Modular 64 fiber Indoor Optical Enclosure
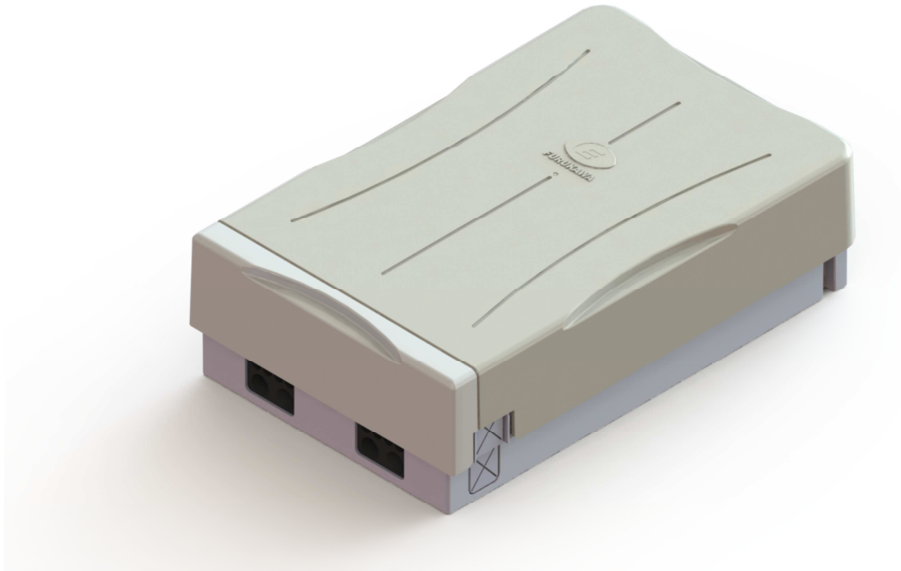
General Information

1.1   Product Description

The enclosure is used in optical MDU networks at the building entrance or as a combiner on individual floors in the building as a drop cable distribution point for vertical wiring. The enclosure is compatible with connectorized splitters; fan outs and accepts 64 adapters and cable entry points for drops and building Riser cable.

1.2   Application

Designed for indoor use at the building entrance, the enclosure provides security and quick activation of drops on the front adapter panel. The rear of the panel houses the fusion splices for connecting to either an Outside Plant cable or a Building Riser cable with pigtail splices. The enclosure may also be pre-terminated with the cable when splicing isn't possible. The cable entry port accepts cables with a diameter of up to 8 mm and provides retention of the cable.

1.3   Dimensions

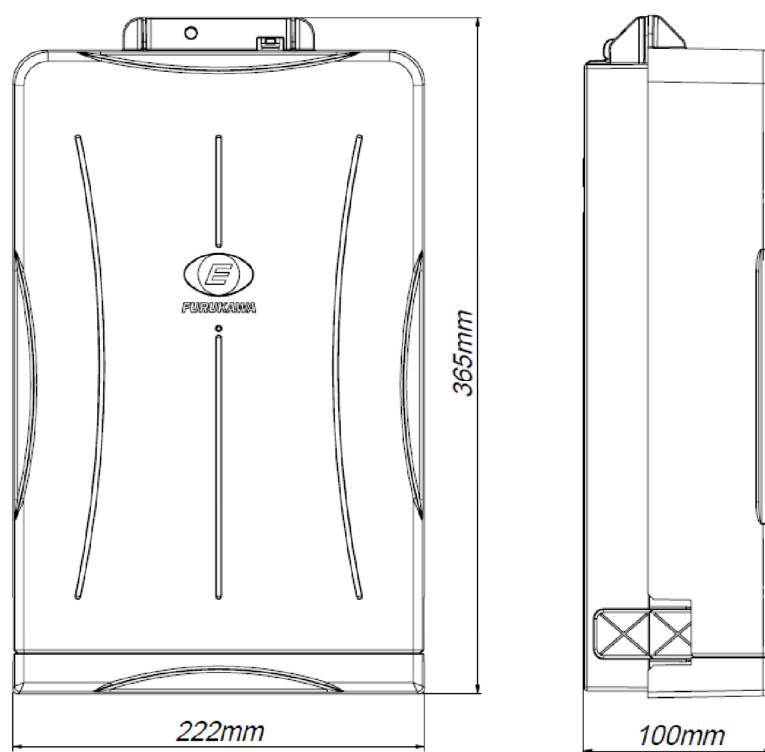222 x 365 x 100 mm (L x H x D), shown in Figure 1.

Figure 1 – Dimension of Product

2.   Composition

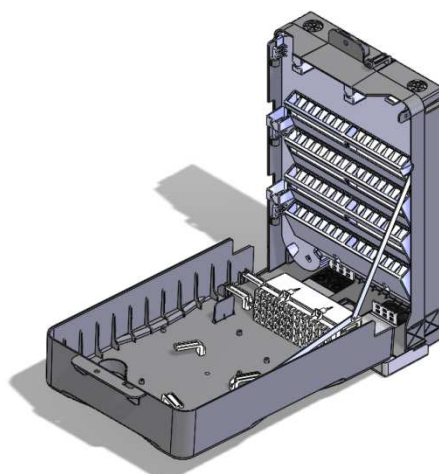It is comprised of the components shown in Figure 2 and listed in the table.

Figure 2

Table 1 – List of components in the basic module

	Description	Quantity
1	Cover	1
2	Base	1
3	Connection Cover and Base	1
4	Adapter Tray	1
5	Splice Tray	1
6	Amendment Tray Cover	1
7	Splice Protector support	2
8	Splice Tray Holder	1
9	Fiber Holder	13
10	Expansion Bracket	1
11	Parking Cap	1
12	Splitter Support	1
13	Rubber Cable Entry Grommet	2
14	Metal Cable Anchor Bracket	2
15	Cable Anchor	4
16	Articulation Rod	2
17	Fiber Protection	1

Installation Accessories:

- Installation Manual
- 4 white galvanized steel self attachment screws, pan head combined slot 5X1 9mm
- 4 nylon bushings for masonry attachment
- 2 Cable Glands
- Screws M3x6 mm plastic for fixing the expansion piece.

- Inputs for mounting include: transport tube, spiral tube, Velcro, cable ties, splice protectors and mounting template for screw placement.

3.   Installation Instruction and Assembly

Check product and make sure all of the components listed above

1.1 Product Opening

3.1.1 Remove the product packaging

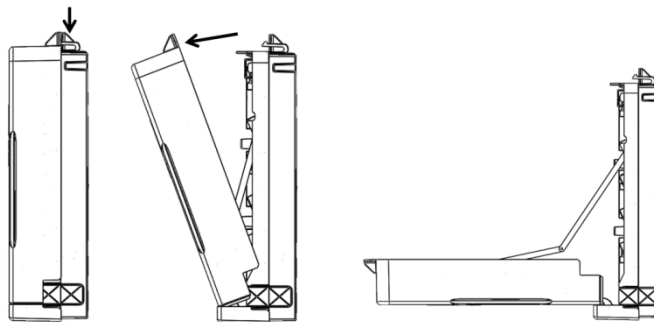3.1.2 Depress plastic fitting to open the enclosure (Fig. 3)

Figure 3 – Method to Open Cover

1.2 Attachment of the Enclosure on the Wall

1.1.1   Remove the base cover

1.1.2   Push the plastic insert and remove the adapter plate (Fig.4);
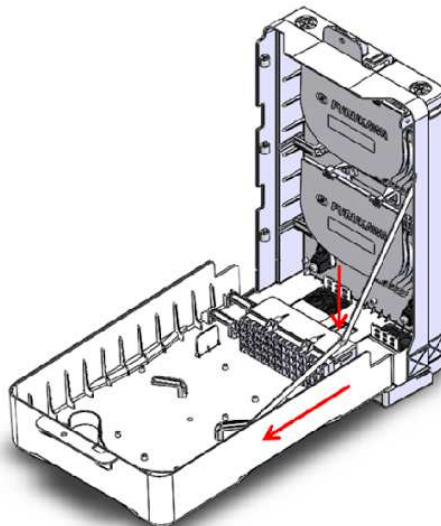
Figure 4

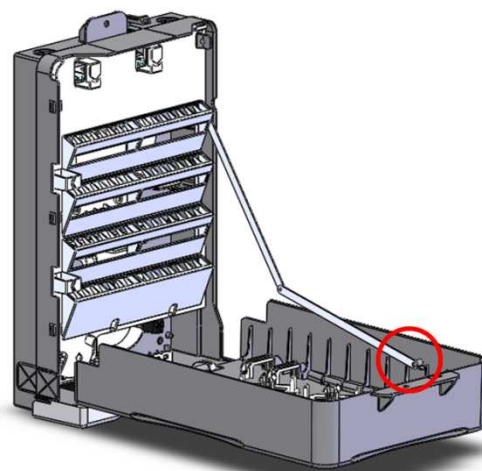1.1.3   Unscrew the connecting rod from the base and cover (Fig. 5);

Figure 5

NOTE: Select a drill with suitable diameter to S5 plugs for wall installation.

1.1.4   Drill a hole at least 25 mm in order to insert the nylon bushings.
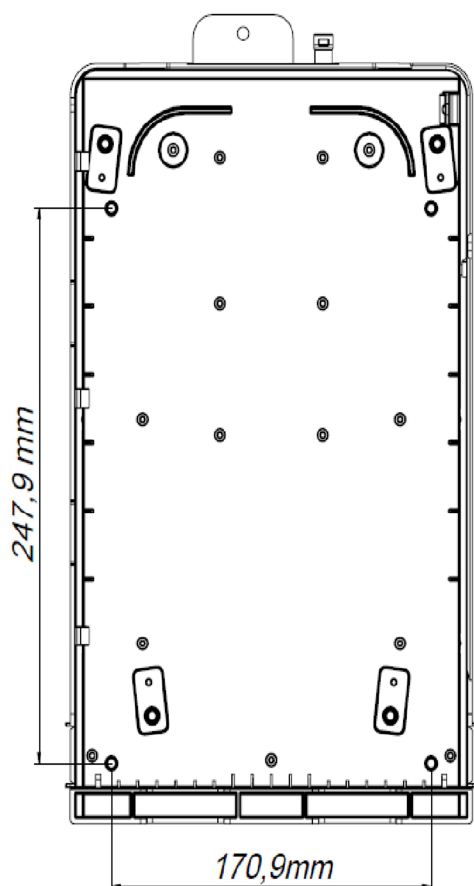1.1.5   Secure the base to the wall. The distance between holes is shown in Figure 6.

247,9 mm

170,9mm

Figure 6

Module Installation

1.1.6   Use pliers to open the side where the expansion module is installed (Fig.7)

NOTE: Use sandpaper to smooth the surface finish.
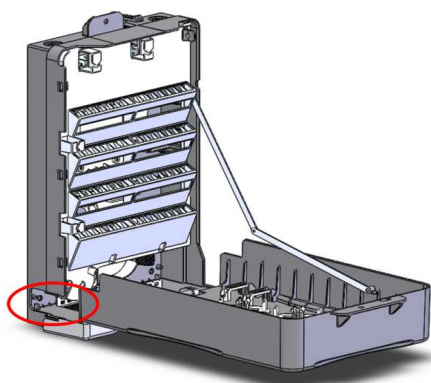
Figure 7

Note: Remove a portion on each of the enclosures.

1.1.7   Install the two enclosures to the wall. Use the following distances for drilling when installing two or more enclosures (Fig. 8).
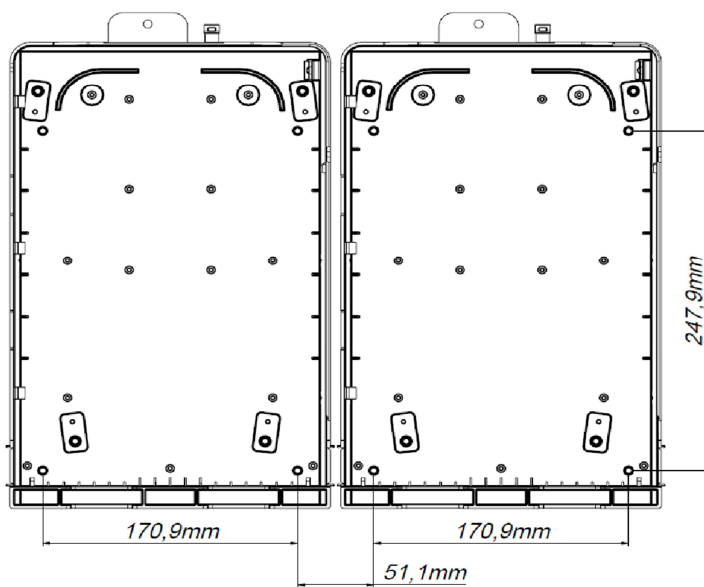

Figure 8

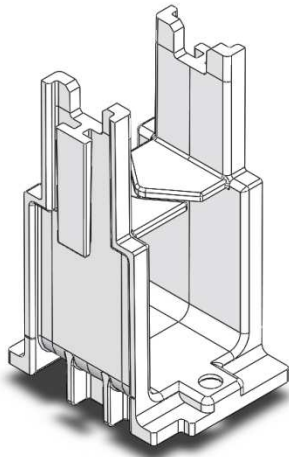1.1.8   After attachment of the modules to the wall, insert the plastic expansion piece Fig. 9.
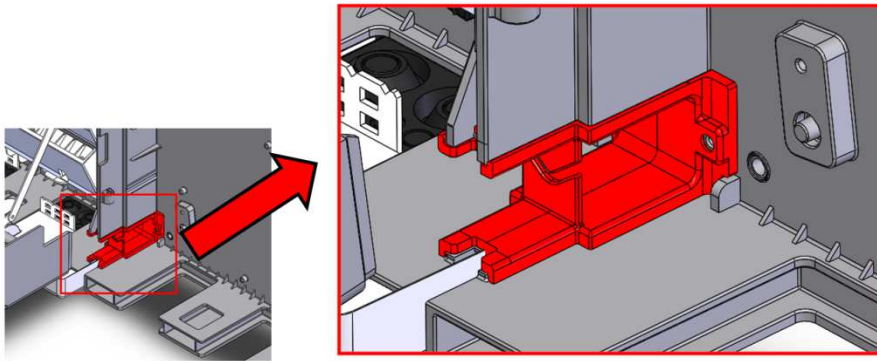
Figure 9

1.1.9 Connect both Products (Fig. 10)

Figure 10

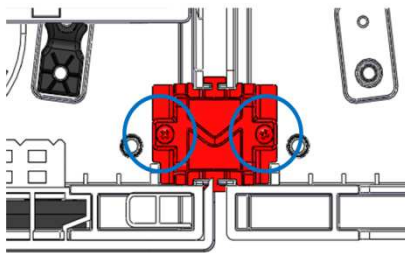1.2.0   Screw the plastic expansion part with two M3X6 mm screws (Fig. 11).

Figure 11

1.3.0   Adapter installation

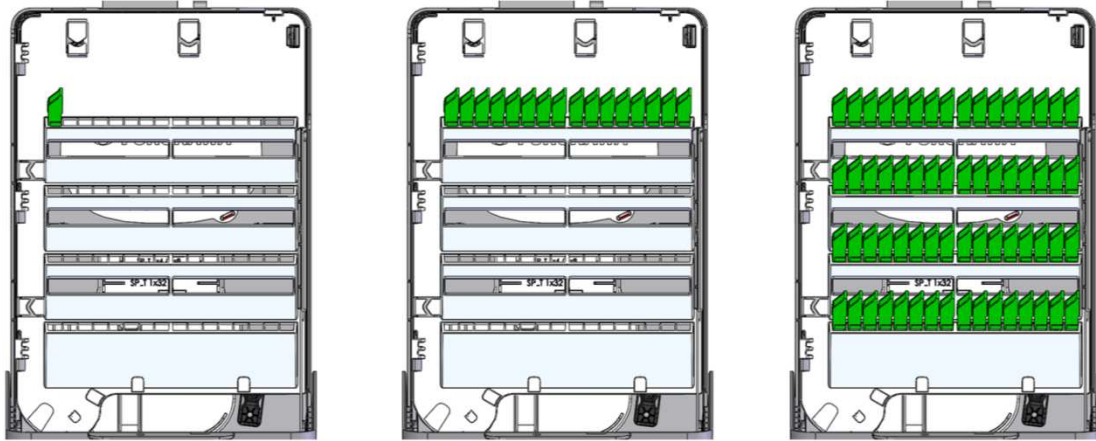1.3.1   Install the adapter into position. Fill from left to right and top to bottom (Fig. 12).

Figure 12

NOTE: Install the adapter in the direction with the smaller side to the left.

1.4.0   Installation of Input Cables

Note the cable entrance shown in Fig. 13 since the bracket is aligned to the entry indicated.
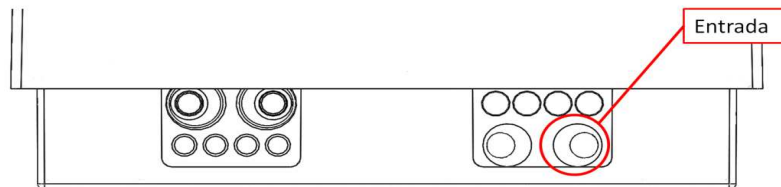

Figure 13

1.4.1   Open 2.5 m and reserve tube to accommodate the fibers within the enclosure.

1.4.2   Insert the cable in the rubber cable entry port.

1.4.3   When preparing the cable leave 60 mm of aramid yarn (FRP) for anchoring the cable;

1.4.4   Insert the aramid in the position and tighten the bracket screw to secure the attachment of the cable (Fig. 14);
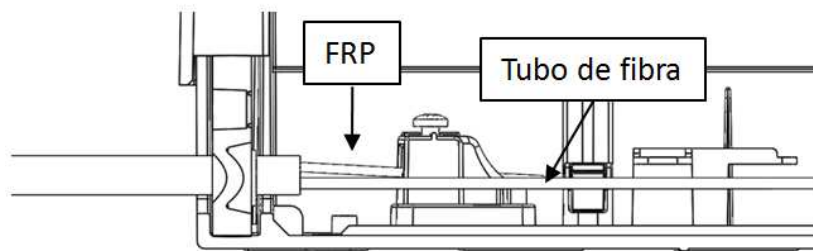

Figure 14 - FRP support for anchoring

1.5.0   Routing of the fiber to the Amendment Tray

1.5.1   Rotate the plastic holders and position the cable as indicated below in Fig. 15

Figure 15

1.5.2   Route the fibers and prepare the ends for splicing (Fig. 16);

Figure 16

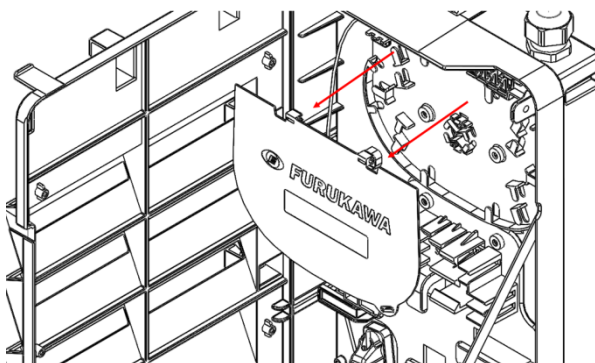1.5.3   Remove the splice tray cover (Fig. 17);

Figure 17

1.5.4   Place the tube into the desired position for installation. Place a mark where to prep the tube/jacket of the cable. (Fig. 18);
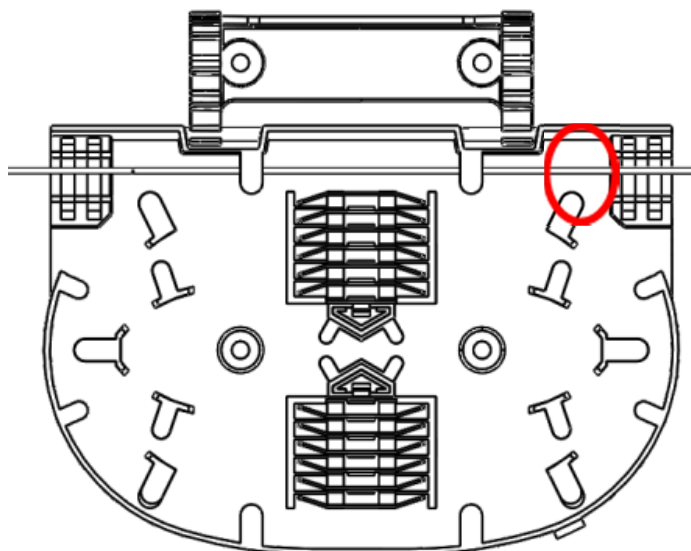

Figure 18

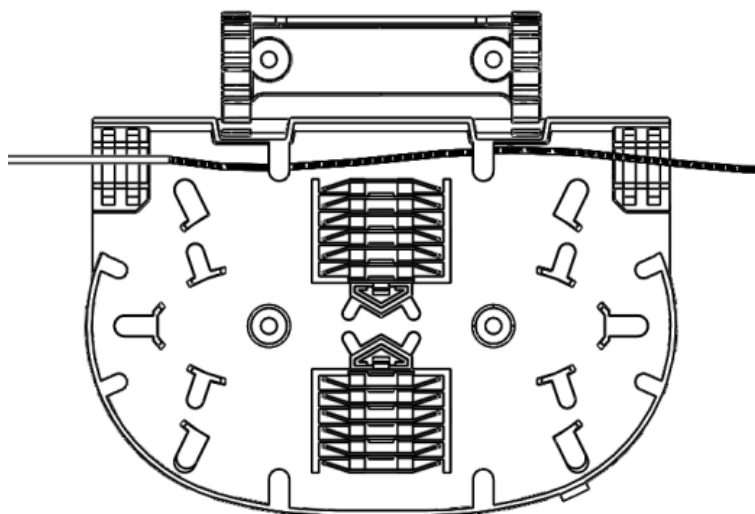1.5.5   Open the jacket or tube and clean the fibers (Fig. 19);

Figure 19

1.5.6   Secure the tube in the tray. Cut approximately 10 mm foam supplied with the splice tray.

1.5.7   Place the tube in the location highlighted in Fig.20; and place the foam on top.
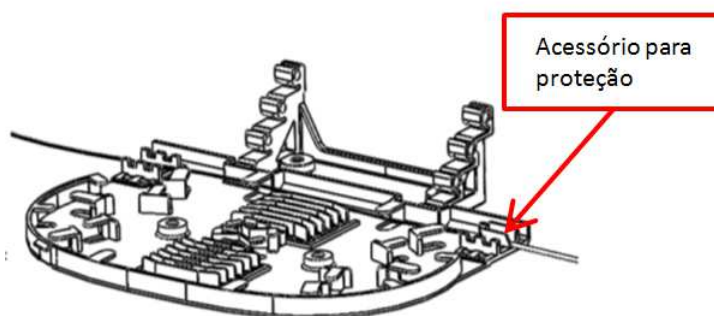

Acessório para proteção

Figure 20

1.5.8   Place a plastic clamp to secure the hose attachment (Fig. 21) and rotate the splice trays to have ease of access and pass the plastic clamp
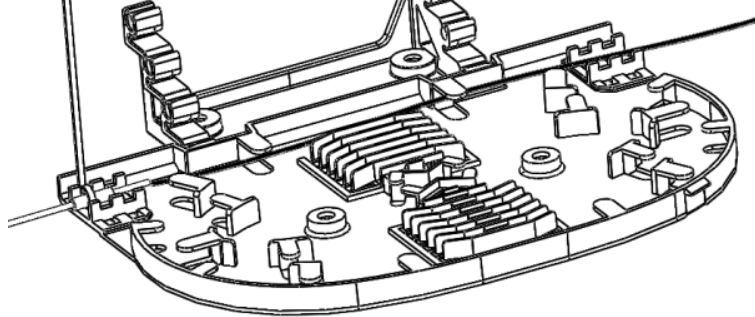
Figure 21

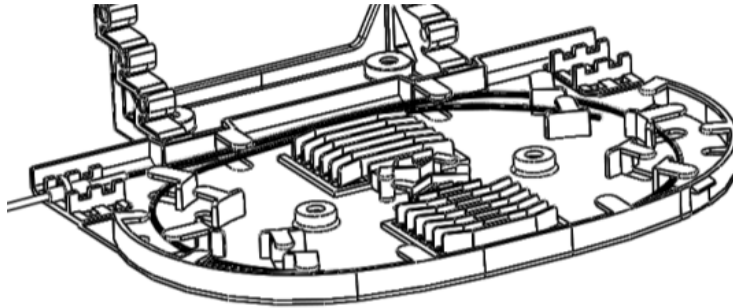1.5.9   Route the fibers in the tray and cut off the excess plastic clamp (Fig.22);

Figure 22

1.5.10   Replace the lid on the splice tray.

1.6.0   Splitter Installation

1.6.1   Unscrew the parking support for the suplitter (Fig. 23). Maintain the screws in a safe place in order to attach them back in place at the end of the installation.
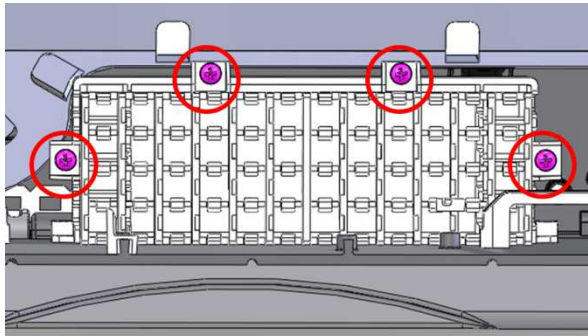

Figure 23

1.6.2   Install the splitter into the holder (Fig. 24) and screw the parking holder in place to support the splitters;
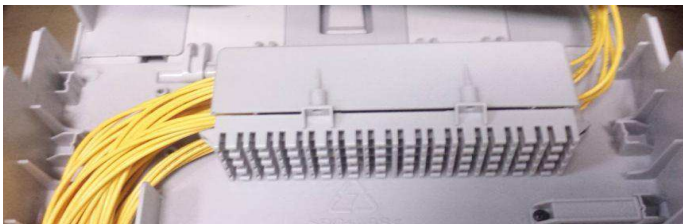

Figure 24

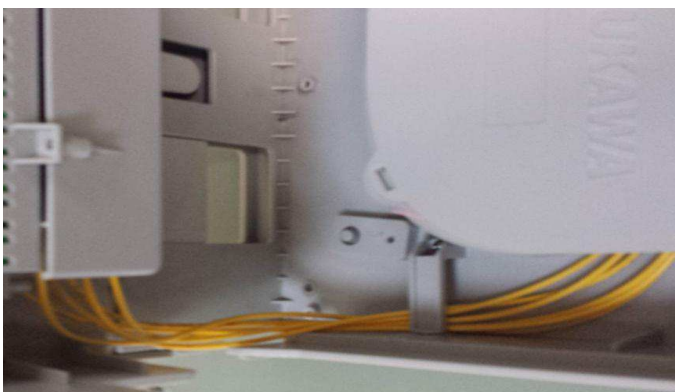1.6.3   Screw the parking support for splitters and route the fiber to the tray (Fig.25);

Figure 25

1.6.4   Remove the cord cover to the entrance of the splice tray with a suitable tool and accommodate the fibers reserve in the splice tray. Wrap the fibers with the foam and pass the cable ties. Accommodate the fibers. (Fig.26);
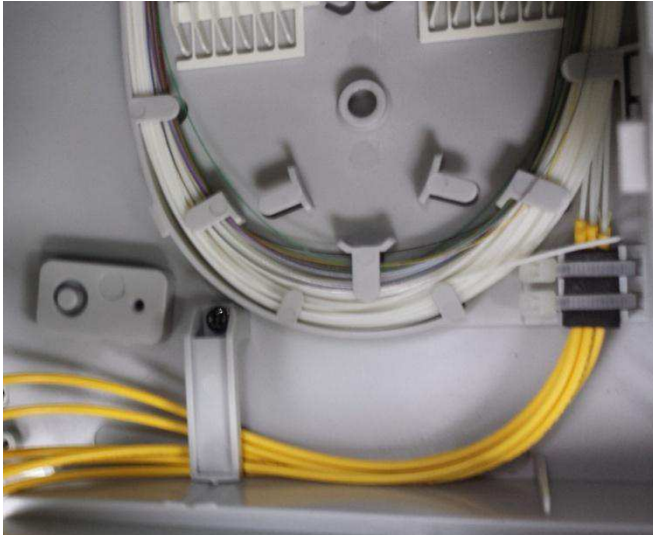

Figure 26

1.6.5   Attach the fibers with velcrop. Route the adapter to the parking holder following the path shown in Figure 27.
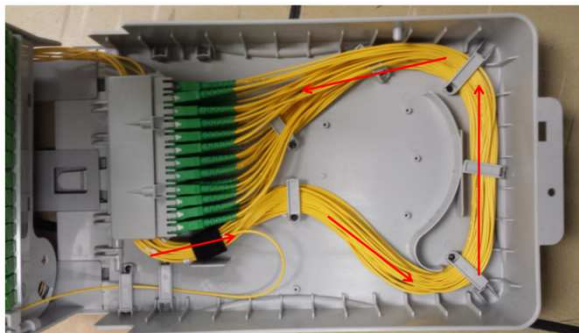

Figure 27 – Routing into the Parking Holder

1.7.0   Pigtail Installation

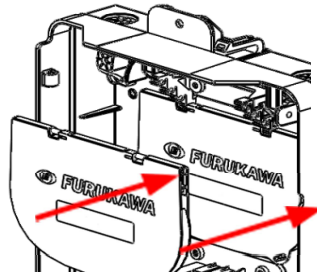1.7.1   Install the splice trays as needed (Fig.28);

Figure 28

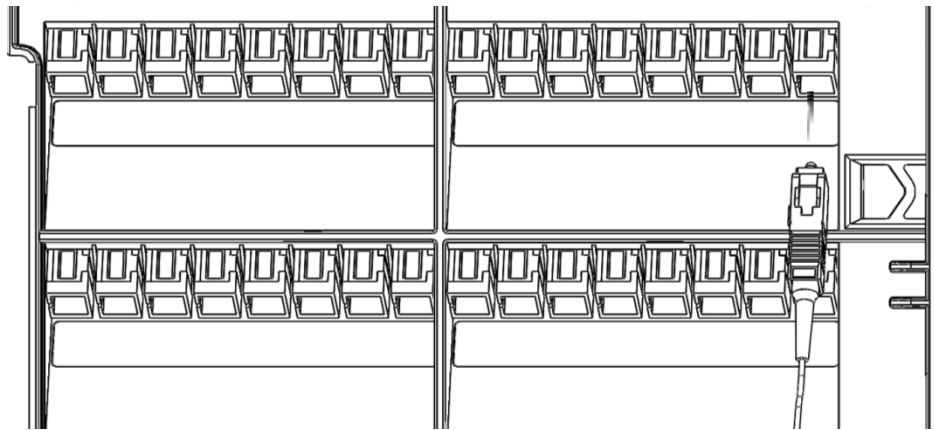1.7.2   Insert the connectors into the adapters on the rear of the panel (Fig.29);

Figure 29

1.7.3   Accommodate the fibers along the way and attach the blister into position with the screws. (Figs.30 e 31);
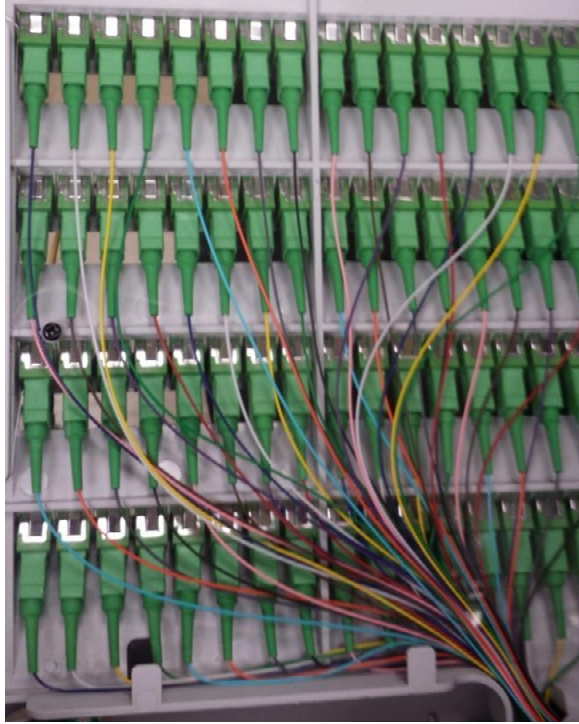

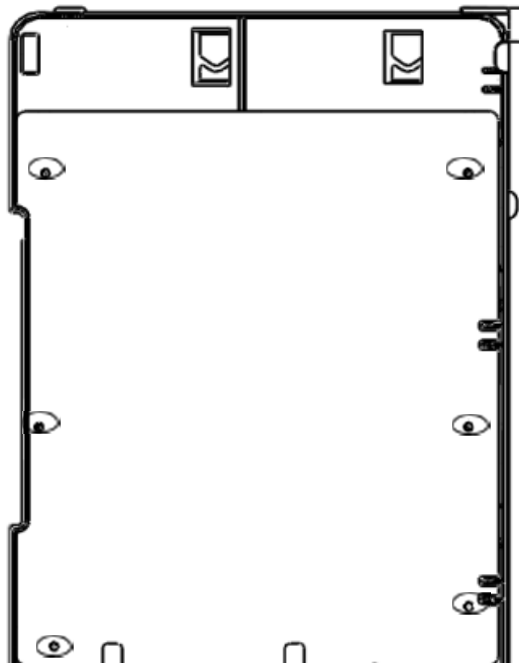
Figure 30 – Fiber protected by clear blister cover

Figure 31 – Position of the blister screws

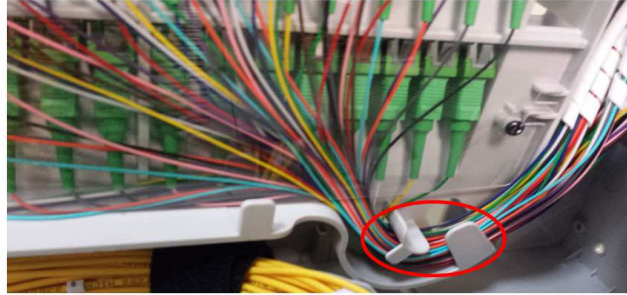NOTE: Accommodate the fibers under the fiber routing fingers. (Fig.32);

Figure 32

1.7.4   Take the fibers to the splice tray by 12 fiber groups and insert the spiral tube in position (Fig.33);

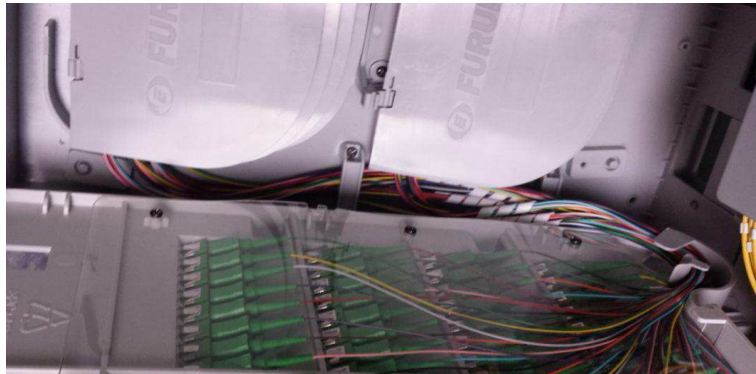Figure 33

1.7.5   Take the fibers to the splice tray. Use the foam tape to protect the fibers and ensure the fixation of the fibers in the splice tray (Fig.34);
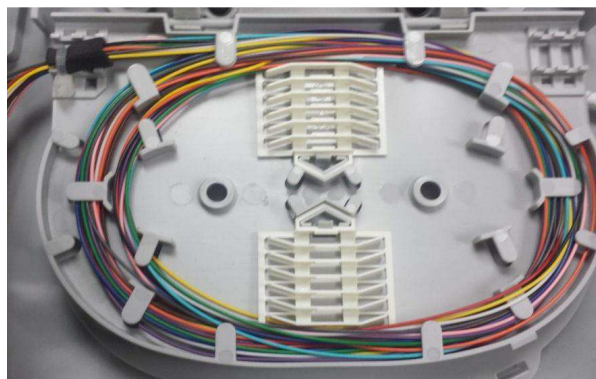

Figure 34

1.8.0   Installation of cables Output/Input Alternative

Note: Utilize one of the holes indicated (Fig. 35).

Cable Entrance
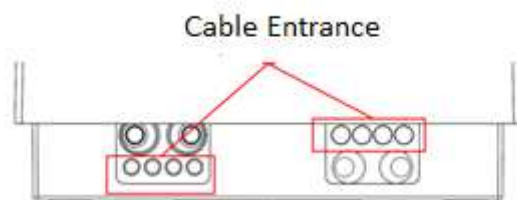

Figure 35

1.8.1   Insert the cable in one of the positions shown

1.8.2   Leave approximately 120 mm to make aramid yarn anchorage
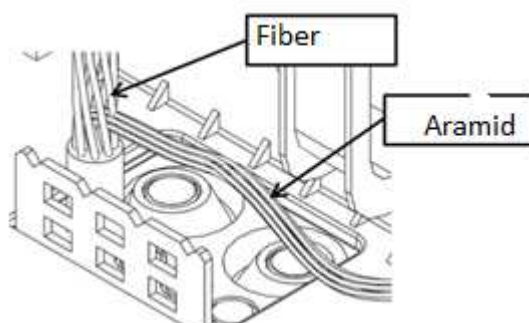
1.8.3   Separate aramid yarn (Fig.36);

Figure 36

1.8.4   Go around the metal support and pass through th bracket holes.
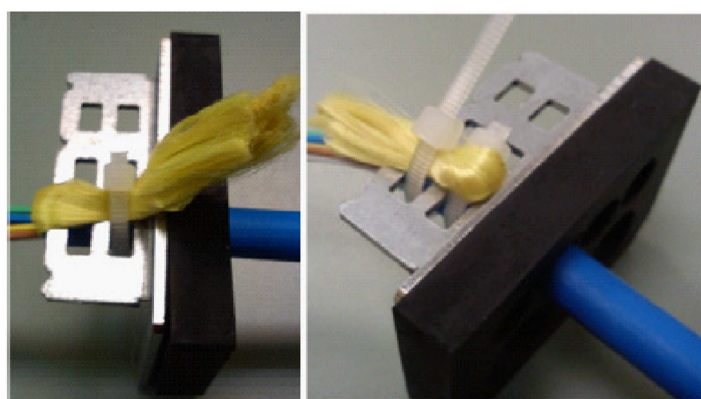   The assembly should remain as shown in Fig. 37;

Figure 37

NOTE: Fasten the clamps to secure fixing. Cut the excess cable ties.

1.9.0   Installing the Cable

If necessary, set by which side of the cable gland will be used.

1.9.1   After the definition of which inputs and outputs are used, position of the cable gland and anchoring supports for FRP

1.9.2   Remove one of the plastic parts shown in Fig. 38 (use a screwdriver and sandpaper to remove the plastic part to finish)
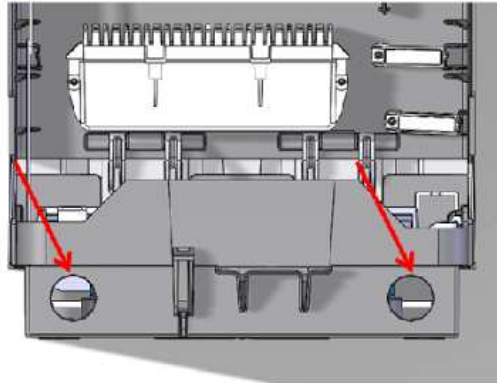
1.9.3   Insert the cable glands as needed

Figure 38

1.9.4   Use the cable glands and support for docking. Go through the support and perform tightening the screw (Fig.39).
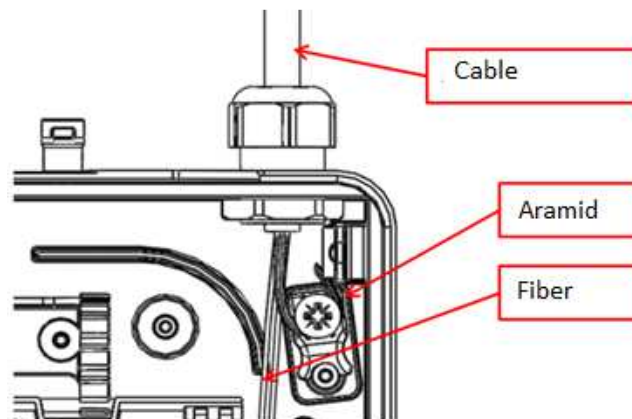

Figure 39

1.10.0 Adding Customer Fiber Patch

1.10.1 In order to activate a client, remove the adapter to be used and enter the desired position. Use the path indicated to perform the activation (Fig.40);
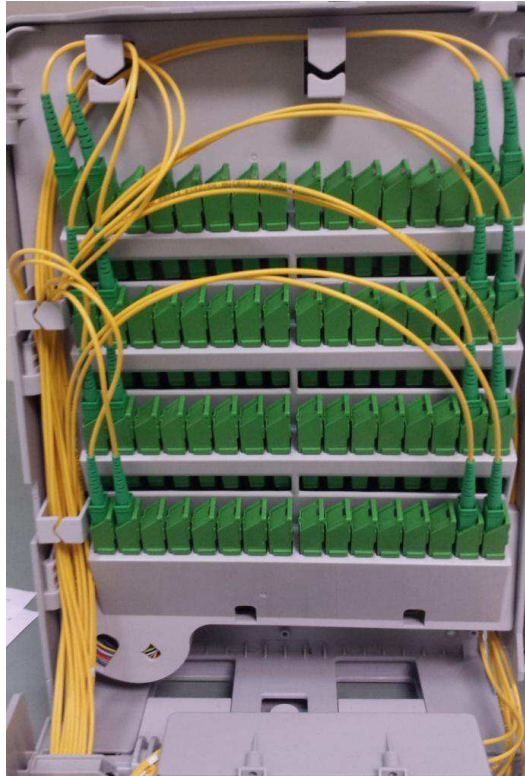

Figure 40

1.10.2 Insert the Velcro in position (Fig.41).

Figure 41

1.11.0 Lock and Security

1.11.1 To close the box, lift the lid and lock the plastic cover in place (Fig.42);
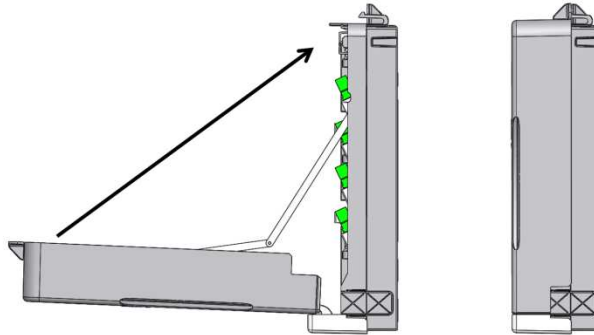

Figure 42

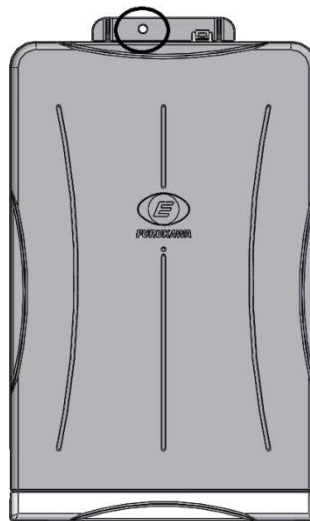1.11.2 A hasp lock can be installed for added security. (Fig. 43).

Figure 43

2 Care and Security

- The installer should take necessary precautions when handling optical cables and cords, especially in the handling of the bare optical fiber. Follow local safety practices, check the bending radii or any interference with other components during the opening and closing of the product.
- Optical connections should be cleaned before every reconnection.
- Pay attention to the laser radiation warnings, avoiding looking into active connections with a magnifying device when the laser is connected.
- Use goggles appropriate for the type of laser in the link and when scoring and breaking fiber;

● Be careful when handling sharp tools.

2.2.0   Discard

● The packaging of the product and its accessories must be disposed of in appropriate places as material composition.

● When discarding the enclosure separate the different materials and dispose of the material in appropriate locations.

3   Technical Assistance

If you need technical assistance or additional information about the product, please contact us:

● Contact your customer service representative;

● Website: www.ofsoptics.com