Optimum Series
2RU Patch Panel

19”/23” EQUIPMENT RACK COMPATIBILITY
4 ADAPTER PLATES, UP TO 96 FIBERS

Introduction

The RLH Optimum Series 2RU patch panel is one of a series of fully integrated fiber distribution units. The user friendly design makes the Optimum series the superior solution for fiber patching and/or splicing optical fiber in a 19/23” rack. It holds up to 4 fiber adapter plates (up to 96-fibers), 4 splice trays, and is ideal for installation in a wide variety of environments including equipment rooms, central offices, and outdoor enclosures.

Optimum Series patch panels are constructed from powder coated aluminum alloy, and feature a removable hinged door with quarter-turn cam-lock, removable slide out tray, and removable rear access self-sealing entry grommets. Optional strain relief kits featuring Peel n’ Seal technology provide proper routing and securing of fiber optic entrance cables every time. Fiber assemblies or pigtails can be custom ordered and pre-terminated into the patch panel for a complete turn-key solution.

Key Features

- Rugged design suited for any environment.
- Installer friendly built-in cable management & splice tray storage.
- Holds 4 adapter plates, up to 96 fiber capacity.
- (EIA) 19” or 23” rack front or mid/center mounting.
- Removable hinged door with latch.
- Self-sealing grommets provide superior dust and rodent protection.
- Convenient fiber identification system.
- Angled adapter plates for optimal fiber routing.
- Removable sliding tray, rear cover, and entry grommets allow for a variety of cable arrangements and maximum ease of fiber installation and maintenance.
- Flexible rear fiber entrance that adapts to every application.
- Additional options include our peel and seal fiber cable strain relief kits, splice trays, adapter plates, and fiber pigtails.
- Made in the USA

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Accessories

The RLH Optimum Series patch panels may be ordered empty or pre-terminated with all the accessories needed for a professional installation. Adapter plates, Fiber Cable Strain Relief Kit, splice trays, fusion splice sleeves and fiber pigtails are all available separately or they may be ordered together to be preloaded. Inside packaged together is a set of cable ties and mounting hardware. The distribution unit can be ordered with jumpers pre-installed upon request. Contact your RLH representative for more information.

Removable Rear Cover

Optimum 2RU Features

Peel n’ Seal Fiber Cable Strain Relief Kit

Feature Identification

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Installation Instructions

**Rack Mounting**

Choose a suitable 19”/23” equipment or telco rack location, with room for the fiber tray to extend out and allow for easy access to the interior. The rack ears are reversible for either 19” or 23” application. The rack ears may be attached to any of the 5 mounting locations on the sides of the housing to suit telco or equipment rack installations. Pre-position the unit in the rack to plan out fiber cable routings and check for any potential problems with the location, then fasten the unit to the equipment rack rails with the hardware provided.
Door Release Tab

Removing the door for access to fiber is easy and convenient. The door release tab is located next to the left door hinge. When the tab is in the forward position the hinge is locked in place. Push the tab back to unlock the hinge and remove the door. Pull the door release tab into the locked position when replacing the door to prevent the door from being accidentally dropped and damaged.

Main Tray

The main tray can slide out the front of the housing for access to the front part of the housing. The main tray may also be completely removed for complete access to the interior.
**Adapter Plates**

The Optimum 2RU patch panel accommodates four adapter plates. Angled adapter plates loaded on the left side are angled left, and adapter plates on the right side are angled right.

The Optimum Series adapter plates are easily installed and removed by pushing in or pulling out the two finger plunger latches on each side of the plate. In the OUT position, latches can be inserted or removed from the adapter plate panel. Pushing the latch into the IN position locks the adapter plate into the loaded position.

Route fiber pigtails so that the fiber leads smoothly off of the fiber adapter plates, and continues in a loop around the splice trays, wrapping around the cable guides as shown. It is best to install one side (right or left) before the other to ensure simplified cable routing.
Removable Grommet Brackets

The removable self-sealing grommet brackets provide protection to interior components while allowing access to perform maintenance or remove the incoming fiber cables without damaging the fiber. The bracket may be adjusted to accommodate rear fiber cable routing if necessary. To adjust the grommet bracket, unscrew the self-captive screws from the housing and switch with the bracket on the other side.

Bottom Position (Standard)
Best for incoming cable from above or the side.

Top Position
Best for incoming cable from below.
**Peel n’ Seal Strain Relief Kit**

The Peel n’ Seal strain relief kit is a universal clamping system for splicing applications. The bracket can be placed on either side of the patch panel as well as adjusted vertically in two different positions depending on where the cable is coming from into the patch panel. To fit the incoming cable in the clamp, peel the rubber sections away to the size of the cable being retained. Place the cable through the middle of the two pieces and screw down to the bracket. If the Peel n’ Seal clamp is not used, lacing holes are provided on the bracket for securing cable.

![Diagram of Peel n’ Seal strain relief kit](image)

**Rear Cable Entry**

After preparing the rear cable entrance pull the cable through grommet and secure it to a tie down loop or lace holes, on the back of the tray. Always secure cable lightly to avoid fiber damage. Make sure to leave room for the service loop out the back once the tray is closed. Wrap excess fiber loosely around the fiber spools avoiding sharp bends.

Splice trays are stacked and held together with retaining hook and loop straps. Use heat shrink splice protectors as required on each fiber splice before inserting into the splice trays. Snap the top back into place on the tray and secure the splice tray with the hook and loop straps when finished.

Use hook and loop fasteners to organize fiber as required so that no strands are pinched between the tray and housing when the unit is closed. Once the fiber is secured, replace the rear cover and tighten the thumb screws.

![Diagram of installed rear top cable entry](image)
Ordering Information

Custom Optimum 2RU Patch Panel - Loaded

Example: PRO-2B-1-B35-N2-1
RLH Optimum 2RU with 4 SC Duplex 12, Multimode OM1/2 adapter plates, no pigtails, 2 splice trays, and 1 strain relief clamp.

Optimum 2RU Patch Panel - Unloaded

Splice Trays

Peel n’ Seal Strain Relief Kit
## Adapter Plates

<table>
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<tr>
<th>Adapter Style</th>
<th>Mode</th>
<th>Style</th>
<th>Fiber Count</th>
<th>Supported Fiber Types</th>
<th>Adapter Color</th>
<th>Plate Style</th>
<th>Part Number</th>
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<td>12</td>
<td>OS1/OS2</td>
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## Specifications

### Adapter Plates
- Holds 4 plates
- Simplex: 48 Fibers
- Duplex: 48 to 96 Fibers

### Connectors
- ST - ST: Simplex, SC - SC: Simplex, Duplex
- SC APC - SC APC: Simplex, Duplex
- LC - LC: Duplex, LC 10G - LC 10G: Duplex

### Mounting Style
- Standard EIA 19"/23" equipment rack or telco rack

### Environmental
- Indoor type sliding tray design

### Construction
- Powder coated aluminum
- Removable hinged door with cam locking latch
- Plastic tray guides with built-in closing detent
- Includes cable guides, fiber management saddles, self sealing cable grommets, hook and loop straps from splice trays, 19"/23" rack adapter ears and rack mounting hardware.

### Dimensions
- H 3.4in. x W 17in. x D 17in. (86mm x 432mm x 432mm) Without rack ears
- 2RU Rack Height • **Note:** 1RU = 1.75 inches
# Contact Information

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Please contact your RLH sales representative for pricing and delivery information.

Specifications subject to change without notice.