

Fiber To The Home Network Solution

- ✓ Fiber Optic Splice System
 - ✓ Fiber Optic Termination System
 - ✓ Fiber Optic Distribution System
 - ✓ Fiber Optic Connectivity System

Issued By



TAIHAN
ELECTRIC WIRE CO., LTD.

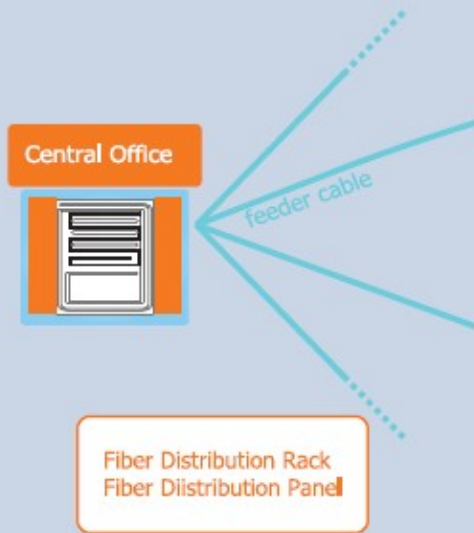
Issue Date

May 29th, 2009

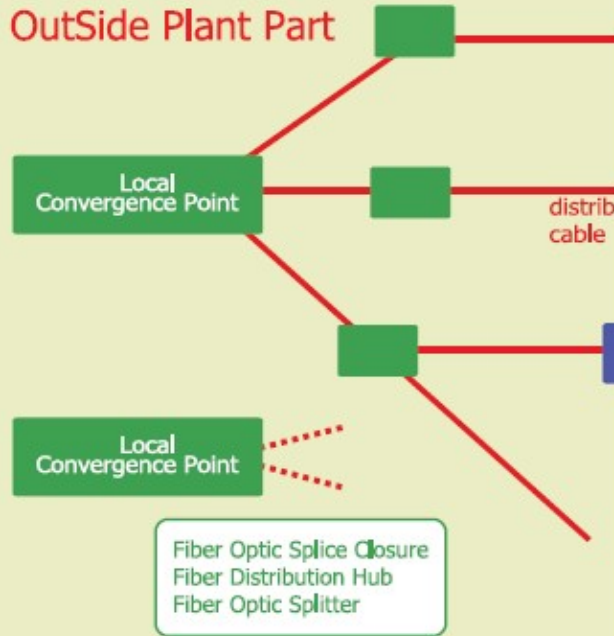
FTTH Deployment Diagram



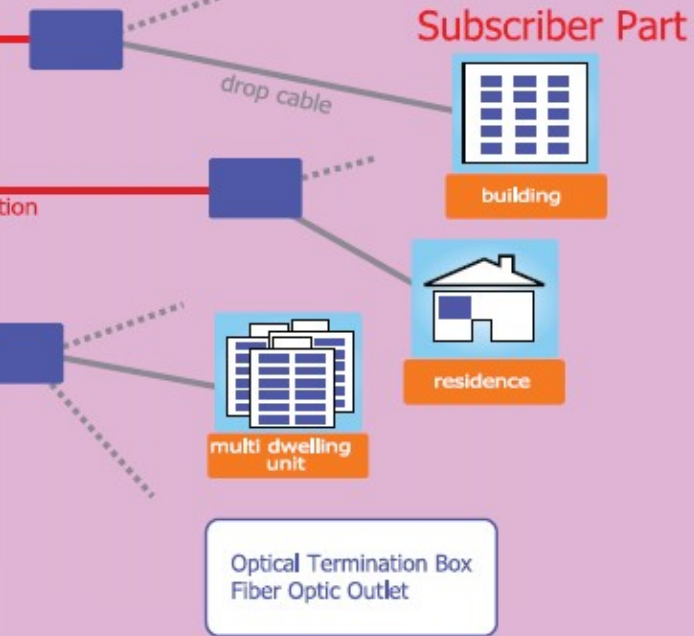
Central Office Part



OutSide Plant Part



Subscriber Part



FTTH with TEC

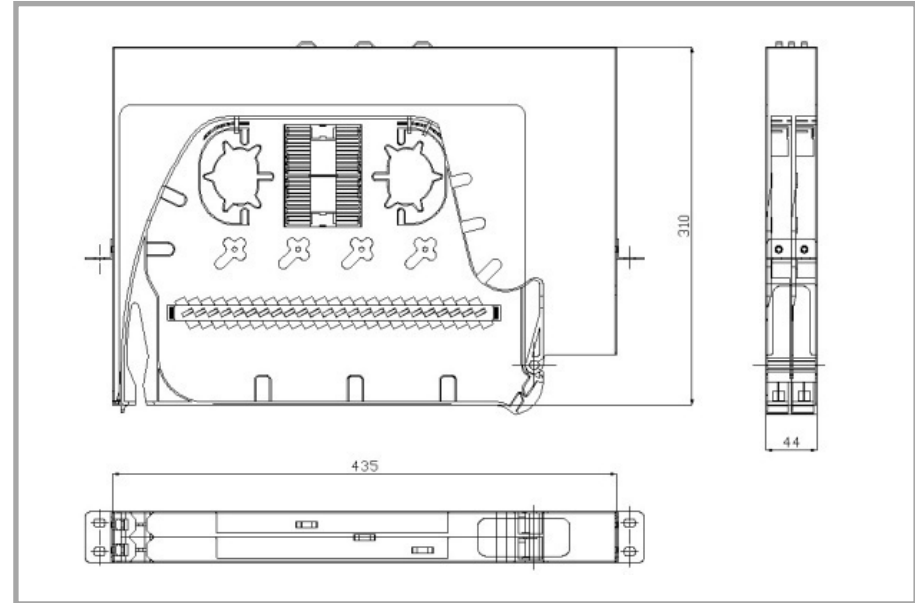
Through diverse FTTH Projects, TEC already experienced many important factors. TEC has a long range of various products such as network equipment and outside plant solution and expects to be a leading solution provider in the world FTTH market. TEC pursues more advanced network environment, so tries to develop new products applies future technologies.



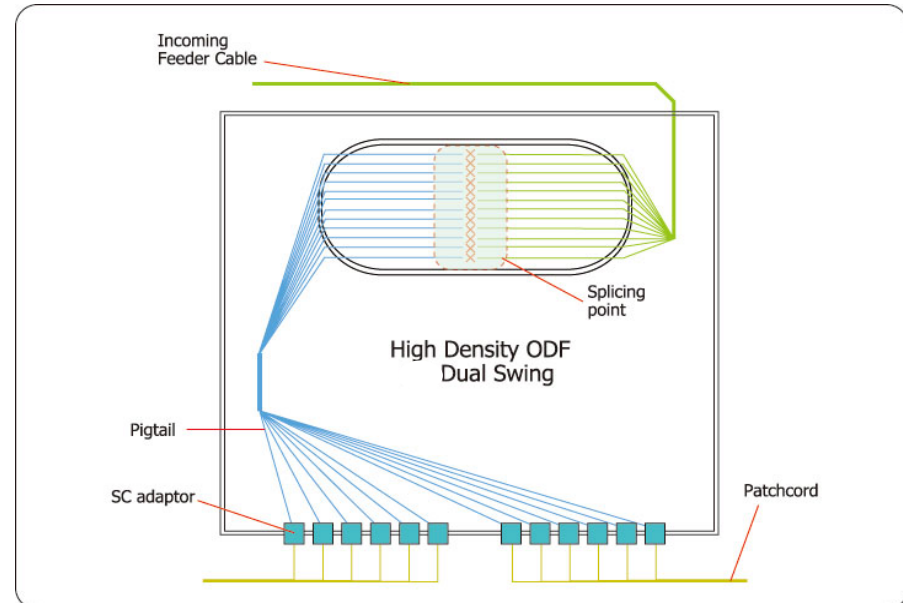
OPTICAL DISTRIBUTION FRAME, DUAL SWING



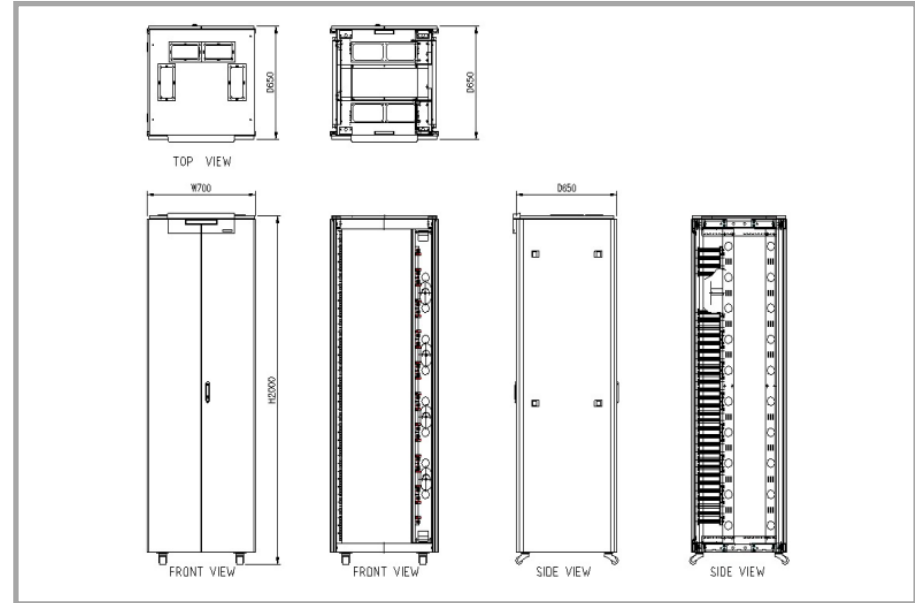
- Accommodates 48 SC adaptors per 1U
- All operation can be done from the front side of frame
- Quick and Efficient installation in compact space
- Total radius control for maintaining transmission integrity
- Fully controlled loose tube cables and jumper cords



Parameter	ODF, Dual Swing
Dimensions (Width X Height X Depth)	200mm X 125mmX 30 mm
Fiber Capacity	48 fibers
Unit	1U
Cable diameter	Φ8 to Φ32 mm
Number of Splice Tray	2
Splice Tray Capacity	24 fibers per tray
Adaptor Type	SC



HIGH DENSITY FIBER DISTRIBUTION RACK



Parameter	HD FDR
Dimensions (Width X Height X Depth)	700 mm X 650 mm X 2000 mm
Unit	40U
Locking Type	Key lock
Patch Cord Guide	Both Side Mandrel
Side Door/ Rear Door	Separated
Rack Bar	19 inch
Earth Bar	Copper Terminal

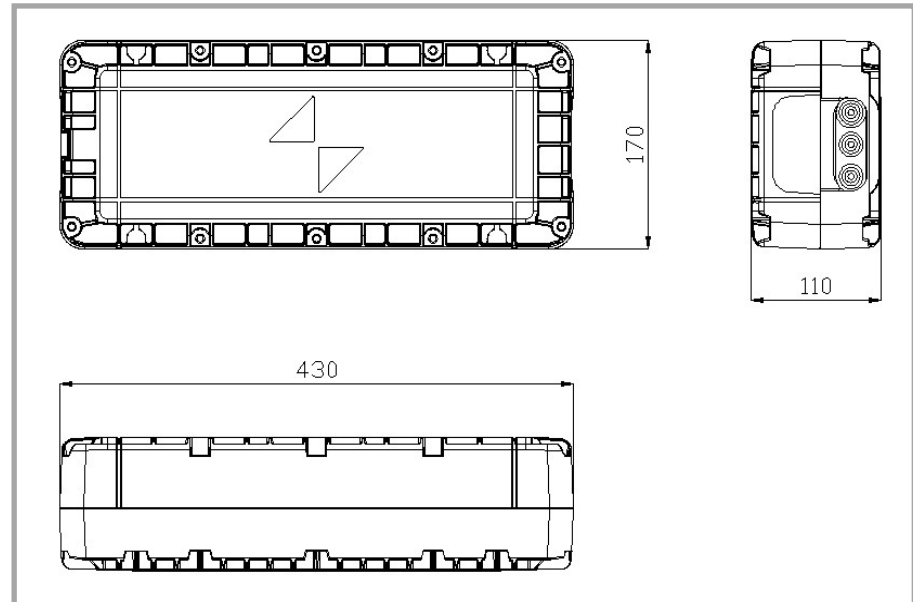
FIBER OPTIC JOINT CLOSURE, SCB



FOJC-SCB

- Bolt Type Locking System
- Ideal for aerial and underground application
- Compact design and high strength
- Multiple Gaskets

Parameter		
General	Dimensions (mm)	430(L) x 170(W) x 110(H)
	Weight	3.0kg
	Capacity	Loose Tube: 144C
Cable entry	Cable diameter	7-22mm
Fiber Splice	Splice Capacity	48C
	No. of Splice Tray	3
Closure Mount	Installation type	Outdoor



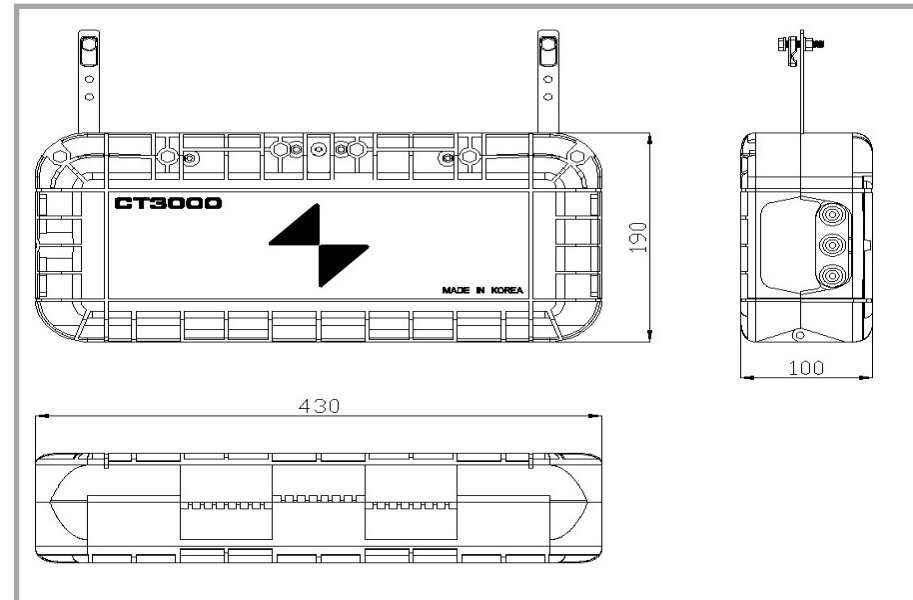
FIBER OPTIC JOINT CLOSURE, SCNB/SCNBL



FOJC-SCNB

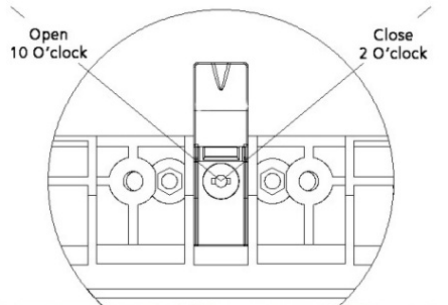
- Non-Bolt Type – Handle Locking System, Quick & Easy installation
- Free adjustable cable dia.
- Multiple branch (combination of drop and feeder cables)
- Available in any environment (Duct, Direct Buried, Aerial, Pole)
- FTTx Networks

Parameter		FOJC-SCNB
General	Dimensions (mm)	430mm X 190 mm X 100 mm
	Weight	4.0 kg
	Capacity	144C (Max.288C)
Cable entry	Cable diameter	7-22mm
Fiber Splice	Splice Capacity	48C
	No. of Splice Tray	3(Std.) 6(Max.)
	Splice Method	Fusion/ Connector
Connector	No. of Optical Adaptor	16 SC Type
General	Dimensions (mm)	430mm X 190 mm X 100 mm



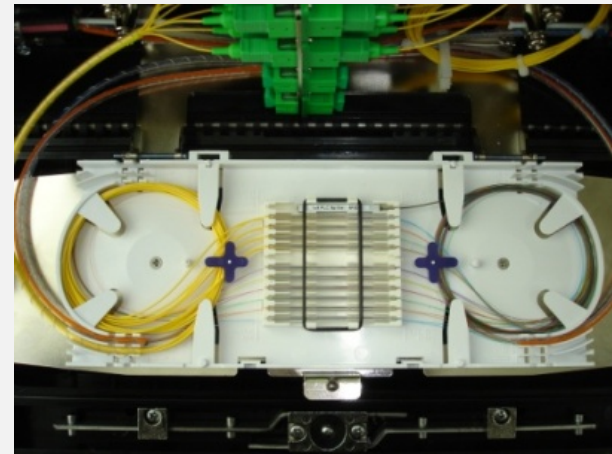
FIBER OPTIC JOINT CLOSURE, SCNB/SCNBL

Handle Locking System



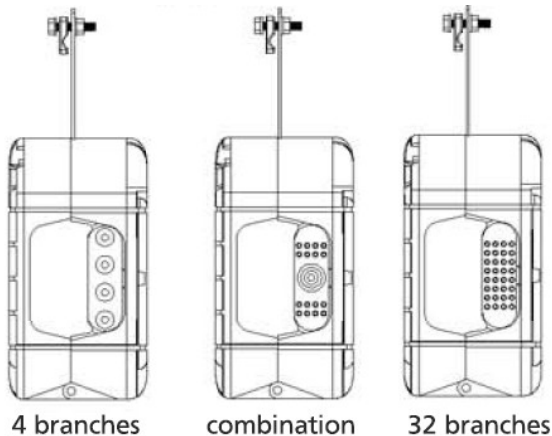
- No need of bolts and nuts.
- Quick and Easy Installation.
- Reducing accidents during aerial installation.

Connector Mounting


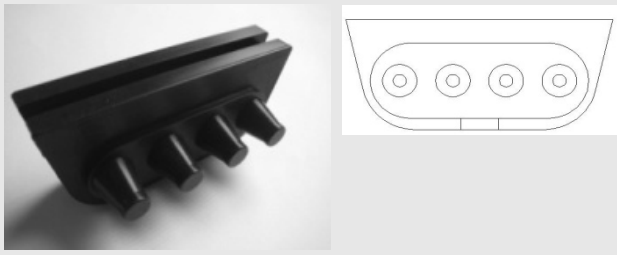
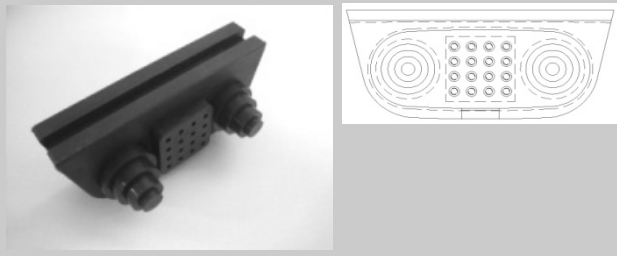
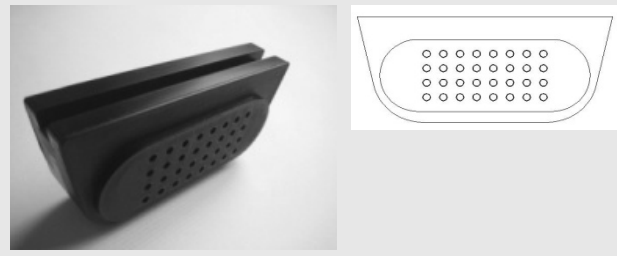


FIBER OPTIC JOINT CLOSURE, SCNB/SCNBL

Multi-Branching System

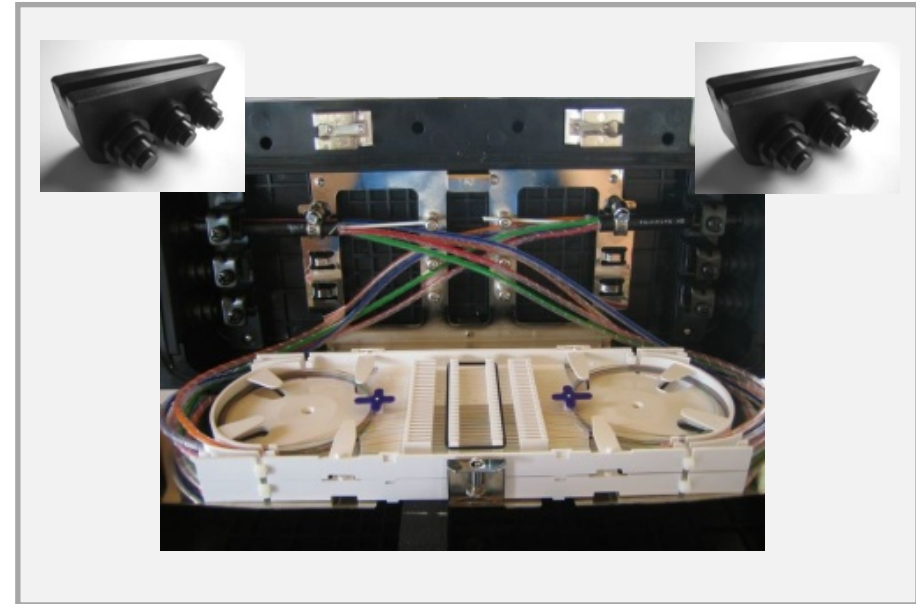
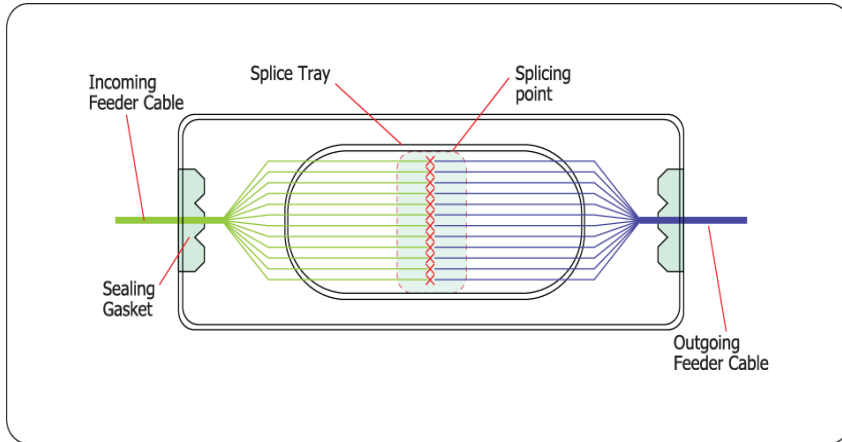


- Designed to accommodate various number of branches
- FTTx Networks
- Provides the function of waterproof

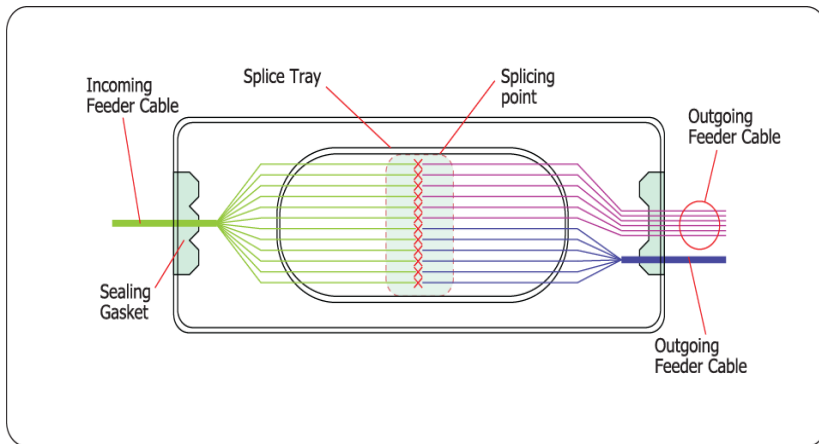
Gasket Type		Applied Cable Diameter
3 Branches		8 ~ 25 mm
4 Branches		6 ~ 14 mm
Combination Branches		8 ~ 25 mm / 3 ~ 4 mm
32 Branches		3 ~ 4 mm

FIBER OPTIC JOINT CLOSURE, SCNB/SCNBL

Feeder to Feeder

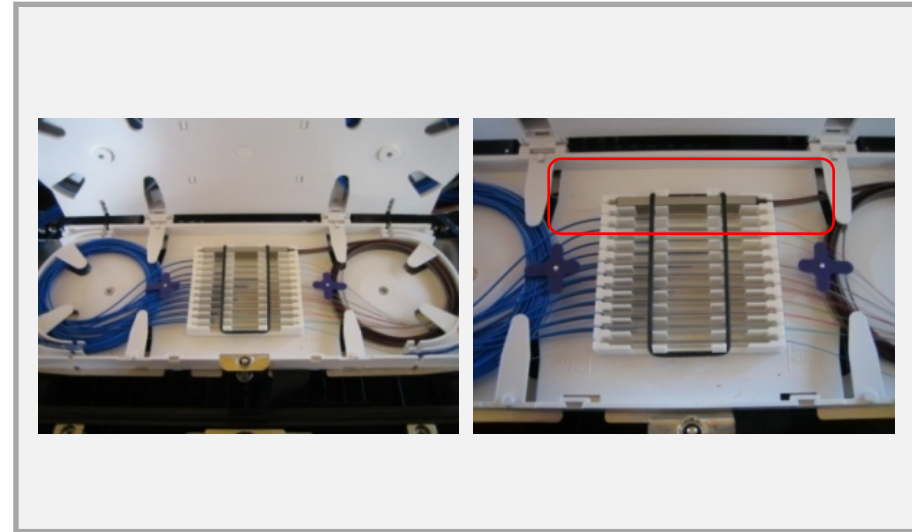
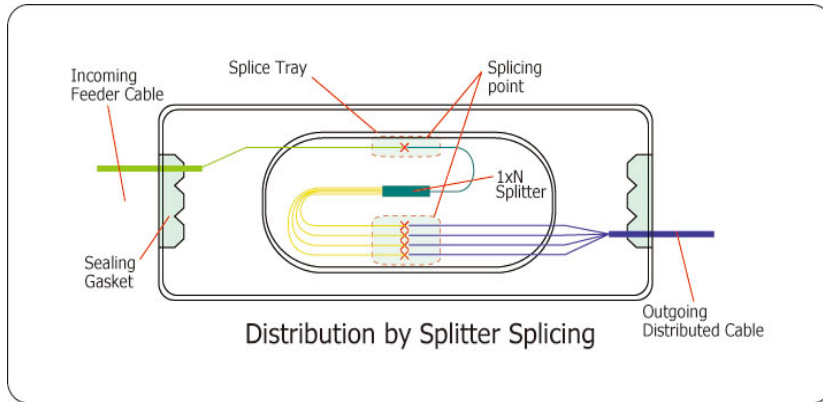


Feeder to Drop

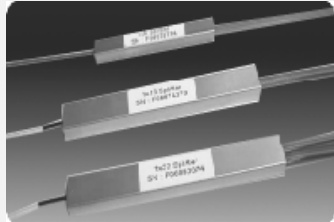


FIBER OPTIC JOINT CLOSURE, SCNB/SCNBL

Splitter Splicing



SPLITTER



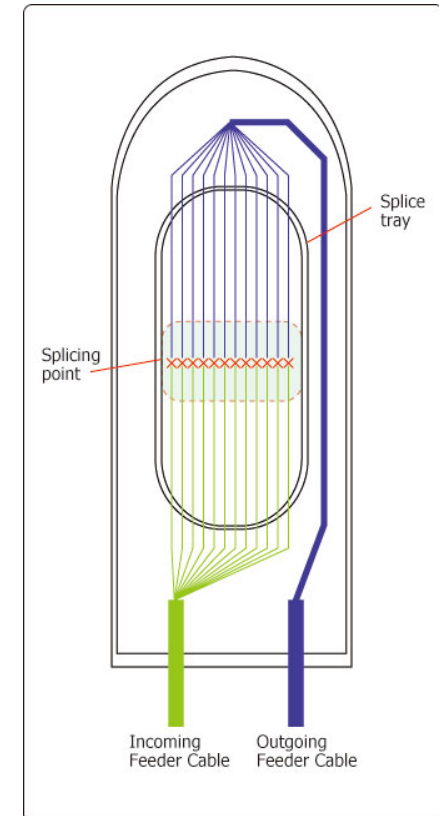
Parameter	Unit	1x2	1x4	1x8	1x16	1x32	2x16	2x32
Operating Wavelength	Nm	1260 ~ 1640						
Insertion Loss (Max.)	dB	≤ 4.1	≤ 7.5	≤ 10.8	≤ 13.8	≤ 17.2	≤ 15.1	≤ 18.5
Uniformity	dB	≤ 0.6	≤ 0.8	≤ 1.0	≤ 1.5	≤ 1.8	≤ 2.0	≤ 2.5
PDL	dB	≤ 0.2	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.4	≤ 0.4
Return Loss	dB	≥ 55						
Directivity	dB	≥ 55						
Operating Temperature	dB	-40 ~ 85 °C						
Storage Temperature	dB	-40 ~ 85 °C						

FIBER OPTIC JOINT CLOSURE, DOME

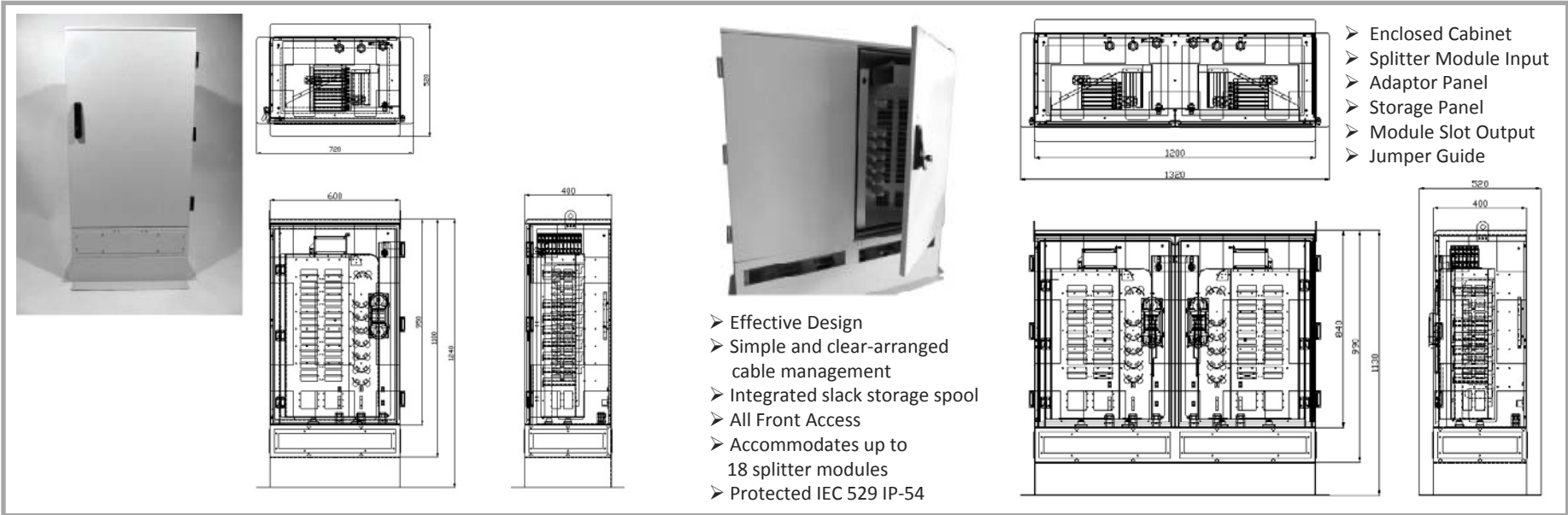


- Compact and High Capacity Design
- Mechanical Protection
- High Performance
- Environmental Protection
- Hermetically Sealed Closure

Parameter	FOJC-Dome
Dimension (H*R)	530mmxΦ160mm
Weight	3.5kg
Entrance	Single : 5 Oval : 1
Suitable cable dia.	Single : less than 25mm Oval :less than 33mm
Max. No. of Splice tray	6
Capacity of tray	24 cores(in case of stacking: 48 cores)
Max. Capacity	144 cores
Splice method	Fusion
Cable Blocking	Heat Shrinkable Tube
Material	PP, ABS

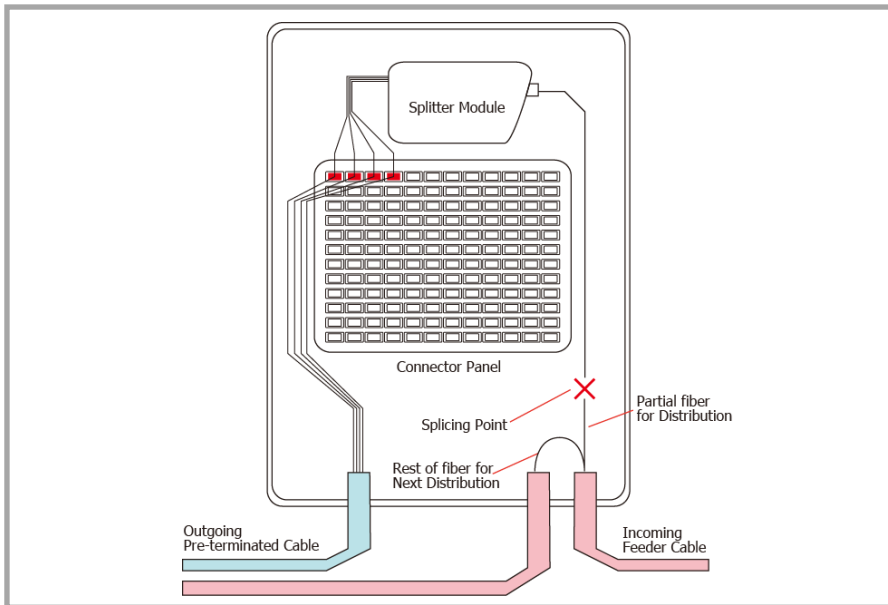
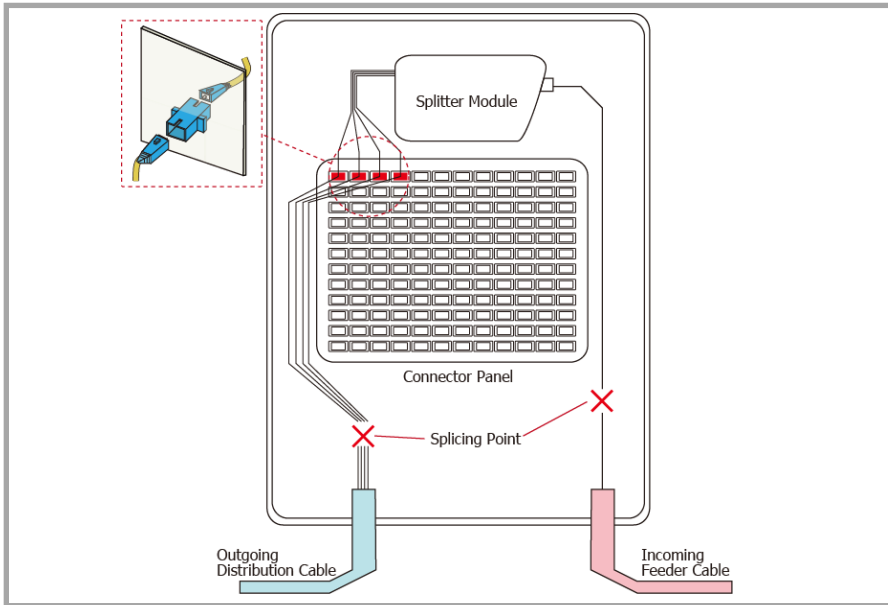


FIBER DISTRIBUTION CABINET



Parameter	FDC288	FDC432
Dimensions (Height X Width X Depth)	1240mm X 600 mm X 400 mm	1130mm X 1200 mm X 400 mm
Mounting Options	Ground	Ground
No. of Cable Entry	1	2
	2	4
Cable dia. (Max.)	20	20
Splitter Module Slot	Max. 18	Max. 36
Applied splitter module	1x8 ~ 1x32	1x8 ~ 1x32
Adaptor Type	SC/ APC	SC/ APC
No. of Adaptor	288	432
Input Parking Lot	Max. 12	Max. 24
Output Parking Lot	Max. 48	Max. 96

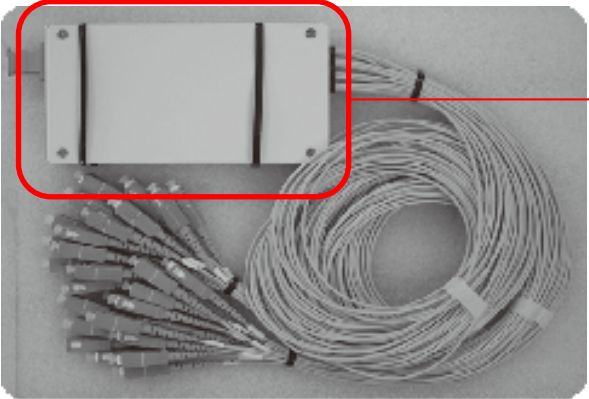
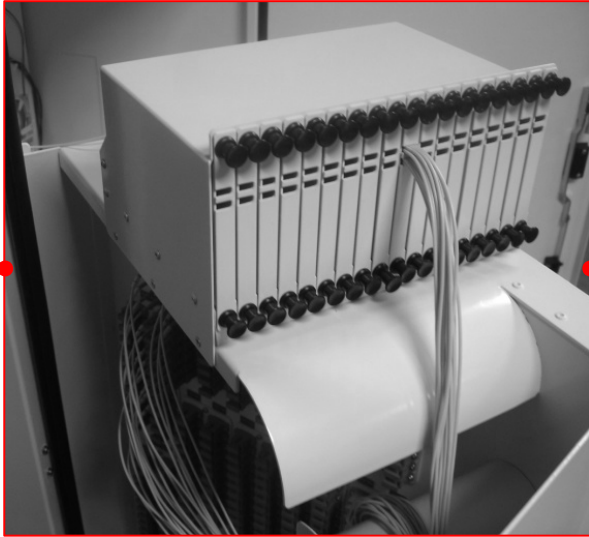
FIBER DISTRIBUTION CABINET



FIBER DISTRIBUTION CABINET

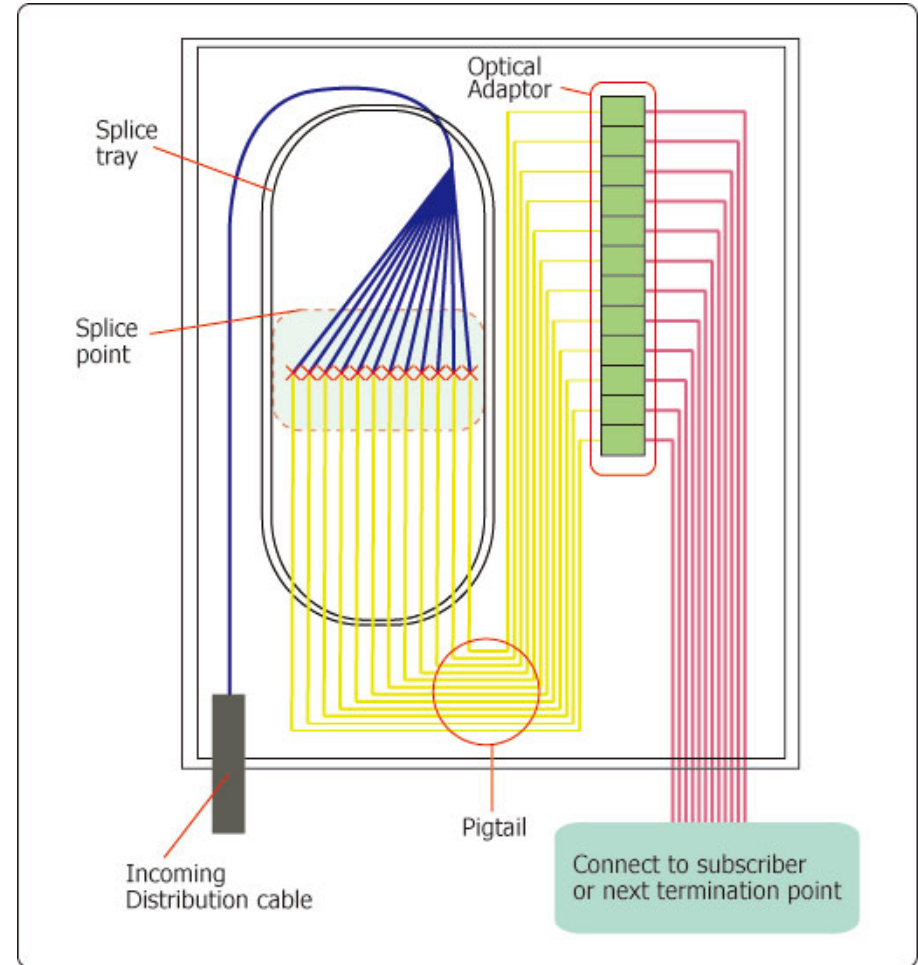


Splitter Module

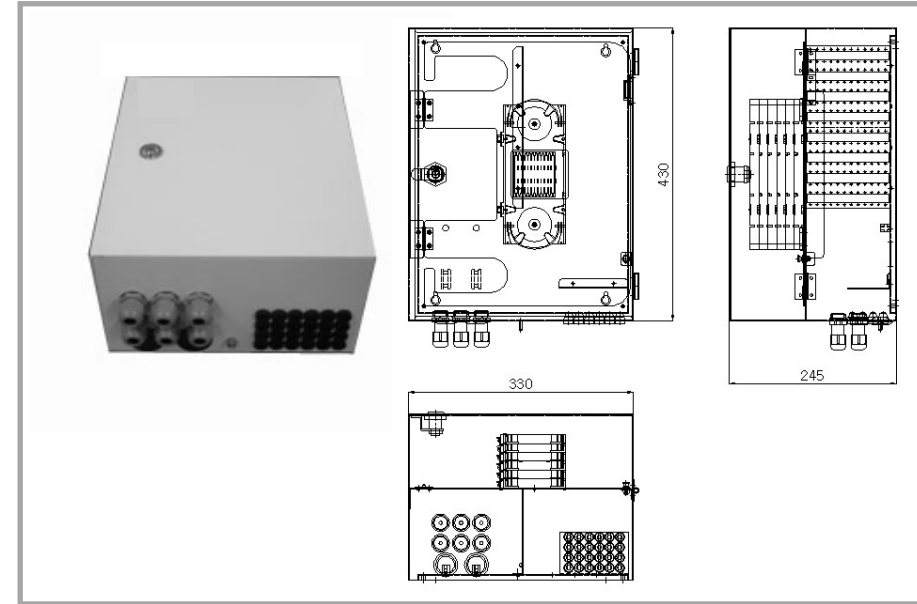
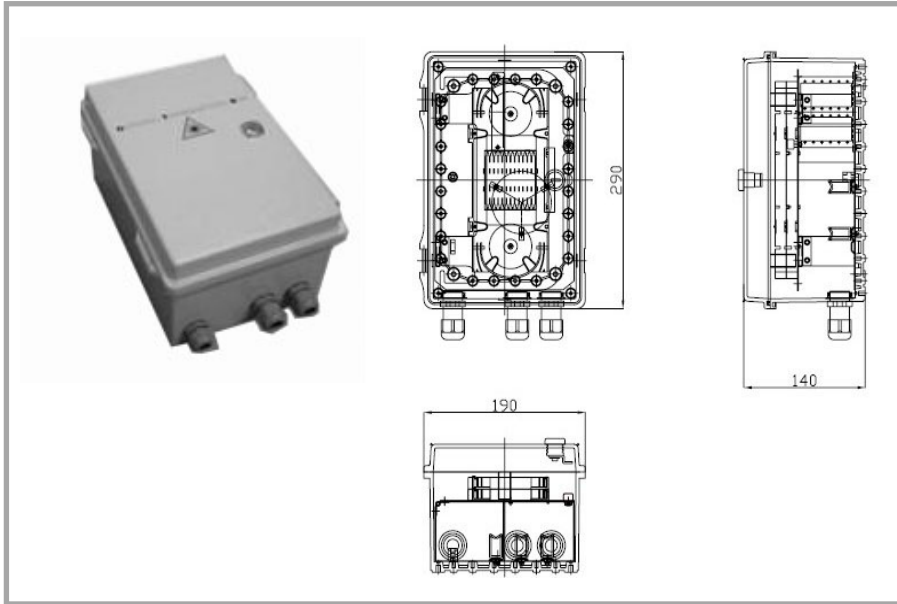


Parameter	Splitter Module	Remarks
Dimension (LxWxH)	150mm X 80 mm X 12mm	Splitter module case
Splitter type	1x4 ~ 1x32	PLC type
Input	SC/APC pigtail 1.5m, O.D 2mm	
Output	2mm Tight buffered tube	
Output cord length	1.5 mm	Allowance tolerance: $\pm 5\%$ mm
Connector/ Adaptor type	SC/APC	
Case material	Aluminum	
Case Color	Ivory	

OPTICAL TERMINATION ENCLOSURE



OPTICAL TERMINATION ENCLOSURE



Parameter		OTE-24C
Dimension (LXWxH)(mm)		290X190x140
Cable Entry	(In/Out)	1/2
Cable Dia.	In (mm)	8-12
	Out (mm)	25
Splice Method		Fusion/ Adaptor
No. of splice tray		1
Splice tray Capa.		24
SC/PC adaptor Capa.		24
Material		Plastic
Installation Type		Wall

Parameter		OTE-36	OTE-48
Dimension (LXWxH)		360 x 260 x 160 mm	
Cable entry	In	2 ea	
	Out	Drop Cable: 24 ea Raiser Cable: 6 ea	
Cable Dia.	In	20 mm	
	Out	Drop Cable: 3.6 mm Raiser Cable: 10 mm	
Splice Method		Fusion	
Splitter Splice Tray Capa.		24 ea	
No. of Splitter Splice Tray		3 ea	4 ea
No. of SC adaptor		36 ea	48 ea
Installation type		Wall	
Locking Method		ITED Key lock type	
Material		SPCC	

HYBRID OUTLET BOX

Hybrid Outlet OLeT2H



Hybrid Outlet is well known solution for global market network of HFC and FTTx networks. CT OLeT2H is for easy connection of optical connector, fiber splicing. In this type user can splice with drop cable to drop cable and drop cable to patchcord.

Hybrid Outlet OLeT8C

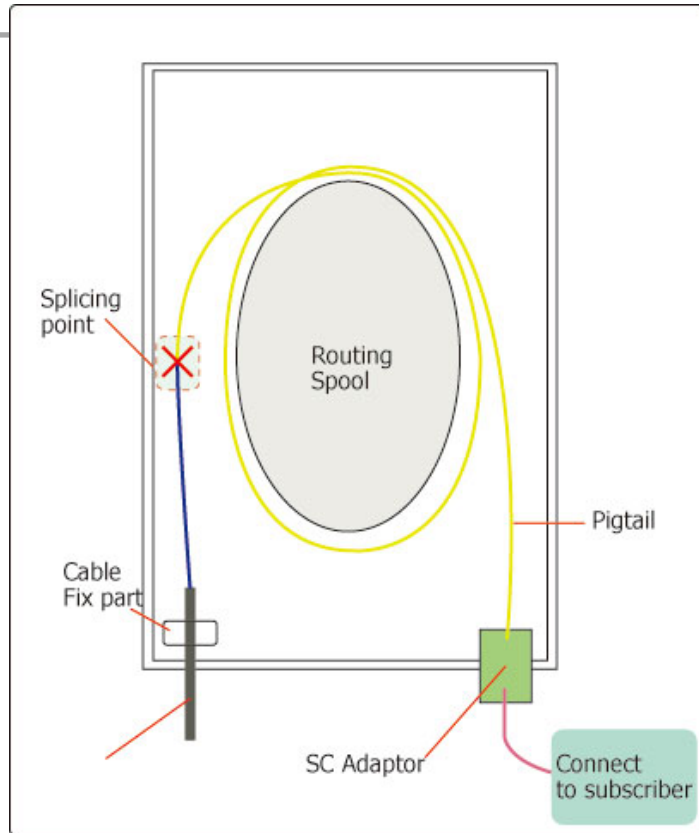


CT OLeT8C is splitter outlet which used in the Multi Dwelling Units(MDU). Using 1x8 or 1x4 splitter, this type can accommodate 8 SC patchcord splicing, useful for extending the subscriber.

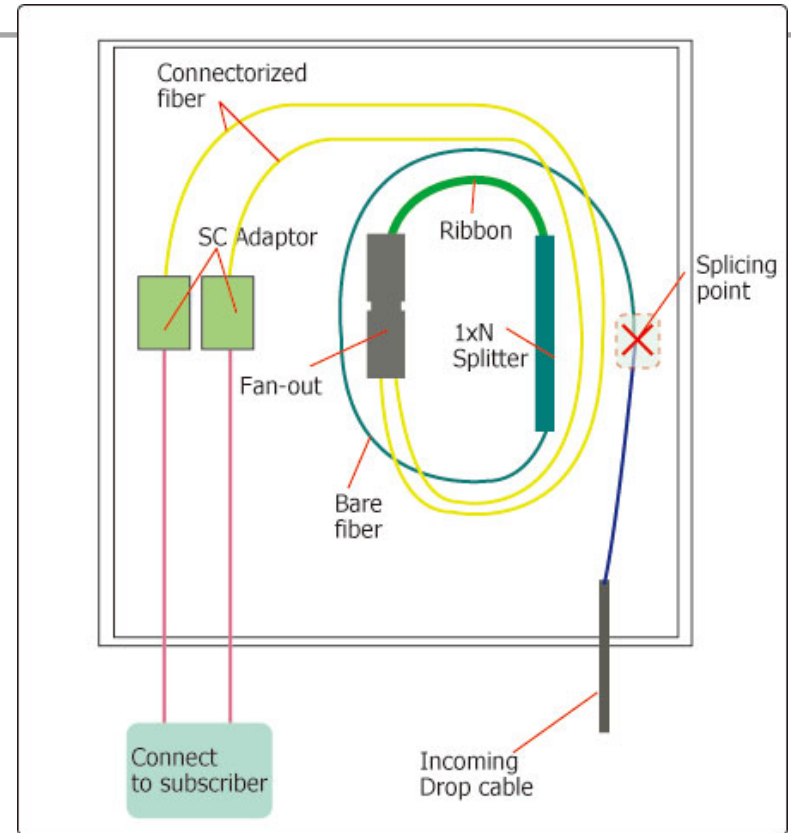
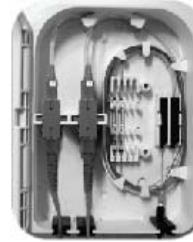
Parameter	OLeT2H	OLeT8C
Dimension (LxWxH)	120mm X 70 mm X 25mm	135mm X 170 mm X 45mm
Adaptor Capacity	2 SC/ 1 RJ	8 SC
Cable Port	1 in bottom/ 2 in rear side	3 in bottom side
In/Out cable diameter	3 ~ 6 mm	
Body Material	Plastic	
Installation Type	Wall Type	

HYBRID OUTLET BOX

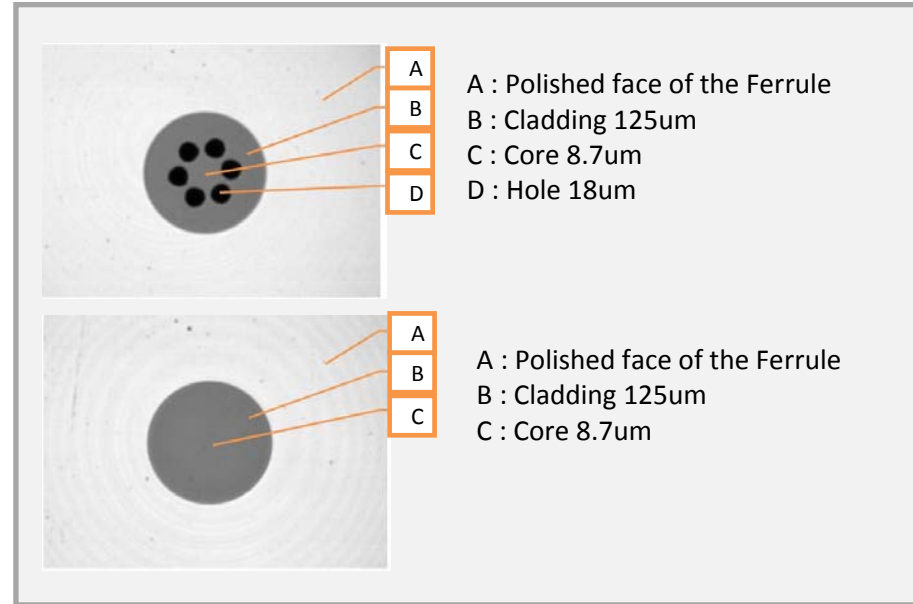
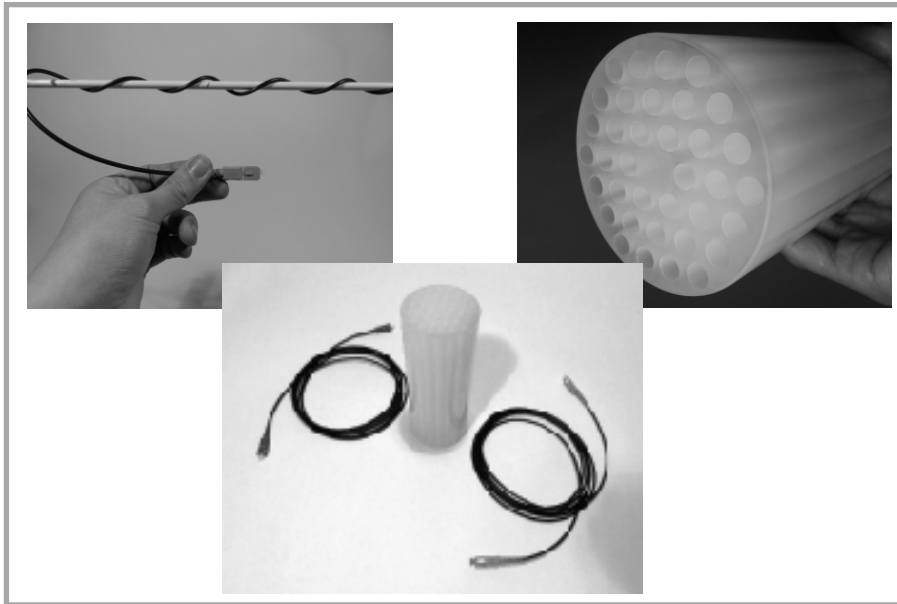
Hybrid Outlet OLeT2H



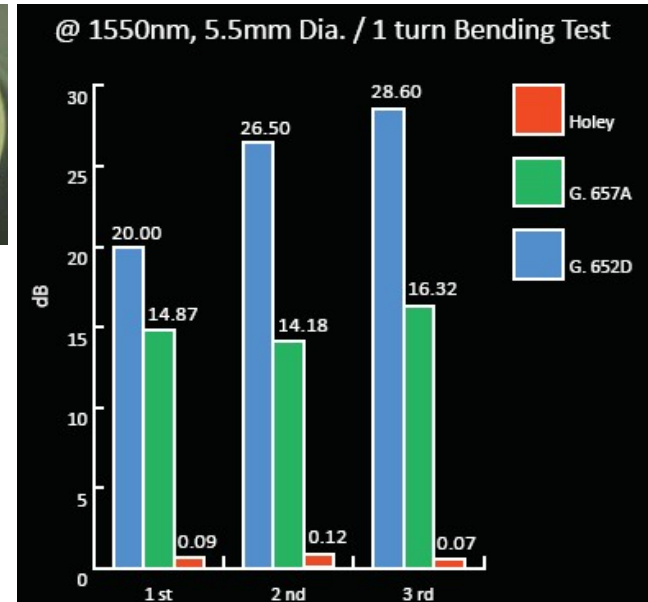
Hybrid Outlet OLeT8C



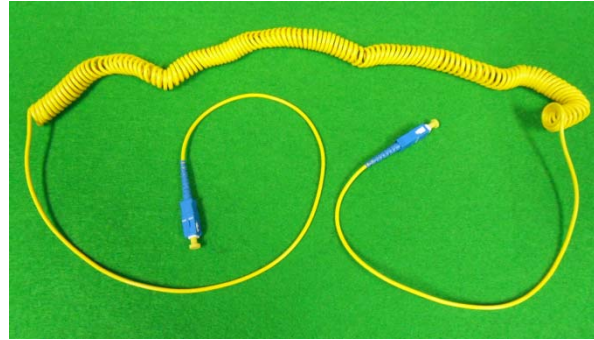
HOLEY CONNECTOR



Parameter	Holey Connector
Hole Size	21 um
Loss (dB/km)	0.220 (1550nm)
MFD	10.40
Dispersion (1550nm)	17.73
Bending Loss (dB/turn)	Carried out 10 times
10mm Radius	< 0.01
7.5mm Radius	< 0.01
5 mm Radius	0.02



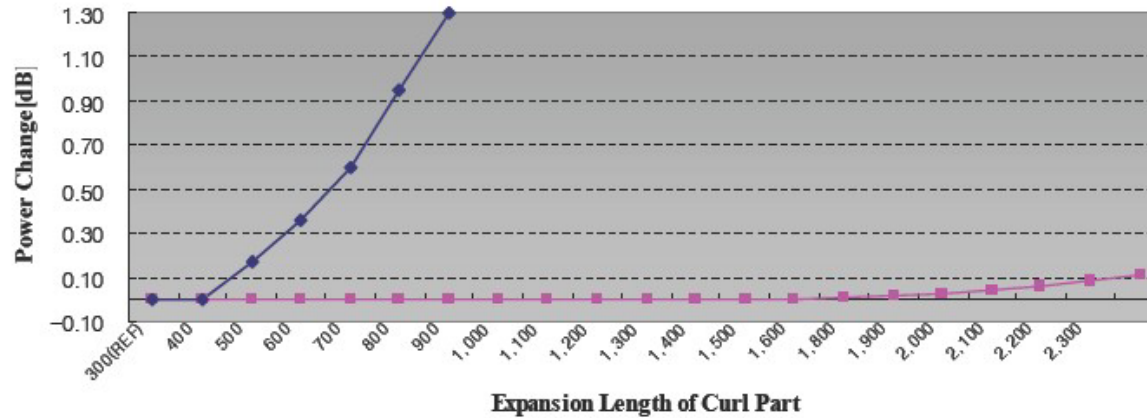
HOLEY CURLCORD



Reliability of optical curl cord-holey fiber

The trend of fiber optic components is smaller, followed product need to be differentiated by holey fiber. Experimental result of the output power variation of the curl cords with the expanded length change are shown below. According to the expansion test results, optical curl cord with holey fiber showed no power change. Wide variety of applications, such as car digital audio, factory automation and even in your personal computer.

Expansion Test (Holey vs BIF)



Expansion Length (mm)	300(1)	500	600	900	1500(5)	1600	1800(6)	2000	2100(7)	2200	2300(8)
Holey Fiber	0.00	0.00	0.00	0.00	0.00	0.010	0.020	0.045	0.060	0.085	0.115
BIF	0.00	0.36	0.60	1.30	-	-	-	-	-	-	-

() ; repeated cycles, BIF : Bend Insensitive Fiber

** According to the expansion test results, optical curl cord with holey fiber showed almost no power change.

Customized Solution Proposal

- ✓ Customized Manufacturing and Design
 - ✓ Product Consulting System
 - ✓ On-site Training Program Support
 - ✓ Establishment and Installation Movie offered
 - ✓ On-site Training Program Support

