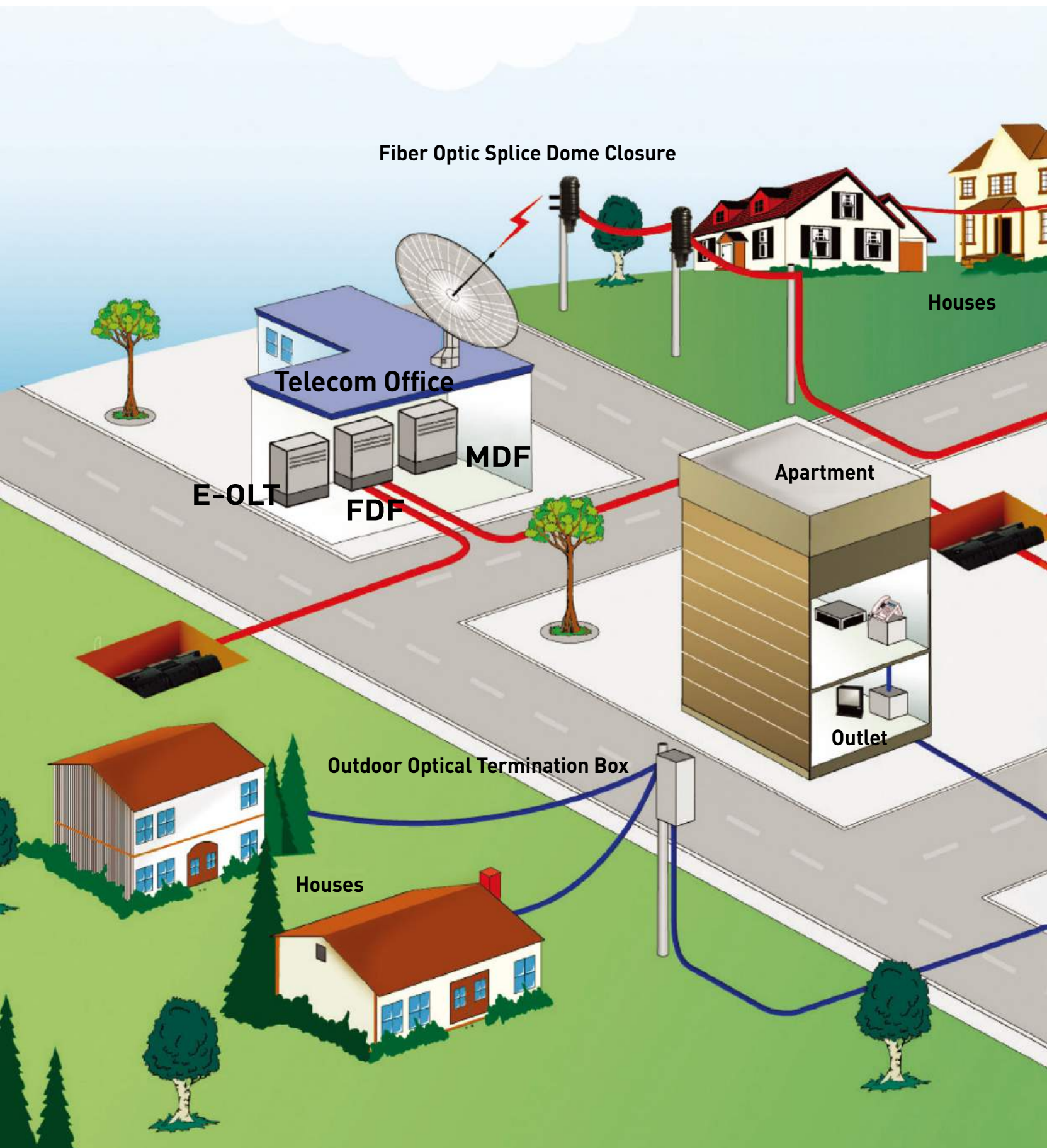· Acquired CE DoC certification (BS506A, BS603B, BS604A, BS712A)
· Patent registration for Multi−core Dome Closure (No. 101777272)

2018
· Developed 5G products (OTB−GM, OTB−GE, T605A, T−PON RNS)

Physical Media Layer _ Capabilities

Fiber Optic Splice Dome Closure

Houses

Telecom Office

MDF

E-OLT

FDF

Apartment

Outlet

Outdoor Optical Termination Box

Houses

VISSEM ELECTRONICS

Opticube®

Optical Termination Box for FTTH

Business Building

Optical splitter

Indoor OTB

Cabinet Rack

FTTx

Optical Termination Box

Manhole

Fiber Distribution HUB

Fiber Optic Splice Closure for Inline

Apartment Building

Outdoor System Rack

Fiber Optic
Splice Closure

Optical Network Solutions

Fiber Optic Splice Closure - Inline -

Fiber Optic Splice Closure Inline types are engineered to meet common needs and field conditions, with different sizes to accommodate varying splice counts. Fiber Optic Closures are made of a tough chemical–resistant material and have a gasket seal, making them ideal for a wide variety of applications. All closures are designed to be easy to install, easy to use and easy to re–enter.
In addition, the multiport grommet feature provides for simple, flexible and future–proof drop or small diameter branch cable additions
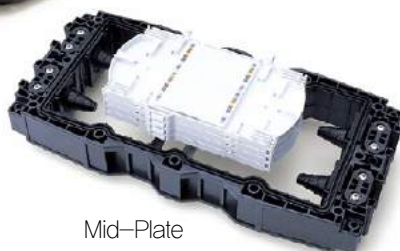
BS403A–SD

BS403A–SS

BS403A–DD

Mid–Plate

BS403A

· The closure has an air valve on its cover for checking air pressure drop.

· The ribbed body has high mechanical strength against impact and compression.

· The closure has 2 cable entry ports at both side and is available to make up to 12 cable entry ports by inserting mid plate

· The splice tray is applicable for both loose tube and ribbon fiber management.

· The ground connector and wire are offered for grounding metallic OSP cables.

· The sealing gaskets and the external bolts provide with the excellent tightness reliability.

· The Cone type sealing gasket is adjustable to fit any cable diameter.

Model	Size (mm)	Weight (kg)	Cable Port (Entry/Exit)	Cable Dia. (mm) (Main/Drop)	No. of Splice Tray Tray Capacity (single/double)	Splice Capacity (single/double)	IP Grade
BS403A–SS	435 X 205 X 113	2.8 kg	4 (2/2)	6~20 / 3.5 ~ 12	4 (24C / 48C)	96C / 192C	IP 68
BS403A–SD	435 X 205 X 167	3.8 kg	8 (4/4)	6~20 / 3.5 ~ 12	6 (24C / 48C)	144C / 288C	IP 68
BS403A–DD	435 X 205 X 221	4.8 kg	12 (6/6)	6~20 / 3.5 ~ 12	8 (24C / 48C)	192C / 384C	IP 68
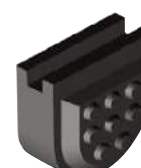
Item	Mono	Di	Tetra	Octa
Cable Dia. (mm)	6 ~ 20	11 ~ 12	6 ~ 12	3, 5 ~ 6

Fiber Optic Splice Closure - Inline -

K605A is specially designed for specific FTTx network environment and developed for multi–branch and multi–purpose and which is suitable for 8–branching or multi–branching installation by using multi–branching gaskets in case of FTTx network installation. besides, it provides with easy and reliable installation and high mechanical strength against any environmental conditions.

K605A

· The ribbed body has high mechanical strength against impact and compression

· Capability of multi–core management

· 100% water–proof by using silicone gasket

· Mechanically assembled by Bolt

· Available for various cable diameter, multi branching and various installation environments
(Aerial, Duct, Manhole, Wall)

Model	K605A	Remarks
Size (mm)	320 X 195 X 120	
Weight (kg)	2.5 kg	
Cable ports (Entry / Exit)	6 (3/3)	
Cable dia. (mm) (Main / Drop)	Ø6 ~ Ø16 / Ø3.5 ~ Ø8	
No. of splice tray	5	
Tray Capacity (Single / Double)	12C / 24C	
Splicing Capacity (Single / Double)	60C / 120C	
Splice Protector	Heat shrinkable sleeve, Mechanical splice	
Tension member	Galvanized steel wire, FRP, Wire	
IP Grade	IP 68	

Fiber Optic Splice Closure - Inline -

RN402A protects fiber optic splicing joint in various installation conditions such as wires, manhole, ducts and direct buried. It is specially designed for FTTH network and applicable to multi branching installation meeting the requirements in each point of network. In addition, it provides with easy and reliable installation and high mechanical strength against any environmental conditions.

RN402A

· The ribbed body has high mechanical strength against impact and compression.

· The cable inlet consists of 4 ports two by two at both sides, and it is designed to be able to supply up to 12 ports by using multi–port gaskets.

· The Splice tray is able to accommodate splitter and heat shrinkable sleeve together.

· The sealing gaskets and the external bolts provide with the excellent tightness reliability.

Model	RN402A	Remarks
Size (mm)	270 X 160 X 80	
Weight (kg)	2.0 kg	
Cable ports (Entry / Exit)	4 (2/2)	
Cable dia. (mm) (Main / Drop)	Ø8 ~ Ø14 / Ø3.5 ~ Ø8	
No. of splice tray	2	
Tray Capacity (Single / Double)	12C / 24C	
Splicing Capacity (Single / Double)	24C / 48C	
Splice protector	Heat shrinkable sleeve, Mechanical splice	
Tension member	Galvanized steel wire, FRP, Wire	
IP Grade	IP 68	

Fiber Optic Splice Closure - Inline -

MN401A protects fiber optic splicing joint in various installation conditions such as wires, manhole, ducts and direct buried. It is specially designed for FTTH network and applicable to multi branching installation meeting the requirements in each points of network. In addition, it provides with easy and reliable installation and high mechanical strength against any environmental conditions.
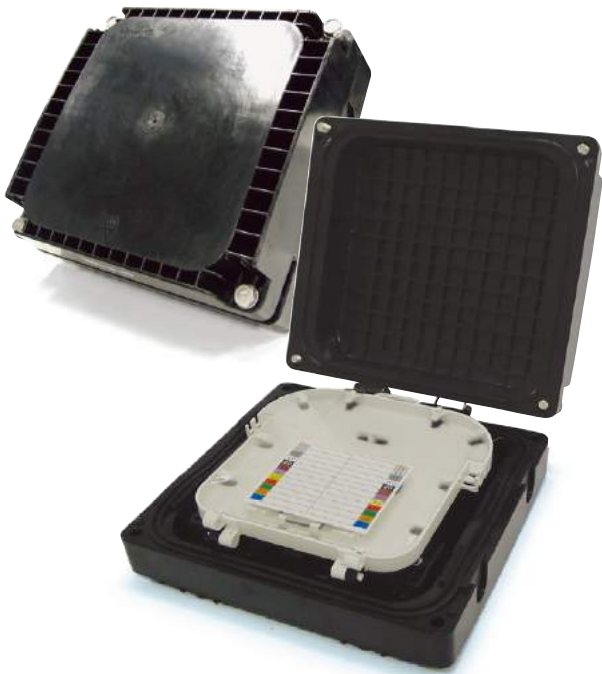
MN401A

· The ribbed body has high mechanical strength against impact and compression

· Available to accommodate 8~10.5mm and 3.5mm drop cable

· 100% water-proof by using silicone gasket

· Light weight & Compact.

· Available to install on pole, wall and underground

Model	MN401A	Remarks
Size (mm)	200 X 180 X 72	
Weight (kg)	1.0 kg	
Cable ports (Entry / Exit)	4 (2/2)	
Cable dia. (mm) (Main / Drop)	Ø8 ~ Ø10 / Ø3.5	
No. of splice tray	1	
Tray Capacity (Single / Double)	8C / 16C	
Splicing Capacity (Single / Double)	8C / 16C	
Splice protector	Heat shrinkable sleeve, Mechanical splice	
Tension member	Galvanized steel wire, FRP, Wire	
IP Grade	IP 68	

![Opticube®]

Fiber Optic Splice Closure - Inline -

The closure consists of outer cases, gaskets, splice trays and inner kits, which has one entry port for main cable and two entry ports for drop cable at both sides. The outer case consists of the upper and lower body and constructed of highly chemical resistant material. and each splice tray is able to accommodate 24 individual fiber fusion splices.
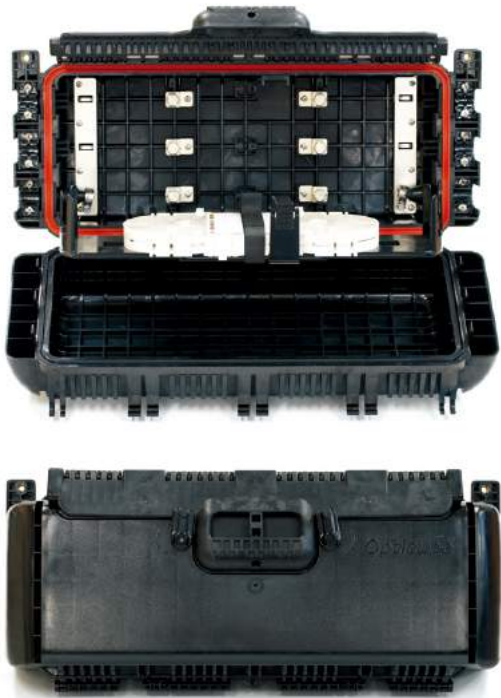
BS603B

BS604D

· Easy open and close by using one touch clip

· The ribbed body has high mechanical strength against impact and compression

· The closure has 3 cable entry ports at both sides.
  and 1 port gasket for main cable and 4 ports gasket for the drop cable are available

· The splice tray is applicable for both loose tube and ribbon fiber management.

· The sealing gaskets and the external bolts provide with the excellent tightness reliability.

· The cone type sealing gasket is adjustable to fit any cable diameter.

· Available to install on pole, wall and underground

Model	Size (mm)	Weight (kg)	Cable Port (Entry/Exit)	Cable dia. (mm) (Main / Drop)	No. of Splice Tray Tray Capacity (Single / Double)	Splicing Capacity (Single / Double)	IP Grade
BS603B	420 X 180 X 100	2.5 kg	6 (3/3)	8 ~ 20 / 3 ~8	3 (24C / 48C)	72C / 144C	IP 68
BS604D	420 X 180 X 100	2.5 kg	6 (3/3)	8 ~ 20 / 3 ~8	4 (24C / 48C)	96C / 192C	IP 68

Fiber Optic Splice Closure - Inline -

BS606G consists of outer cases, gaskets, splice trays and inner kits, which has three entry port for main cable at both sides. The outer case consists of the upper and lower body and constructed of highly chemical resistant material, and each splice tray is able to accommodate 24 individual fiber fusion splices.


BS606G

· The body has high mechanical strength against impact and compression

· The closure has 3 cable entry ports at both sides.
and 1 port gasket for main cable and 4 ports gasket for the drop cable are available

· The cone type sealing gasket is adjustable to fit any cable diameter.

· Main gasket provides with the excellent tightness reliability.

· Easy open and close by using one touch clip.

· Tight jointed cable sheath for work efficiency

· Designed for the beauty of the town

Model	BS606G	Remarks
Size (mm)	500 X 202 X 145	
Weight (kg)	4.4 kg	
Cable ports (Entry / Exit)	6 (3/3)	
Cable dia. (mm) (Main / Drop)	Ø8 ~ Ø20 / Ø3 ~ Ø8	
No. of splice tray	6	
Tray Capacity (Single / Double)	24C / 48C	
Splicing Capacity (Single / Double)	144C / 288C	
Splice protector	Heat shrinkable sleeve, Mechanical splice	
Tension member	Galvanized steel wire, FRP, Wire	
IP Grade	IP 68	

Opticube®

Fiber Optic Splice Closure - Inline -

BS606A is multi−purpose closure to protect the connection part of optical cable and the splicing part of optical fiber from external circumstances, and it provides with the high working operation with the use of one touch clip and high convenience and reliability by the fixed gasket & sealing socket at same time. it is designed to have high−capability & high−interchangeable ability in multi−branch type with the concern of variety of optical network configuration and installation site.

BS606A
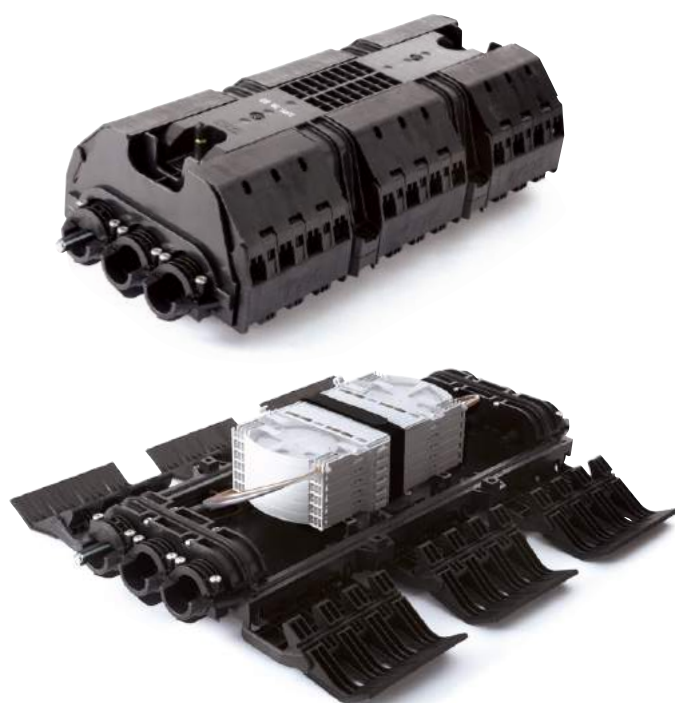
· The main body has a valve to check the pressure inside closure and has a lot of rib on inside and outside of closure to protect optical cable from the external circumstances.

· There are 6 cable entry ports which are divided by 3 each in both side, and it is optimized for the convenience of operation with the use of fixed sealing socket.

· The splice tray has 6 way inlet and is composed of the slot to use loose tube & ribbon cable and the transparent cover to record the state of fiber's connection.

· 6 clips outside provide with high working speed, convenlence and high reliability.

· No Special tool required

Model	BS606A	Remarks
Size (mm)	542 X 243 X 150	
Weight (kg)	4.5 kg	
Cable ports (Entry / Exit)	6 (3/3)	
Cable dia. (mm) (Main / Drop)	Ø6 ~ Ø29 / Ø6	
No. of splice tray	6	
Tray Capacity (Single / Double)	24C / 48C	
Splicing Capacity (Single / Double)	144C / 288C	
Splice protector	Heat shrinkable sleeve, Mechanical splice	
Tension member	Galvanized steel wire, FRP, Wire	
IP Grade	IP 68	

Fiber Optic Splice Closure - Inline -

K806A is specially designed for specific FTTx network environment and developed for multi–branch and multi–purpose and which is suitable for 8–branching or multi–branching installation by using multi–branching gaskets in case of FTTx network installation. besides, it provides with easy and reliable installation and high mechanical strength against any environmental conditions.

K806A

· The ribbed body has high mechanical strength against impact and compression

· Capability of multi–core management

· 100% water–proof by using silicone gasket

· Mechanically assembled by Bolt

· Available for various cable diameter, multi branching and various installation environments. (Aerial, Duct, Manhole)

Model	K806A	Remarks
Size (mm)	559 X 242 X 135	
Weight (kg)	4.5 kg	
Cable ports (Entry / Exit)	8 (4/4)	
Cable dia. (mm) (Main / Drop)	Ø8 ~ Ø24 / Ø3.5 ~ Ø8	
No. of splice tray	6	
Tray Capacity (Single / Double)	24C / 48C	
Splicing Capacity (Single / Double)	144C / 288C	
Splice protector	Heat shrinkable sleeve, Mechanical splice	
Tension member	Galvanized steel wire, FRP, Wire	
IP Grade	IP 68	

Opticube®

Fiber Optic Splice Closure - Inline -

BS606R protects fiber optic splicing point in various installation conditions such as wires, manholes, ducts and direct buried.
It is specially designed to accommodate a plenty of ribbon cable and applicable to multi branching installation and meeting the requirements in each point of network.
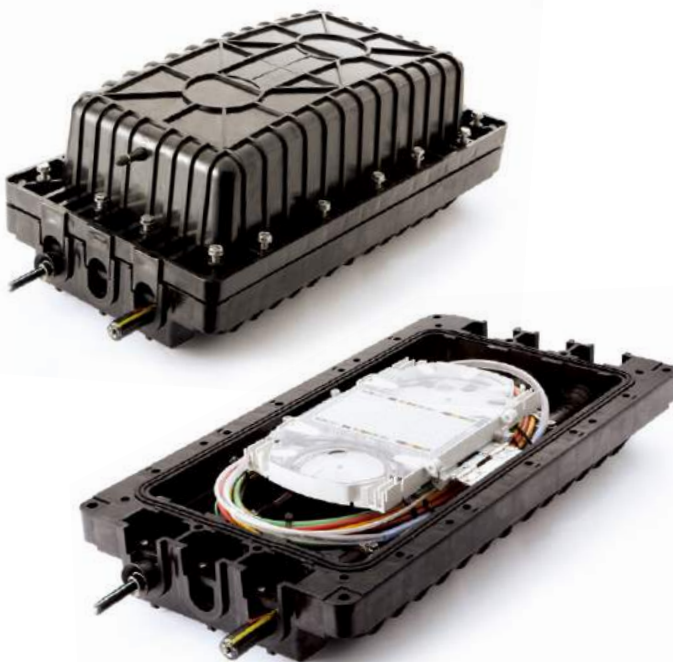
BS606R

High Reliability
- 100% water-proof by using silicone gasket
- Tight gripped by double sheath holder

Ease of Use
- Tight jointed cable sheath for work efficiency
- Mechanically assembled by Bolt
- No additional cost for fiber maintenance

High Variety
- Various cable diameters available (8 ~ 27)
- Multi branching and various installation environments (Aerial, Duct, Manhole)
- Capability of multi-core management

High capacity of Splicing
- 36F per Splice tray
- Designed by stable fiber bending radius

Model		BS606R	Remarks
Size (mm) L x W x H	Outer	600 X 325 X 225	
	Inner	470 X 254 X 210	
Weight (kg)		10 kg	
Cable ports (Entry / Exit)		6 (3/3)	
Cable dia.(mm) (Main / Drop)		8 ~ 27 / 8	
No. of splice tray		6	
Tray capacity	Single / Double	36F / 72F	
	Ribbon	324F (12F Ribbon)	
Splice capacity	Single / Double	216F / 432F	
	Ribbon	1944F (12F Ribbon)	
Splice protector		Heat shrinkable sleeve	
Tension member		Galvanized steel wire, FRP	
IP Grade		IP 68	

Fiber Optic Splice Closure - Aerial Line -

Fiber Optic Splice Closure for Aerial Line is one of the most popular Fiber Optic Splice Closures specially designed for aerial–line and provides with easy and reliable installation and high mechanical strength against any environmental conditions. In addition, it provides with the optimal environment for maintenance and the beauty of the town with the suitable design. With this closure, you can arrange cables neatly without a loop of cable around like Dome Closure. Also, our own designed Clip handle provide you with more convenient working during aerial installation working.

BS603BT

BS606GT

BS806HT

· Cable fixing with H/S Tube

· Designed for the beauty of the town

· Easy working and high safety by using one–touch clips

· Comply with IP65

· Fiber optic protection, prevention of tube–break off and assurance against risk of bend

· Double structure of sheath gasket and sheath holder

· Prevention from vibration, movement by using aerial hanger

| Model	Size (mm)	Weight (kg)	Cable Port (Entry/Exit)	Cable Dia. (mm) (Main/Drop)	No. of Splice Tray Tray Capacity (single/double)	Splice Capacity (single/double)	IP Grade
BS603BT	558 X 180 X 110	2.5 kg	6 (3/3)	8 ~ 18	3 (24C / 48C)	72C / 144C	IP 68
BS606GT	640 X 202 X 145	4.4 kg	6 (3/3)	8 ~ 22	6 (24C / 48C)	144C / 288C	IP 68
BS806HT	714 X 225 X 177	6.3 kg	8 (4/4)	8 ~ 24	6 (36C / 72C)	216C / 432C	IP 68

Cross Connect Closure

The Opticube Cross–Connect Closure was designed for applications requiring connectorization or cross connecting in the outside plant network. Additionally, the Opticube Cross–Connect Closure was configured to allow for convenient and safe storage of uncut buffer tubes in the feeder cable, while providing individual connectivity to the fibers of the drop cables.

CS403A-SS
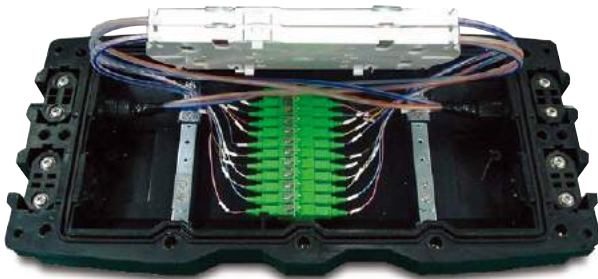
· The closure has an air valve on its cover for checking air pressure drop.

· The ribbed body has high mechanical strength against impact and compression

· The splice tray is applicable for both loose tube and ribbon fiber management

· The sealing gaskets and the external bolts provide with the excellent tightness reliability

CS403A-SD
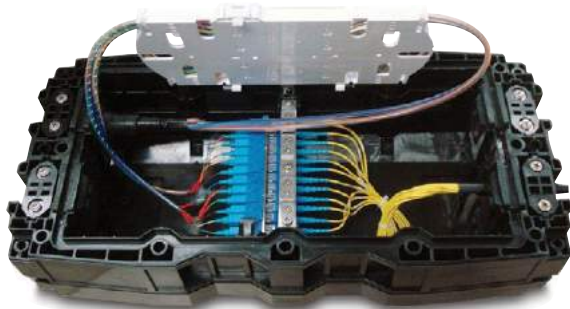
· The cone type sealing gasket is adjustable to fit any cable diameter

· The closure can accommodate pigtail, field–installation connector and drop cable

Model	CS403A–SS	CS403A–SD
Size (mm)	435 X 205 X 113	435 X 208 X 154
Weight (kg)	2.8 kg	3.8 kg
Cable ports (Entry / Exit)	4 (2/2)	8 (4/4)
Cable dia. (mm) (Main / Drop)	Ø6 ∼ Ø20 / Ø3.5 ∼ Ø12	Ø6 ∼ Ø20 / Ø3.5 ∼ Ø12
No. of splice tray	2	2
Tray Capacity	24C / 48C	24C / 48C
Connector Type / No. of Connection	12 x SC Simplex = 12	24 x SC Simplex = 24
Splicing Method	Fusion, Mechanical, Connector	Fusion, Mechanical, Connector
Splitter	1X4, 1X8	1X4, 1X8 1X16
IP Grade	IP 68	IP 68

Cross Connect Closure

The Opticube Cross–Connect Closure was designed for applications requiring connectorization or cross connecting in the outside plant network. Additionally, the Opticube Cross–Connect Closure was configured to allow for convenient and safe storage of uncut buffer tubes in the feeder cable, while providing individual connectivity to the fibers of the drop cables.

CS603A

· Enough space to accommodate various splitters in the splice tray

· Providing with two types of cable holder in accordance with the cable diameter

· Separation between main cable and drop cable installation part

· The cable entry port consists of main cable 6 ports and drop cable 16 ports

· Enough space to arrange surplus fibers

· Available for Mid–Span Branching

Model	CS603A
Size (mm)	300 X 210 X 140
Weight (kg)	2.2 kg
Cable ports (Entry / Exit)	6 (3/3)
Cable dia. (mm) (Main / Drop)	Ø8 ～ Ø19 / Ø3 ～ Ø6
No. of splice tray	3
Tray Capacity	24C / 48C
Connector Type / No. of Connection	16 x SC Simplex = 16
Splicing Method	Fusion, Mechanical, Connector
Splitter	1X4, 1X8 1X16
IP Grade	IP 68

Cross Connect Closure

The Opticube Cross–Connect Closure was designed for applications requiring connectorization or cross connecting in the outside plant network. Additionally, the Opticube Cross–Connect Closure was configured to allow for convenient and safe storage of uncut buffer tubes in the feeder cable, while providing individual connectivity to the fibers of the drop cables.

CS606G

· The body has high mechanical strength against impact and compression

· The closure has 3 cable entry ports at both sides,
  and 1 port gasket for main cable and 4 ports gasket for the drop cable are available

· The cone type sealing gasket is adjustable to fit any cable diameter.

· Main gasket provides with the excellent tightness reliability.

· Easy open and close by using one touch clip.

· Tight jointed cable sheath for work efficiency

Model	Size (mm)	Weight (kg)	Cable Port (Entry/Exit)	Cable Dia. (mm) (Main/Drop)	No. of Splice Tray	Connector type / No. of Connection	IP Grade
CS606G	500 X 202 X 145	4.4 kg	6 (3/3)	8 ~ 20 / 3 ~ 8	2	32 X SC Simplex = 32	IP 68

CS402A

· The ribbed body has high mechanical strength against impact and compression

· Tight jointed cable sheath for work efficiency

· The closure can accommodate pigtail, field–installation connector and drop cable

· Easy working and high safety by using one–touch clips

· Capability of multi–core management

· Available for various cable diameter, multi branching and various installation environments

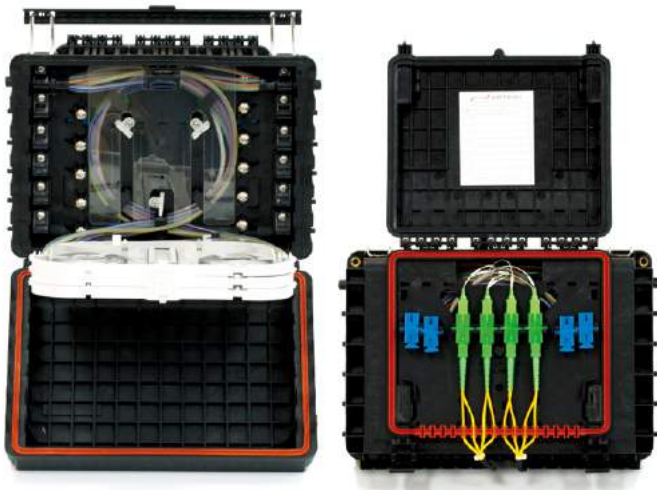| Model	Size (mm)	Weight (kg)	Cable Port (Entry/Exit)	Cable Dia. (mm) (Main/Drop)	No. of Splice Tray	Connector type / No. of Connection	IP Grade
CS402A	270 X 160 X 80	2.5 kg	4 (2/2)	8 ~ 14 / 3.5 ~ 8	1	4 X SC Duplex = 8	IP 68

Cross Connect Closure

The Opticube Cross–Connect Closure was designed for applications requiring connectorization or cross connecting in the outside plant network. Additionally, the Opticube Cross–Connect Closure was configured to allow for convenient and safe storage of uncut buffer tubes in the feeder cable, while providing individual connectivity to the fibers of the drop cables.

CS803B

· The Body has high mechanical strength against impact and compression

· More then 3 splitters can be mounted

· Splitter–Module is protected by Bottom–Panel

· Easy open and close by using one touch clip

· High working efficiency by mechanical cable clamping

Model	Size (mm)	Weight (kg)	Cable Port (Entry/Exit)	Cable Dia. (mm) (Main/Drop)	No. of Splice Tray	Connector type / No. of Connection	IP Grade
CS803B	291.5 X 191 X 127	2.0 kg	16 (8/8)	7 ~ 13 / 3.5	3	8 X SC Simplex = 8	IP 65

CS1203A

· Enough space to accommodate various splitters in the splice tray

· Providing with three types of cable holder in accordance with the cable diameter

· Separation between main cable and drop cable installation part

· The cable entry port consists of main cable 12 ports and drop cable 8 ports

· Enough space to arrange surplus fibers

· Available for Mid–Span Branching

Model	Size (mm)	Weight (kg)	Cable Port (Entry/Exit)	Cable Dia. (mm) (Main/Drop)	No. of Splice Tray	Connector type / No. of Connection	IP Grade
CS1203A	290 X 200 X 130	1.9 kg	28 (12/16)	7 ~ 13 / 3.5	3	16 X SC Simplex = 16	IP 65

Fiber Optic Splice Closure - Dome type -

Fiber Optic Splice Closure for Dome Type protects fiber optic cable and provides with fast and easy re–entry working.
Aerial, manhole, ducts, wall, and pole installation are available and it provides with reliable sealing performance protected by a ribbed dome cover made of Polypropylene that has high mechanical and environmental features. With its 6~8ports, It is applicable for mid–span branching method.

BS604B

· The ribbed cover has an air valve on the top for tightness test and is sealed and clamped to the base by a gasket and band clamp respectively.

· The splice tray has 4 entry/exit and is available for the management for both loose tube and ribbon.

· The OSP cable is clamped by tension member gripper and central strength member and sealed by hot melted heat shrinkable tube for BS604A & MS604A but sealed by gasket for BS604B

· Providing with the ground connector and ground wire for grounding of OSP cables.

BS604A / MS604A

· Available for various cable diameter, multi branching and various installation environments

BS604A   MS604A

Model	BS604A	MS604A	BS604B
Size (mm)	552 X 211 X 174	472 X 211 X 174	552 X 211 X 174
Weight (kg)	2.0 kg	2.0 kg	2.0 kg
Cable ports (Oval / Round)	6 (2/4)	5 (1/4)	6 (2/4)
Cable dia. (mm)	Ø8 ~ Ø24	Ø8 ~ Ø22	Ø8 ~ Ø24
No. of splice tray	4	4	4
Tray Capacity (Single / Double)	12C / 24C	12C / 24C	12C / 24C
Splicing Capacity (Single / Double)	48C / 96C	48C / 96C	48C / 96C
Splice Protector	Heat shrinkable sleeve, Mechanical splice	Heat shrinkable sleeve, Mechanical splice	Heat shrinkable sleeve, Mechanical splice
Sealing Method	Heat Shrinkable Tube	Heat Shrinkable Tube	Gasket
IP Grade	IP 68	IP 68	IP 68

Fiber Optic Splice Closure - Dome type -

Fiber Optic Splice Closure for Dome Type protects fiber optic cable and provides with fast and easy re–entry working.
Aerial, manhole, ducts, wall, and pole installation are available and it provides with reliable sealing performance protected by a ribbed dome cover made of Polypropylene that has high mechanical and environmental features. With its 6~8ports, It is applicable for mid–span branching method.

BS604C/ MS604C

· Reliable sealing system by hot–melted heat shrinkable tube

· The ribbed body has high mechanical strength against impact and compression

· Easy assembly and fiber management

· No additional cost for fiber maintenance

BS604C   MS604C

Model	Size (mm)	Weight (kg)	Cable ports (Oval / Round)	Cable Dia. (mm)	No. of Splice Tray	Tray Capacity (Single / Double)	Splicing Capacity (Single / Double)	IP Grade
BS604C	577 X 211 X 174	2.5 kg	6 (2/4)	Ø8 ~ Ø24	4	12C / 24C	96C / 192C	IP 68
MS604C	527 X 211 X 174	2.5 kg	5 (1/4)	Ø8 ~ Ø22	4	12C / 24C	96C / 192C	IP 68

BS506A

BS506A / BS906A

· Reliable sealing system by hot–melted heat shrinkable tube

· The ribbed body has high mechanical strength against impact and compression

· Easy assembly and fiber management

· No additional cost for fiber maintenance

· Available to accommodate high capacity of fiber optic cable

BS906A

Model	Size (mm)	Weight (kg)	Cable ports (Oval / Round)	Cable Dia. (mm)	No. of Splice Tray	Tray Capacity (Single / Double)	Splicing Capacity (Single / Double)	IP Grade
BS506A	490 X 195	3.0 kg	5 (1/4)	Ø8 ~ Ø24	6	24C / 48C	144C / 288C	IP 68
BS906A	490 X 195	3.0 kg	9 (1/8)	Ø8 ~ Ø24	6	24C / 48C	144C / 288C	IP 68

Fiber Optic Splice Closure - Dome type -

Fiber Optic Splice Closure for Dome Type protects fiber optic cable and provides with fast and easy re—entry working.
Aerial, manhole, ducts, wall, and pole installation are available and it provides with reliable sealing performance protected by a ribbed dome cover made of Polypropylene that has high mechanical and environmental features. With its 7~9ports, It is applicable for mid—span branching method.

BS712A / BS912B

BS712A

BS912B

· Reliable sealing system by hot—melted heat shrinkable tube

· The ribbed body has high mechanical strength against impact and compression

· Easy assembly and fiber management

· No additional cost for fiber maintenance

· Available to accommodate high capacity of fiber optic cable

· The ribbed cover has an air valve on the top for tightness test

BS710A / BS910A

BS710A

BS910A

Model	BS712A	BS912B	BS710A	BS910A
Size (mm)	268 X 534	268 X 534	268 X 695	268 X 695
Weight (kg)	5.5 kg	5.5 kg	9.0 kg	9.0 kg
Cable ports (Oval / Round)	7 (1/6)	9 (1/8)	7 (1/6)	9 (1/8)
Cable dia. (mm)	Ø8 ~ Ø29	Ø8 ~ Ø29	Ø8 ~ Ø29	Ø8 ~ Ø29
No. of splice tray	12	12	10	10
Tray Capacity (Single / Double)	24C / 48C	24C / 48C	60C / 120C	60C / 120C
Splicing Capacity (Single / Double)	288C / 576C	288C / 576C	600C / 1200C	600C / 1200C
IP Grade	IP 68	IP 68	IP 68	IP 68

Optical
Termination Box

Optical Network Solutions

Opticube®

Optical Termination Box - Outdoor (Metal)-

Outdoor Optical Termination Box provides with the inter–connecting capabilities in the outside of optical environment. Featuring mechanical and environmental protection for both fiber and its components and it provides with a transition point between outside fiber cable and patch cords in fiber optic network and is designed to maintain the fiber bend radius. For convenient cable management, they provide with the termination, splicing and storage functions for fiber optic cable systems.

OTB-B

· Simple and easy cable management

· Designed for stable fiber bending radius

· Built in half turn key lock for security

· Enough working space and high efficiency of splicing

· water–proof by using silicone gasket

OTB-D

Model	OTB–B	OTB–D
Size (mm)	375 X 235 X 60	400 X 250 X 80
Weight (kg)	3.5 kg	5.3 kg
Cable ports (Entry / Exit)	5 (3/2)	35 (3/32)
Cable dia. (mm) (Main / Drop)	Ø8 ∼ Ø22	Ø8 ∼ Ø22 / Ø3.5 ∼ Ø6
No. of splice tray	1	2
Connector Type / No. of Connection	6 x SC Duplex = 12	32 x SC Simplex = 32
Spin–Off (port)	–	24 / 48 / 72
IP Grade	IP 55	IP 55

Optical Termination Box - Outdoor (Plastic)-

The termination box is designed and constructed to be suitable for outdoor installation. The housing is sufficiently sturdy to withstand typical handing and installation procedures. The design and layout of the cable guides promote an efficient and ordered positioning of the cable within the box. Placement of the incoming cables allow convenient access for installation, maintenance and subsequent termination of additional secondary cable.

OTB-PM

· Comply with IP55

· Available to include the optical parts such as splitter, fan–out, heat shrinkable sleeve and connectors.

· Available for SC/LC type fiber optic connectors and jumper cord.

· Long–term reliability by high–power plastic material.

· Cost effective
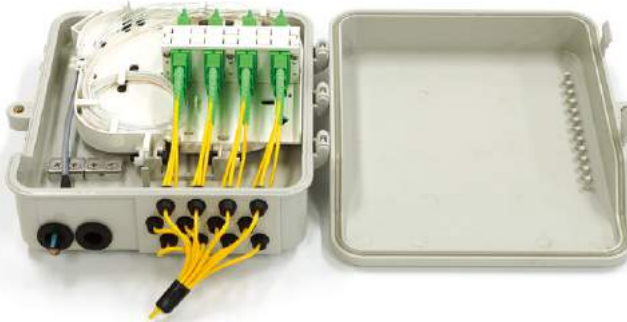
OTB-P

Outlet-A

Model	OTB–P	OTB–PM	Outlet–A
Size (mm)	193 X 226 X 62	238 X 141 X 44.5	108 X 163 X 35
Weight (kg)	1.5 kg	0.55 kg	0.3 kg
Cable port (Entry / Exit)	14 (2/12)	10 (2/8)	3 (1/2)
Cable dia. (mm) (Main / Drop)	Ø8 ～ Ø13 / Ø3.5 ～ Ø6	Ø7 ～ Ø13 / Ø3.5	Ø5 / Ø3.5
No. of splice tray	1	1	–
Connector Type / No. of Connection	12 x SC Simplex = 12	8 x SC Simplex = 8	2 x SC Simplex = 2
IP Grade	IP 55	IP 55	IP 55

Optical Termination Box – Indoor –

The Indoor Optical Termination Box is designed to provide with the essential interface between fiber optic cables or between optical equipment installed on the customer's premises. The units offer networking and fiber distribution from the wiring closet or any suitable internal wall to the user's terminal equipment.

OTB-J

· Simple and easy cable management

· Designed for stable fiber bending radius

· Built in half turn key lock for security

· Enough working space and high efficiency of splicing

· Separation between splicing part and distribution part

Model	Size (mm)	Weight (kg)	Cable Port (Entry / Exit)	Cable Dia. (mm) (Main / Drop)	No. of Splice Tray	Connector Type / No. of Connection	IP Grade
OTB–J	320 X 320 X 96	1.5 kg	4 (2/2)	Ø8 ~ Ø22	2	32 x SC Simplex = 32	IP 53

OTB-M

Outlet 1432

OTP-M
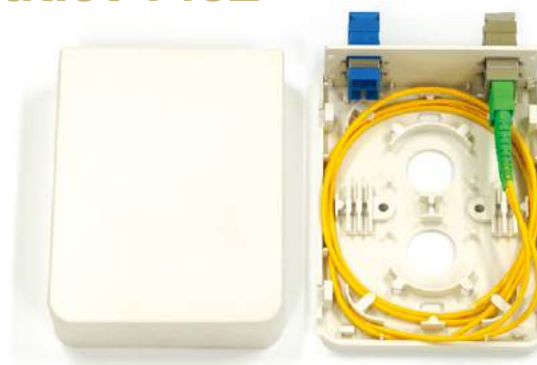
· Compact size takes up less wall space for installation

· Available for SC/LC connector

· Removable sliding cover for easy access to complete Panel

· Protection of fiber connection from accidental contamination or long term movement

· Cost effective passive solution

| Model	Size (mm)	Weight (kg)	Cable Port (Entry / Exit)	Cable Dia. (mm) (Main / Drop)	No. of Splice Tray	Connector Type / No. of Connection	IP Grade
OTB–M	120 X 95 X 38	0.12 kg	6 (2/4)	Ø6 ~ Ø15	–	4 x SC Simplex = 4	IP 53
OTP–M	190 X 140 X 35	0.7 kg	10 (2/8)	Ø6 ~ Ø15	–	8 x SC Simplex = 8	IP 53
Outlet 1432	92 X 120 X 36	0.1 kg	5 (1/4)	Ø8	–	4 x SC Simplex = 4	IP 53

5G Product

5G Module Series consist of outer box, module and connectors, which provide with fast and wide range of telecommunication networks by combining 4G frequency that divided by several bandwidths, and it manages 5G modules for high density fiber connections in 5G network by combining 4G network, 5G Module Series are designed and constructed to be suitable for outdoor and indoor installation such as wall, pole and rack cabinet.
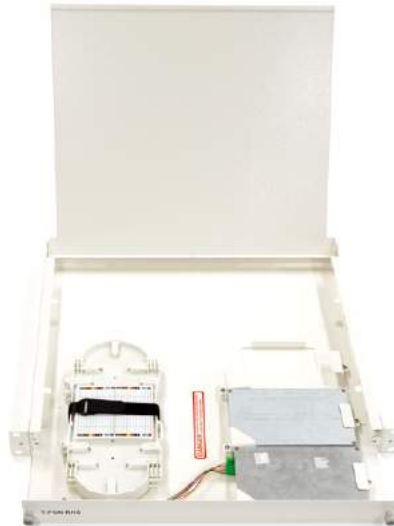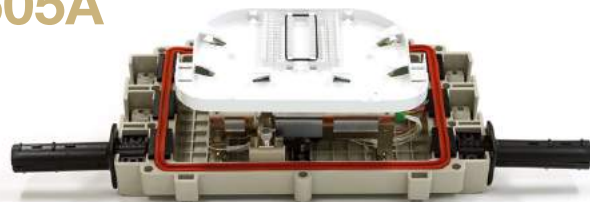
OTB-GE
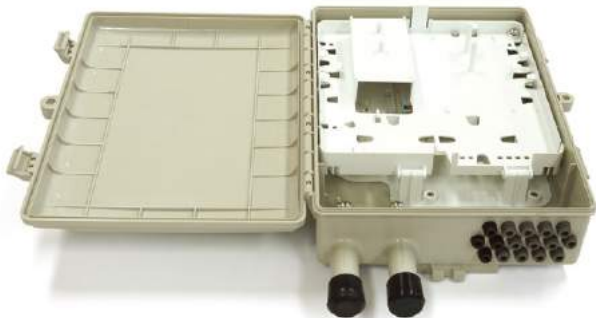
T-PON RNS

OTB-GM

T605A

· Available to install CWDM & 5G Mux Module

· Various installation environments (Aerial, WALL, Pole & Rack Cabinet)

· Providing with multi Cable entry/exit port

· Available for SC/LC connectors

Model	T605A	OTB-GE	OTB-GM	T-PON RNS
Size (mm)	320 X 195 X 125	247 X 332 X 35	247 X 332 X 35	483 X 380 X 44
Weight (kg)	2.5 kg	2.2 kg	2.2 kg	5 kg
Cable ports (Entry / Exit)	6 (3/3)	10 (2/8)	18 (2/16)	–
Cable dia. (mm) (Main / Drop)	Ø7 ~ Ø13	Ø4.8 / Ø5.5	Ø16.5 / Ø5 ~ Ø7	Ø8 ~ Ø32
No. of splice tray	1	–	1	2
Tray Capacity (Single / Double)	13C / 39C (Triple)	–	12C / 24C	24C / 48C
Module Type	MRN, SRN	CRN	5G Mux / 4G Mux	MRN, SRN
Connector Type / No. of Connection	–	24 x SC Simplex = 24	3 x LC Quadplex = 12	–
IP Grade	IP 68	IP 55	IP 55	IP 53

Fiber Distribution Frame

Optical Network Solutions

# Fiber Distribution Frame – Rack Mounted -

Fiber Distribution Frame provides with a comprehensive solution for cable management and storage in the long–term success of the network. For convenient management, it provides with the termination, Splicing and storage functions in the fiber optic cable system. Featuring cable entries on each side and at the rear is optimized to arrange the cable in the frame. They are used for the central office, remote terminal locations and LANs and installed in the convenient point for interconnecting outside plant fiber optic cables with fiber optic equipments.
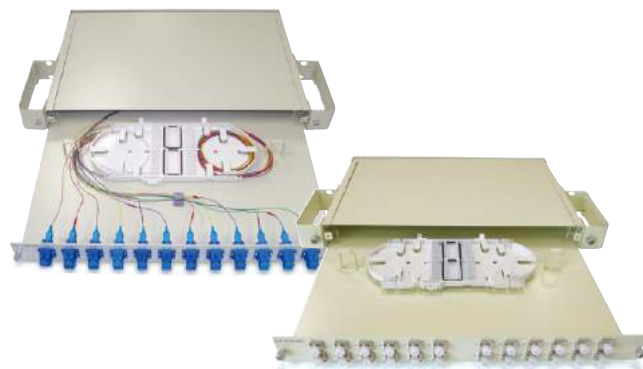
FDF-48C

· Units can be stacked to accommodate future network growth

· All work can be done from the front of frame

· Provides fast–efficient installation in tight spaces

· Total radius control for maintaining transmission integrity

· The top cover is removable for easy installation

· Fully controlled loose tube and jumper cord service loops

· High quality, uniform rust–proof finish with no sharp edges

FDF-144C
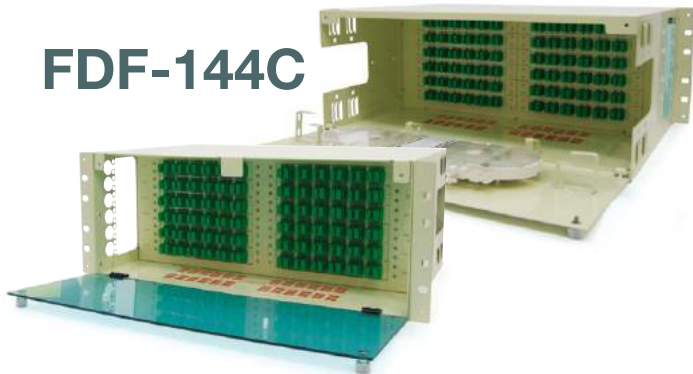
Model	Size (mm) / Unit	Weight (kg)	Cable Dia. (mm)	No. of Splice Tray	Connector type / No. of Connection	Spin–off (LC/ FC)
FDF–24C	483 x 310 x 133 / 3U	7 kg	8 ~ 32	1	24 X SC Simplex = 24	48 / 24
FDF–48C	483 x 310 x 222 / 5U	10 kg	8 ~ 32	2	48 X SC Simplex = 48	96 / 48
FDF–72C	483 x 310 x 178 / 4U	8 kg	8 ~ 32	3	72 X SC Simplex = 72	144 / 72
FDF–96C	483 x 310 x 178 / 4U	8.5 kg	8 ~ 32	4	96 X SC Simplex = 96	192 / 96
FDF–144C	483 x 310 x 178 / 4U	9 kg	8 ~ 32	6	144 X SC Simplex = 144	288 / 96

Fiber Distribution Frame - Swing Type -

Fiber Distribution Frame provides with a comprehensive solution for cable management and storage in the long–term success of the network. For convenient management, it provides with the termination, Splicing and storage functions in the fiber optic cable system. Featuring cable entries on each side and at the rear is optimized to arrange the cable in the frame. They are used for the central office, remote terminal locations and LANs and installed in the convenient point for interconnecting outside plant fiber optic cables with fiber optic equipments.

FDF-RM

· Units can be increased to accommodate future network growth

· Provides with fast–efficient installation in tight spaces

· The top cover is removable for easy installation

· Easy to control the loose tube and jumper cord loops

· High quality & rust–proof with no sharp edges

Model	Size (mm) / Unit	Weight (kg)	Cable Dia. (mm)	No. of Splice Tray	Connector type / No. of Connection	Spin–off (Port)
FDF–RM	483 x 310 x 44 / 1U	5 kg	8 ～ 32	1	24 x SC Simplex = 24	36 / 48 / 72 / 96
FDF–PRM	483 x 310 x 44 / 1U	1.2 kg	8 ～ 22	1	16 x SC Simplex = 16	12 / 24 / 32

Fiber Distribution Frame - Sliding Type -

FDF-FCM

· Units can be increased to accommodate future network growth

· All work can be done from the front of frame

· Provides with fast–efficient installation in tight spaces

· The top cover is removable for easy installation

· Easy to control the loose tube and jumper cord loops

· High quality & rust–proof with no sharp edges

Model	Size (mm) / Unit	Weight (kg)	Cable Dia. (mm)	No. of Splice Tray	Connector type / No. of Connection	Spin–off (Port)
FDF– FCM	483 x 310 x 44 / 1U	5 kg	8 ～ 32	1	24 x SC Simplex = 24	36 / 48 / 72 / 96
FDF–SFCM	483 x 250 x 44 / 1U	4.5 kg	8 ～ 32	1	24 x SC Simplex = 24	12 / 24 / 36 / 48

Fiber Optic
Accessories

Optical Network Solutions

Adapter, Pigtail, Patch Cord

Fiber optic patch cords and adapters provide with interconnections between transmission equipment and distribution panels, equipment to equipment and distribution panels to OSP cables. Different optical connectors such as FC, SC, ST and LC can be assembled on specified fiber cables.
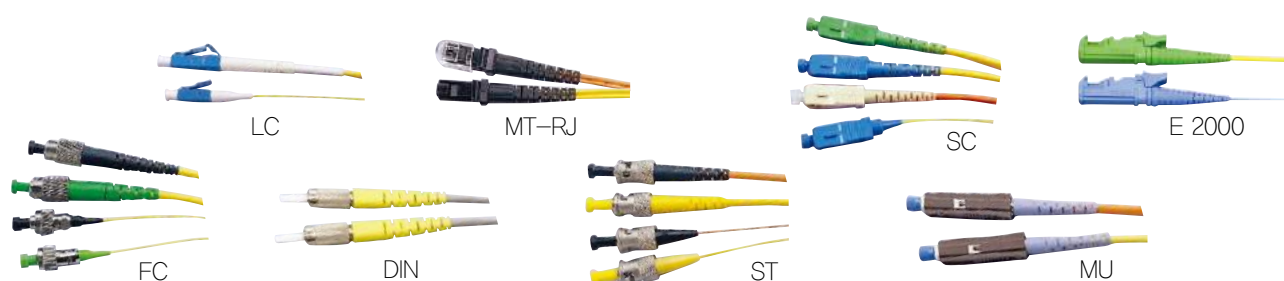Our products are manufactured under the strict quality standards through several inspections and testing processes for customer's satisfaction.

Adapter

SC

LC

E 2000

SC–FC

LC–SC

FC

ST
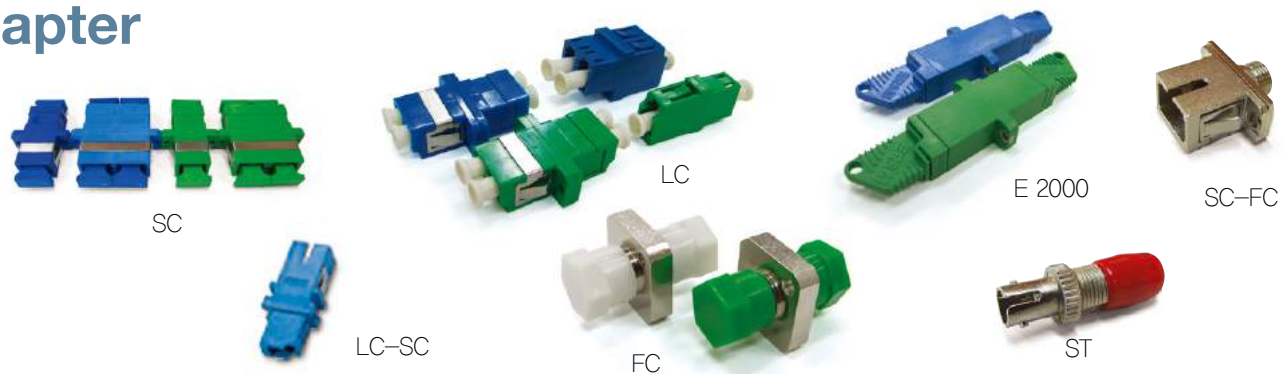
Characteristics	Values
Insertion Loss	≤ 0.2 dB
Mating Durability	≤ 0.2 dB (500times)
Operation Temperature. Stability	≤ 0.2 dB (−40 C ˚ ～ +85 C ˚)

Pigtail, Patch Cord

LC

MT–RJ

SC

E 2000

FC

DIN

ST

MU

Characteristics		Values
Fiber Type		SM(9/125,) MM(52/125, 62.5/125)
Insertion Loss		≤ 0.2 dB
Return Loss	SPC	≤ 40 dB
	UPC	≤ 55 dB
	APC	≤ 65 dB
Durability		≤ 0.2 dB (500times)
Operation Temperature. Stability		≤ 0.2 dB (−40 C ˚ ～ +85 C ˚)

PLC Splitter

The 1XN Planar Splitter has high performance with very low insertion loss, excellent Uniformity, Low PDL and flat wavelength operation. The splitter is pigtailed with single mode Fibers and compact package. It's available in 2, 4, 8, 16, 32 and 64 channel configuration, with connector type open to customer specifications.
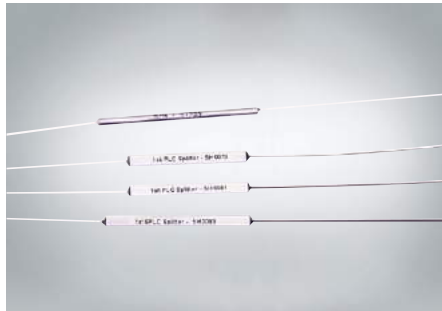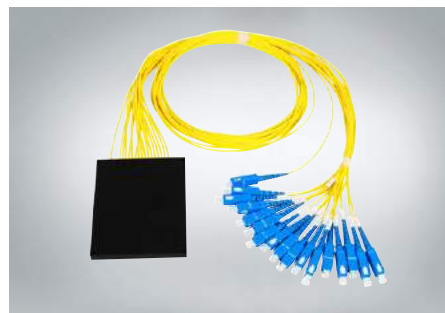

PLC Splitter Module
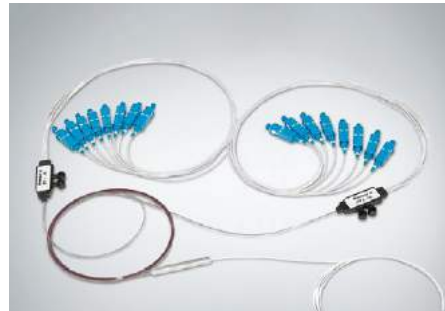
Fan-out Type
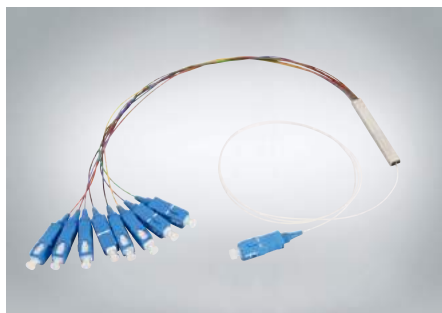
Integrated Type – SUS Case

Integrated Type – Plastic Case

Item		unit	Specifications					
			1X2	1X4	1X8	1x16	1x32	1X64
Insertion Loss @1,310/1,550nm (0.9mm with connector)		dB	≤ 4.0	≤ 7.5	≤ 10.9	≤ 14.5	≤ 18.1	≤ 21.5
Insertion Loss @1,310/1,550nm (0.9mm w/o connector)		dB	≤ 3.5	≤ 7.5	≤ 10.5	≤ 13.5	≤ 17.5	≤ 20.5
Uniformity @1,310/1,550nm (0.9mm with connector)		dB	≤ 0.6	≤ 1.0	≤ 1.3	≤ 1.7	≤ 2.4	≤ 2.6
Uniformity @1,310/1,550nm (0.9mm w/o connector)		dB	≤ 0.4	≤ 0.5	≤ 0.8	≤ 1.0	≤ 1.3	≤ 2.5
PDL @1,310/1,550nm (0.9mm with connector)		dB	≤ 0.2	≤ 0.2	≤ 0.25	≤ 0.3	≤ 0.4	≤ 0.4
PDL @1,310/1,550nm (0.9mm w/o connector)		dB	≤ 0.1	≤ 0.2	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.4
Return Loss @1,310/1,550nm		dB	≥ 50	≥ 50	≥ 50	≥ 50	≥ 50	≥ 50
Directivity @1,310/1,550nm		dB	≥ 55	≥ 55	≥ 55	≥ 55	≥ 55	≥ 55
Removable durability			1000 times : Insertion Loss Increase ≤ 0.1dB					
Operating Wavelength		nm	1260 ～ 1660					
Operating Temperature			−40 ～ +85					
Operating Humidity		℃	≤ 95%					
Fiber Length		%	120 ± 2 (or customized length)					
Input Fiber	Type	cm	0.9mm tight buffered fiber, PVC/LSZH					
	Color		White or Customized					
Output Fiber Configurations	Type		With 0.9mm Loose tube, PVC/LSZH					
	Color		ISO standards or customized					
	Order		2–fiber x 1	4–fiber x 1	8–fiber x 1	8–riber x 2	8–fiber x 4	8–fiber x 8
Package Size (LxWxH)		mm	55 x 7 x 4			60 x 20 x 4	80 x 23 x 4.5	120 x 43 x 5

Splice Tray
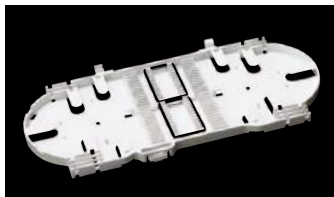
STI

Item	STI 24–6
Splice Capacity	24C (Singlev)
	48C (Double)
Size (mm)	230 X 118 X 10.8 mm

STA

Item	STA 24–5
Splice Capacity	24C (Single)
	48C (Double)
Size (mm)	260 X 115 X 10.2 mm

STH

Item	STH 36–6
Splice Capacity	36C (Single)
	72C (Double)
Size (mm)	336 X 164 X 12.5 mm

STF

Item	STF 12–6
Splice Capacity	12C (Single)
	24C (Double)
Size (mm)	199 X 95 X 11 mm

STH

Item	STH 24–3
Splice Capacity	24C (Single)
	48C (Double)
Size (mm)	240 X 140 X 10.2 mm

STC

Item	STC 24–3
Splice Capacity	24C (Single)
	48C (Double)
Size (mm)	240 X 140 X 10.2 mm

STL

Item	STL 24–3
Splice Capacity	24C (Single)
	48C (Double)
Size (mm)	280 X 105 X 11 mm

STR

Item	STR 36–6
Splice Capacity	36C (Single)
	72C (Double)
Size (mm)	300 X 170 X 21 mm

STS

Item	STS 24–6
Splice Capacity	24C (Single)
	48C (Double)
Size (mm)	260 X 138 X 10.2 mm

STD

Item	STD 12–3
Splice Capacity	12C (Single)
	24C (Double)
Size (mm)	155 X 138 X 9.7 mm

STT

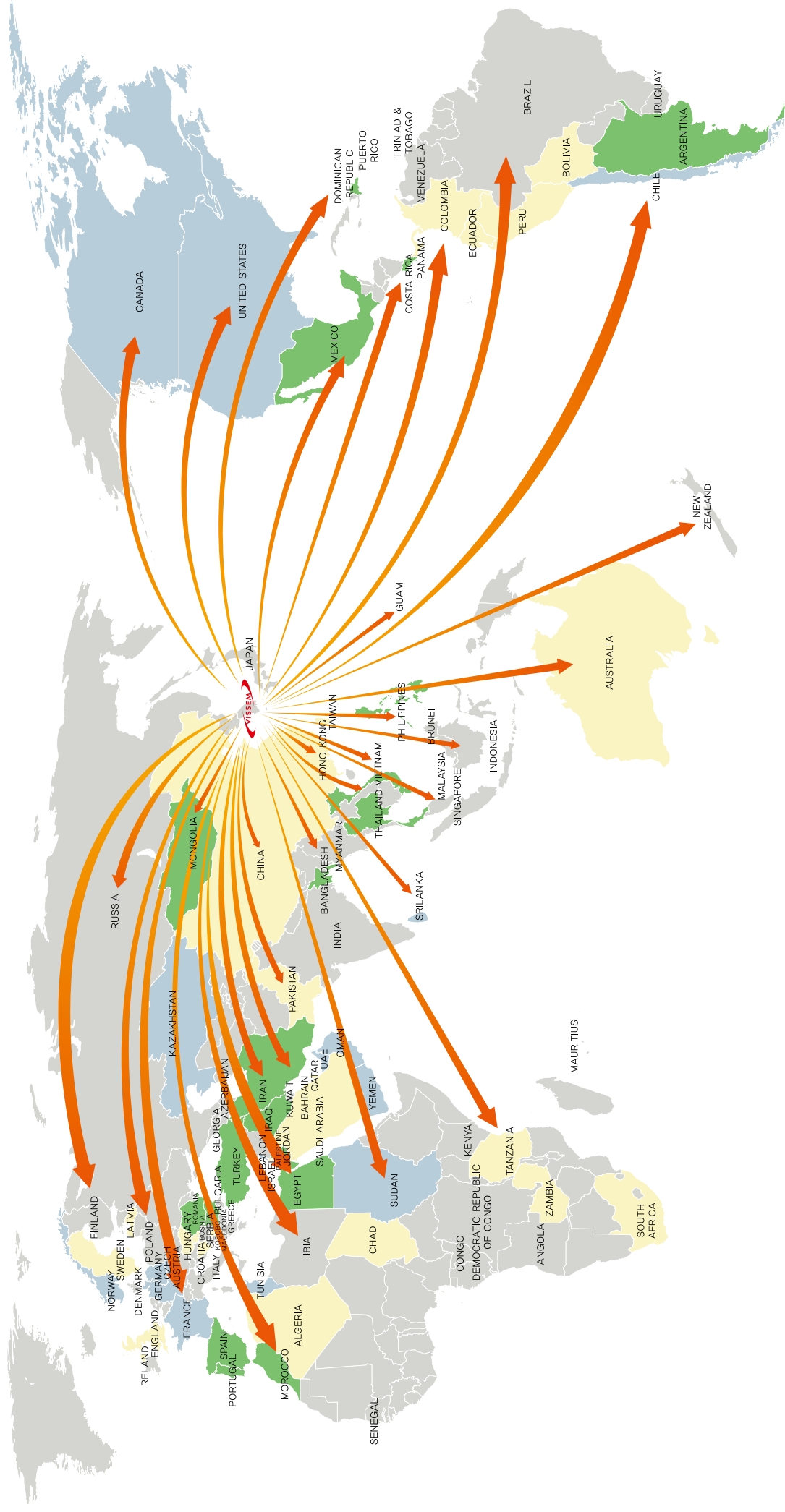| Item	STT 13–3
Splice Capacity	13C (Single)
	39C (Triple)
Size (mm)	205 X 128.5 X 10.2 mm

Tray Chip

Single   Ribbon   Splitter

VISSEM Electronics provides with the best solution for LED display and Optical Network Components

Opticube®

Optical Network Solutions

World Wide Customers

Client

Opticube®

O p t i c a l   N e t w o r k   S o l u t i o n s

Outstanding Technology

| R & D | INNO-BIZ | PATENT | ISO 9001:2000 | ISO 14001 | CE인증 | ISA MEMEBER | NET | 환경마크 | RoHS |

VISSEM ELECTRONICS

Headquarter   http://www.vissem.com
262-14, Guseong-ro, Giheung-gu, Yongin-si, Gyeonggi-do Korea   Zip Code : 16914

Yongin Factory
53-11, Eondong-ro, Giheung-gu, Yongin-si, Gyeonggi-do Korea   Zip Code : 16914

Icheon Factory
924, Deokpyeong-ro, Majang-myeon, Icheon-si, Gyeonggi-do Korea   Zip Code : 17389   Tel. +82 31 288 3481   Fax. +82 31 283 7844
E-mail : djkang@vissem.com