

# Fiber Distribution Hub, Patch Free PLC Splitters 96Cores

## Patch Free FDH with PLC Splitters 96Cores Singlemode

Infinique's Fiber Distribution Hub with Splitters is a compact high density enclosure supporting up to 96 cores termination and providing overall greater protection for fiber optic connections from pull and impact. The enclosure is made of a tough chemical resistant engineering material which effectively prevents it from ageing caused by heat, cold, oxygen and UV radiation. It's strong and rugged housing stands up to harsh weather conditions and is water proof, fire resistant and also quake proof.

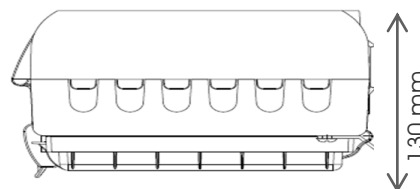
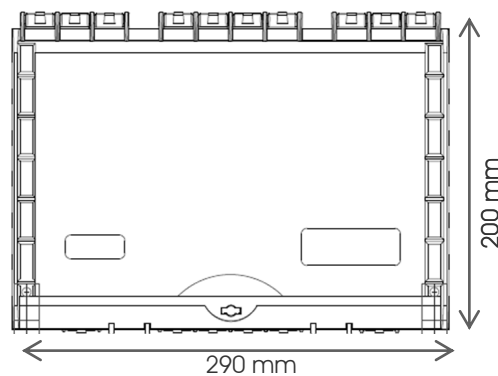
To accommodate 96 cores termination, the enclosure has splice trays. Each tray can support one 2x32 PLC splitter termination capable of splicing fiber cores from either multi-core cables or drop cables.

A high quality elastic silicon gasket seal, shrinks and dilates to ensure long-term sealing performance of the enclosure when it is closed and makes it reusable for easy re-entry. Gaskets are provided for entry of both feeder cable and drop cable and they offer excellent tightness reliability. Transition Tube Kit is included which protects the routed fiber cable. This fully mechanical enclosure can be used indoors or outdoors, and can be mounted on wall, hand hole mount, duct mount or aerial applications.

### Features and Benefits

- High Density, Compact FDH for 96 Cores**  
 Compact FDH that offer high density splicing capacity of 96 cores comes with three splice trays, each with one 2x32 PLC Splitter. Splice tray is equipped with labels to indicate splitter number and 32 splices. Separate storage tray to store excess cable.
- Versatile Cable Ports**  
 Accepts cables of various diameters through its 12 ports, 6 ports are placed on each side. Two types of gaskets are provided one for multi-core cable of various diameters and another specially designed for drop cable.
- Reliability**  
 High quality elastic silicon gasket seal makes it suitable for reuse and re-entry, pre-installed air valve to check air leakage, manufactured as per ISO-9001:2008/TL9000 process.
- Minimum Bend Radius**  
 Bend Radius of 30mm maintained with hinge-able structure of splice trays to route fibers with no transmission degradation
- Aerial, Manhole and Wall Mount Applications**  
 Can be installed either in manhole or aerial pole using the two self supporting stainless steel strand clamps. Rugged housing suitable for wall, hand hole and duct mounting applications
- Superior Design**  
 Corrosion free stainless steel metallic parts, non-metallic parts are made of tough engineering material resistant to solvents, chemicals, stress and constructed without sharp edges
- IP65 Rated Housing**  
 The closure is dust tight, water proof, vibration proof, protects splices from pull, torsion and impact

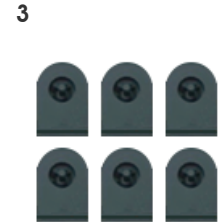
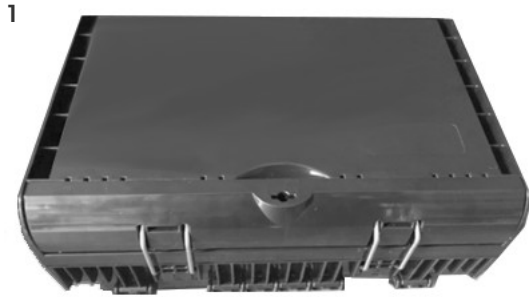
### Construction



# Fiber Distribution Hub, Patch Free PLC Splitters 96Cores

Patch Free FDH with PLC Splitters 96Cores Singlemode

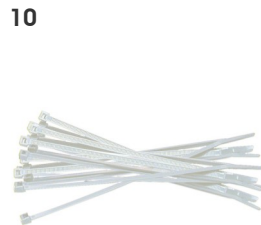
## PARTS LIST



5

6

7



1. Enclosure Box
2. 2x32 PLC Splitters (Qty 3)
3. Multi-core Cable Gasket (Qty 6)
4. Drop Cable Gasket (Qty 12)
5. L-Clamp 11-13 mm Cable Diameter (Qty 4)
6. M-Clamp 9-11 mm Cable Diameter (Qty 4)
7. S-Clamp 6-9 mm Cable Diameter (Qty 4)
8. Splice Trays (Qty 4)
9. Splice Protection Sleeves (Qty 102)
10. Cable Ties (Qty 12)
11. Spiral Tube (Qty 6)
12. Wall Mount Brackets with Screws (Qty 2)
13. Instruction Manual

# Fiber Distribution Hub, Patch Free PLC Splitters 96Cores

Patch Free FDH with PLC Splitters 96Cores Singlemode

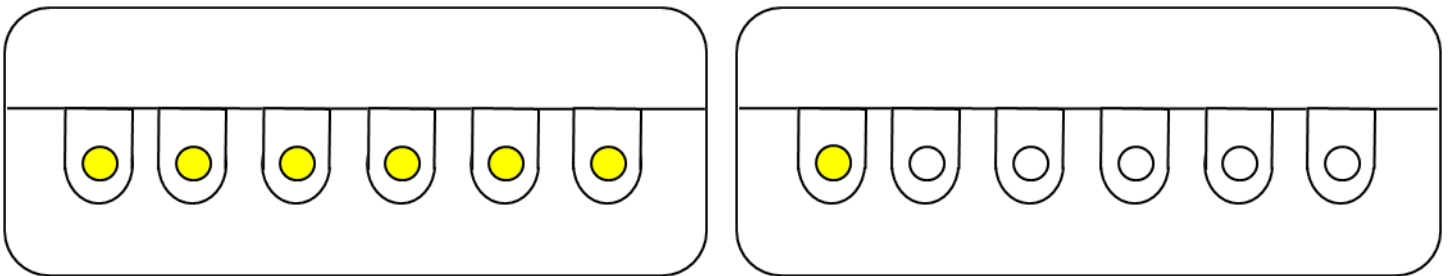
## CABLE ROUTING

There are 12 ports present in the FDH with 6 each on each side. Each port is snugly fixed with an airtight gasket which are of two types, one is designed for multi-core cable and another one for drop cable. As a standard, all the 12 ports in the enclosure are fitted with a gasket type for drop cable and 6 nos of gaskets for multi-core cable are included in the enclosure packing when shipped from the factory.

One drop cable gasket can be used to route 8 flat drop cables of 2x3 diameter and one multi-core cable gasket can be used to route one loose tube cable. Use the first port on the left side to route the feeder Cable. Multi-core and drop cables can be routed through the ports present on both the left and right side. Excess cable be stored in the cable tray which is present bottom compartment of the enclosure.

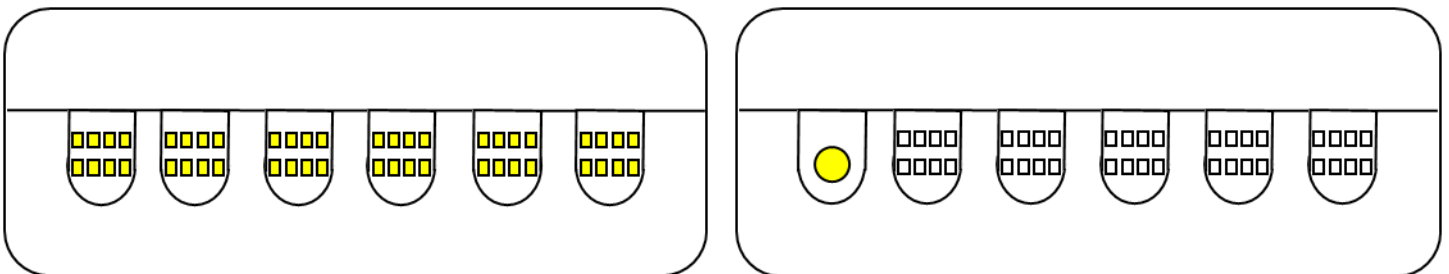
## Fiber Distribution Configuration for 48 Core Multi-Core Cable

On the left side of the closure, the ports shall be used for multi-core cables and hence be fitted with the multi-core cable gasket. In each cable gasket one multi-core cable can be routed. On the right side of the closure, the first port should be used for the feeder cable and this port should be fitted with the multi-core cable gasket.



## Fiber Distribution Configuration for Drop Cable

On the left side of the closure, all the six ports will be used for drop cables and shall be fitted with drop cable gasket. In each gasket 8 drop cables can be routed. This gives a total capacity of 96 Cores. On the right side of the closure, the first port will be used for the multi-core feeder cable and hence should be fitted with the feeder cable gasket.

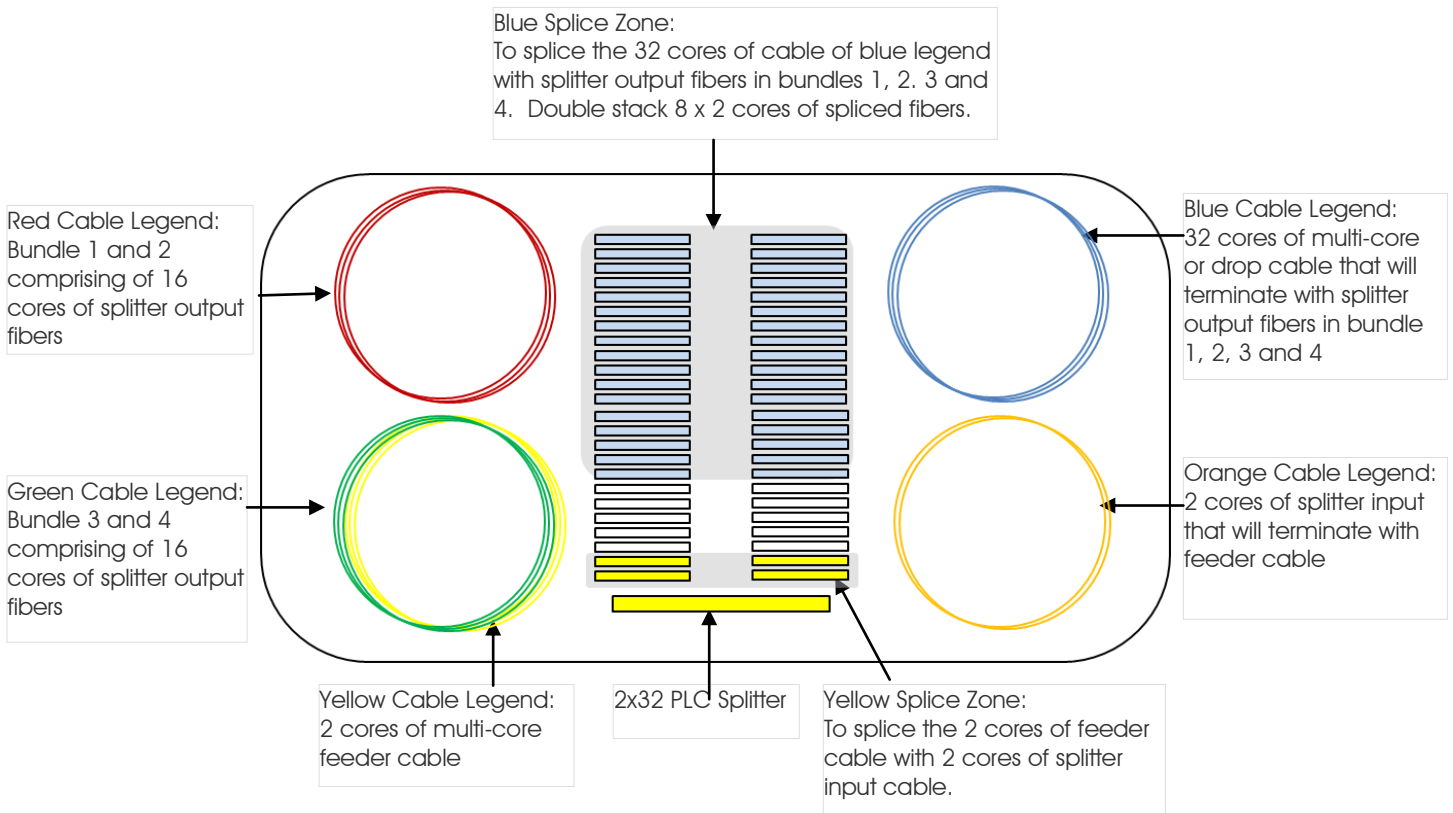


# Fiber Distribution Hub, Patch Free PLC Splitters 96Cores

Patch Free FDH with PLC Splitters 96Cores Singlemode

## SPlicing CONFIGURATION

There are 3 splice trays present in each enclosure, and each splice tray is equipped with a 2x32 PLC splitter. The PLC splitter output is made of 4 bunches of 8 fiber cores, with each bundle having unique eight colors for easy identification. Each splice tray is capable of holding 2 fibers of feeder cable and 32 fibers of multi-core or drop cables that are routed to each splice tray for splicing both the input and the output fibers of the splitter. Please refer the section "Cabling Routing" in the installation manual for the instructions of routing the drop cables and the feeder cable into the enclosure.



# Fiber Distribution Hub, Patch Free PLC Splitters 96Cores

Patch Free FDH with PLC Splitters 96Cores Singlemode

## TECHNICAL SPECIFICATIONS

### PLC SPLITTER 2x32 OPTICAL PERFORMANCE

Operating Wavelength (nm)	1260 ~ 1650
Insertion Loss (Max dB)	17.5
Uniformity (Max dB)	1.5
Polarization Dependent Loss (Max dB)	0.3
Return Loss (Min dB)	55
Directivity (Min dB)	55

### PLC SPLITTER 2x32 MECHANICAL SPECIFICATIONS

Case Dimensions (W x H x L mm)	7 x 4 x 60
Splitter Case Material	Stainless Steel
Fiber Type (IN and OUT)	G.657A1
Input Type	2ea of 250um bare fibers
Input Fiber Length (mm)	1,000
Output Fiber Type	4ea of 8 core ribbons
Output Fiber Length (mm)	1000
Output Fiber Colors in each bundle	Blue, Orange, Green, Brown, Gray, White, Red and Black
Connectors (IN and OUT)	None

### SPECIFICATIONS

Dimensions (mm)	290 (L) x 200 (W) x 130 (D)
Cable Ports	12 Ports
Feeder Cable Gasket	6 Nos
Drop Cable Gasket	12 Nos
Splicing Tray	4 Nos
PLC Splitters 2 x 32	3 Nos
Splicing Capacity	96 Cores
IP Rating	IP 65

### TEMPERATURE RANGE

Operating Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
Operating Humidity	95% RH
Storage Humidity	95% RH

## ORDERING INFORMATION

Part Number	Description
IFPLC-SM-696-PFWM	Infinique Fiber Distribution Hub, Patch Free PLC Splitter for 96 Cores, Singlemode, Wall Mount with Brackets
Packing Kit: Fiber Distribution Hub Enclosure, 2x32 PLC Splitters (Qty 3), Feeder Cable Gasket (Qty 6), Drop Cable Gasket (Qty 12), L-Clamp for 11-13 mm Cable ø (Qty 4), M-Clamp for 9-11 mm Cable ø (Qty 4), S-Clamp for 6-9 mm Cable ø (Qty 4), Splice Trays (Qty 4), Splice Protection Sleeves (Qty 102), Cable Ties (Qty 12), Spiral Tube (Qty 6), Wall Mount Brackets with Screws (Qty 2), Instruction Manual	



Infinique, a Canadian company is a manufacturer of high performing end-to-end solutions in copper, fiber and video surveillance systems. For more information visit our website at [www.infinique.com](http://www.infinique.com) or email us at [sales@infinique.com](mailto:sales@infinique.com).