Application

The outdoor Patching on Demand Fiber Distribution Terminal (POD-FDT) cabinet for up to 768 end users is designed to handle fiber optic terminations and passive optical splitters in PON FTTx networks. It can also be used for Point to Point (P2P) applications or combinations of the both. The POD-FDT is used as a demarcation point between the feeder network and the distribution network and provides quick and easy incremental installation of distribution cable terminations and fiber optic splitters. This cabinet can handle both air-blown fiber in micro ducts, micro cables as well as drop cables and other fiber optic cables.

The POD-FDT is intended for outdoor installations but can also be mounted indoors, floor standing or wall mounted e.g. for use in a basement of a Multi Dwelling Unit.

Design

This cabinet is designed with the unique feature of modular splitter panels each can accommodate 12 spli©er modules pre-connectorised in a very efficient manner with management for easy handling and identification of output fibers inside the cabinets. This excludes the need for external manholes and splice boxes and therefore reduces installation time and installation cost. In addition to easy cable installation, the cabinet is designed for installation patching on demand which enables better consumer connection management and additional cost savings. The product is equipped with a distribution panels for up to 768 end-user connections and up to 144 feeder cable, bypass and spare feeder terminations. There is 192 ports Parking Panel which is used to hold the point to multipoint connections in idle state parked till it was connected.

Features

- For PON and P2P applications

- In-cabinet splicing, no splicing in manhole

- Up to 768 terminated patching on demand drops

- Up to 24 positions for mounting of splitter modules

- IP 55 rated Metallic Outer body

The cabinet is equipped with heavy duty lockable front doors with hexagonal key lock. The feeder

cable and distribution cable management and routing is also provided with self-protecting rubber to retain the cabinet IP rating after installation as well.

Typical Data

Material

The housing is made of GI steel powder coated that provides excellent mechanical strength at a very low weight in combination with highest corrosion resistance. Other metallic parts such as screws, micro duct and cable holders etc. are made of stainless steel. The door gaskets are of EPDM material. Fiber adapter trays are of plastic. All materials are very high in quality.
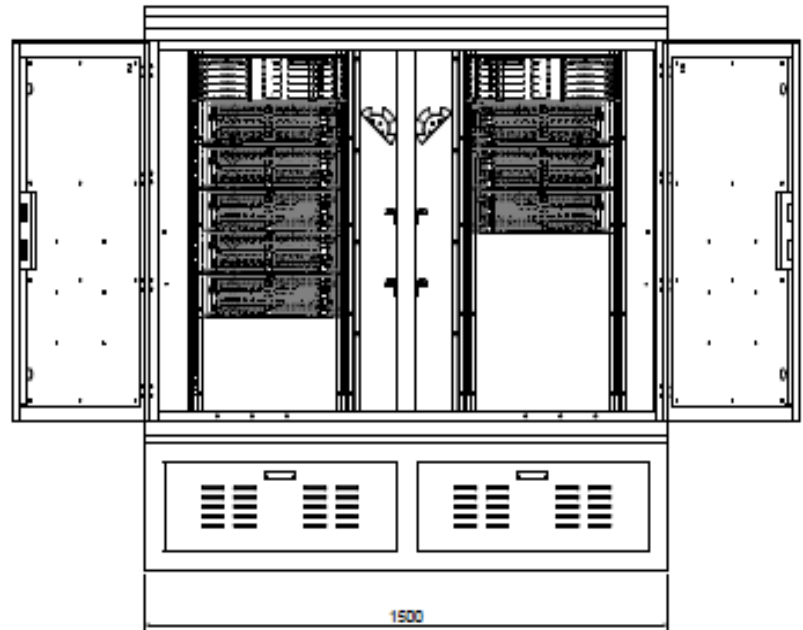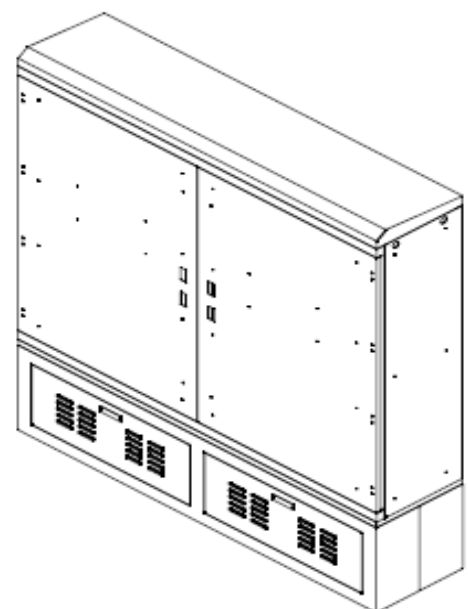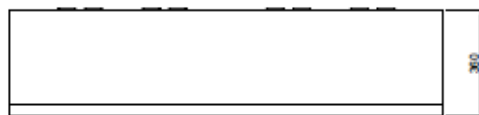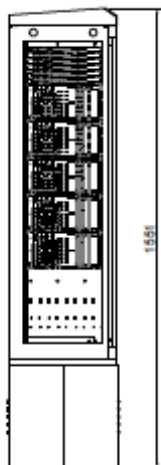

Weight, Size and Color
Weight: 280 kg (approx.)
Dimensions (HxWxD):1551mm X 1500mm X 360mm
Color: Light grey (RAL 7035)
*Height including base.

Configuration

A standard configuration of Patching on demand FDT, the main components are as follows:

- Feeder/ Bypass Panel
- Parking Panel for standby connections.
- Optical Distribution Panels
- Modular Splitter Management Panel

Pigtails splice sleeves, protection tubes etc are optional accessories available with the cabinet.
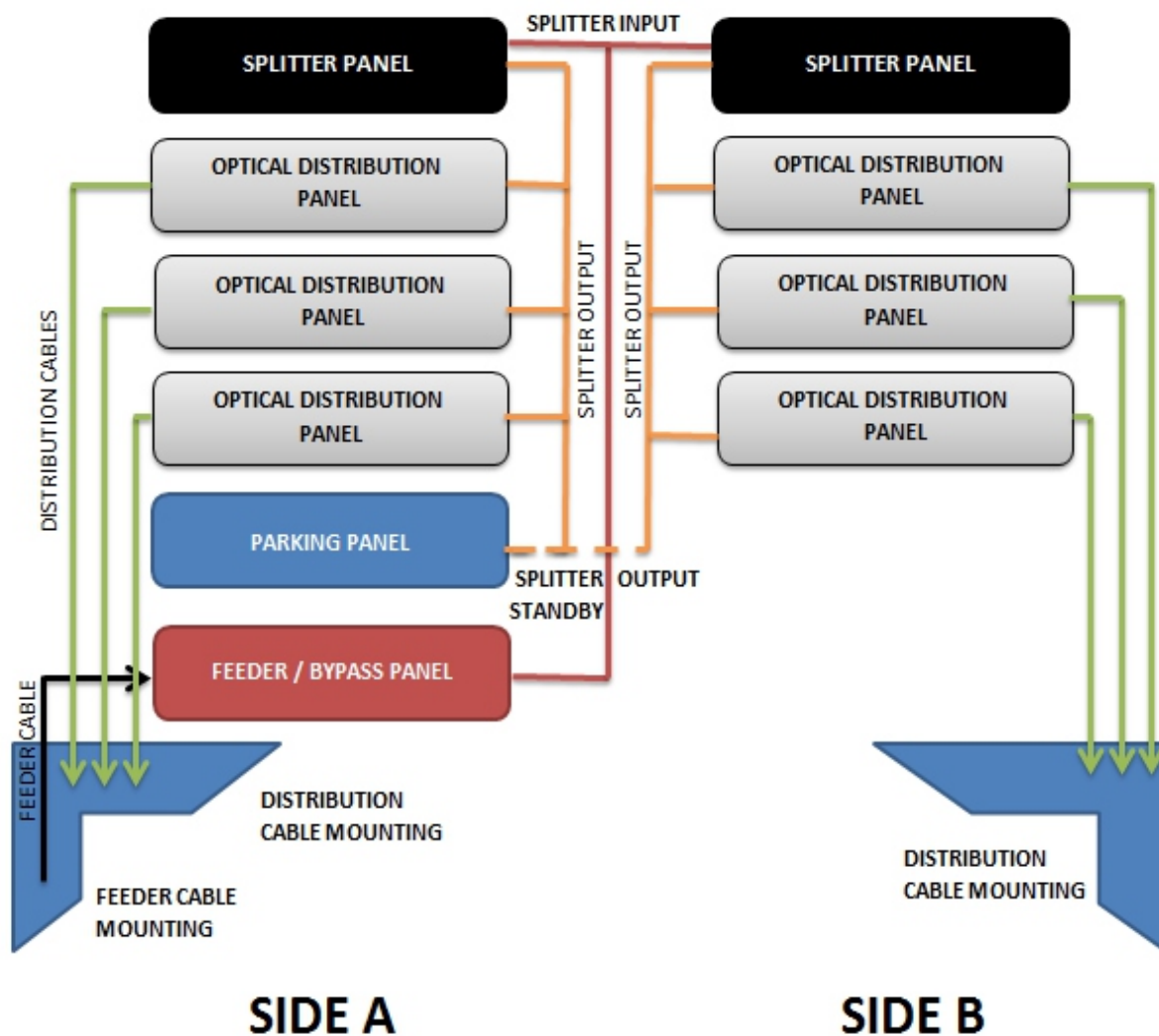
Fiber Distribution Terminal – Patching on Demand

Optical Characteristics

ODF Pigtails :

Parameters	Specifications
Return Loss	Minimum 60 dB for APC
Operating Temperature	10 - ° C to + 75° C
Fiber / Pigtail Standard	Fiber SM ITUT – G657A1 , Pigtail Ø 0.9 mm
Connector /Adapter Standard	EIA / TIA and IEC Compliance

Splitter:

Specifications:		1 x 2 50/50	2 x 2 50/50	1 x 4	2 x 4	1 x 8	2 x 8	1 x 16	2 x 16	1 x 32	2 x 32
Operating Wavelength		1260- 1620 nm									
Fiber Type		Single Mode ITU-T G657-A									
* Insertion Loss (dB)	Typical	--	--	--	--	--	--	--	--	16.2	17.2
	Max	--	--	--	--	--	--	--	--	17.0	17.5
Return Loss (dB) Min		--	--	--	--	--	--	--	--	55/50	
PDL (dB)	Typical	--	--	--	--	--	--	--	--	0.2	0.2
	Max	--	--	--	--	--	--	--	--	0.3	0.3
Directivity (dB)		--	--	--	--	--	--	--	--	55	
Wavelength Dependent Loss (dB)	Typical	--	--	--	--	--	--	--	--	0.3	0.3
	Max	--	--	--	--	--	--	--	--	0.5	0.5
Temperature Stability	Typical	--	--	--	--	--	--	--	--	0.4	0.4
(-40 °C ~ + 85 °C)	Max	--	--	--	--	--	--	--	--	0.5	0.5

Product Categorization

Model No	PLC Splitter Type * (N –X)	No of Splitters	Maximum Capacity	Loaded Capacity	Adapter Type	Dimensions with Base (H x W x D) mm
ATC-POD-FDT-768-232-24	2: 32	24	768	768	* LC/APC	1551 x 1500 x 360
ATC-POD-FDT-384-232-12	2: 32	12	384	384	* LC/APC	1551 x 750 x 360

*N = Splitter Input 1.6 mm loose buffer, Red color.
*X= Splitter Output 1.6 mm loose buffer, Yellow color.
*ATC standard Adapter is offered as LC/APC or as customer specified.