

OAsys INTERNAL PLANT
RS4000 42/47U x 900 X 300 Rack and Cable Installation



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Description

- The rack can accommodate the SRS3000 or SRS4000 shelves and other 19" rack mounted products and equipment.
- Shelves and sub-racks are available for Splicing Only, Patching Only, Splicing & Patching, Connectorized Splitters and Patch cord Storage. They can be supplied in 1U, 2U or 3U formats.
- Up to 40 single (1U) SRS shelves can be accommodated in a 42U rack providing a capacity of 1920F on a splice & patch basis. Up to 45 single (1U) SRS shelves can be accommodated in the 47U rack, providing a capacity of 2160F on a splice & patch basis.
- The rack can also be supplied with a 3U routing channel in the bottom for patch cord routing to adjacent racks.
- The rack is supplied fully configured as a composed rack with side channels, doors, 19" mounting rails, patch cord storage mandrels and cable anchor brackets.
- Cables are anchored and distributed in the left-hand side of the rack using & BEM cable anchors. See additional items.
- Patch cord storage drums are supplied in the right-hand side of the rack, for patch cord storage and bend management.

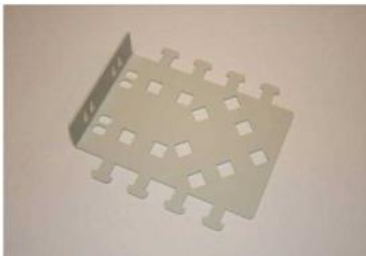
Tools & Optional Items

Optional Item:	Prysmian Part No.:
Heat shrink Splice Protectors (pk 50)	XPESC00053
ETSI Mounting Bracket Kit	XKTSC00171
Crimp Splice Holders (pk 10)	XSRSC00358
Rear Mounting Bracket Kit	XSRSC00361
Crimp Splice Protectors (pk 12)	XKTSC00020
SRS - ARS Cable Anchor Kit	XSRSC00360
BEM Cable Anchor Kit	XEXSC00960

Tools:	
	Pozi Drive Screwdrivers: No.2 / No.3
	Flush Cutting Tool 1A – BT Item Code 07680
	Tube Cutting Tool / Indelible Pen

Component Parts (pictures not to scale)

1. Cable Mounting Bracket
QTY: 4



2. Main Rack Assembly
QTY: 1



3. Patch Cord Storage Mandrel
QTY:11



Cable Preparation and Installation

Step 1

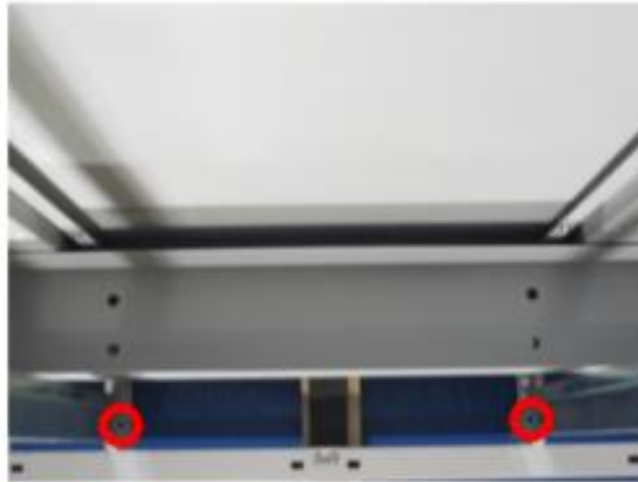


- Remove the empty rack from its packing box and stand upright.
- Position the rack in its intended final position.

Note: The item is heavy and should only be manoeuvred by a minimum of 2 people.

Cable Preparation and Installation

Step 2 – floor mounting



- Use an indelible pen to mark the floor fixing positions through the bolts on the base of the rack.
- If the rack does not need to be fixed to the floor you can use these two positions along with two positions to the rear of the rack to fit adjustable feet.

Cable Preparation and Installation

Step 3 – floor fixing

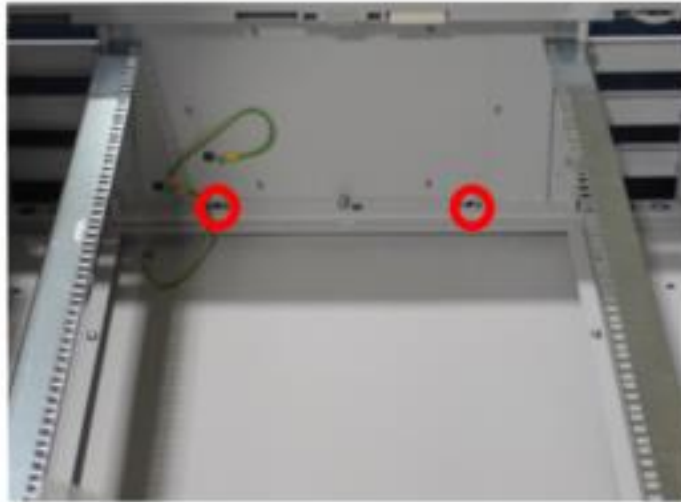


- *The floor fixings chosen will depend on the type of floor on to which the rack is to be fixed.*
- *It is the responsibility of the installer to choose the correct fixings to suit the situation.*
- *As a minimum Prysmian recommend using 4x Hex Head Coach Screws M8x40mm for this purpose.*
- Drill suitable holes for the chosen method of fixing in the floor at the marked positions.
- Secure the rack to the floor using 4 fixing screws (not supplied).

Please note, the part shown in the picture may not be exact representation of the product you are installing.

Cable Preparation and Installation

Step 4 – Wall fixing

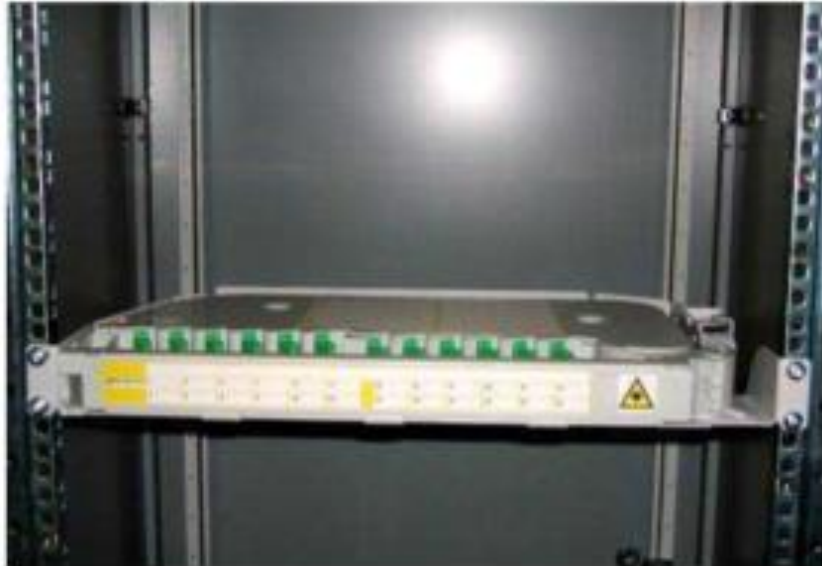


- Take the 'L' shaped bracket from the wall mounting kit (*supplied separately*).
- Secure to the top of the rack via the two positions highlighted above.
- Fix the rack to the wall by drilling two holes into the wall through the bracket.
- Fit wall plugs and tighten the screws.

Please ensure the rack is securely fitted to either the floor or the wall before mounting any product into the rack.

Cable Preparation and Installation

Step 5



- Mount the rack mounted equipment into the rack following the enclosed product installation guide.
- To fit the cable anchor brackets first insert the cage nuts into the side rail found in the left-hand side of the rack.
- Fit the bracket using the M6 SEMS screws.

Note: Position 1 and position 42/47 is not used the total capacity of each rack is 40 or 45U respectively.

Cable Preparation and Installation

Step 6



- Use an ARS to breakout cables between 1 and 48F. An ARS kit is supplied with the SRS shelves. Additional kits can be purchase separately. Use a BEM to break out a cable between 48F and 192F (sold separately).
- Both the ARS and BEM can be used in the side of the rack.
- 2x ARS's can be assembled onto the back of each SRS shelf.
- If neither is required used the supplied cable anchor brackets and cable tie the cables in position.

FURTHER INSTALLATION TECHNIQUES CAN BE FOUND ON PAGE 4 AND 5 OF THIS DOCUMENT.

Cable Preparation and Installation

Step 7



- If using the ARS or BEM cable management solutions, you will need to route the tube round the SRS. Please refer to the SRS installation guide supplied with your product for more information.

Cable Preparation and Installation

Step 8



- The mandrels require fitting the right-hand side of the rack. These are achieved by using a No.3 Pozi Pan head Screwdriver and using the M6 SEMS supplied as part of the kit.
- Locate the screw and tighten securely to the cage nuts in the right-hand side of the rack.
- The mandrels can either be used in a straight line or staggered. It is up to the installer how many mandrels are fitted. The kit comes with 11 mandrels.

Cable Preparation and Installation

Step 9



- Start feeding the patch cords into the SRS shelf. Where possible use the bend manager to reduce over loading.
- Pull the patch cord around the front of the SRS. It must pass around the hinge area.
- Flip down the front cover to provide excess to the adaptors.
- Follow standard procedure to make the connection.

Note: Refer to the SRS installation guide supplied with the product for more information.

Cable Preparation and Installation

Step 10



- Use the storage mandrels to route patch cords to other SRS shelves in the rack.
- Be sure to use the black managers supplied on the side of the SRS0 products to help manage the patch cords in and out of the shelf.

Cable Preparation and Installation

Step 11



- The mandrels can also be used to lose excess patch cord length,

Cable Preparation and Installation

Step 12



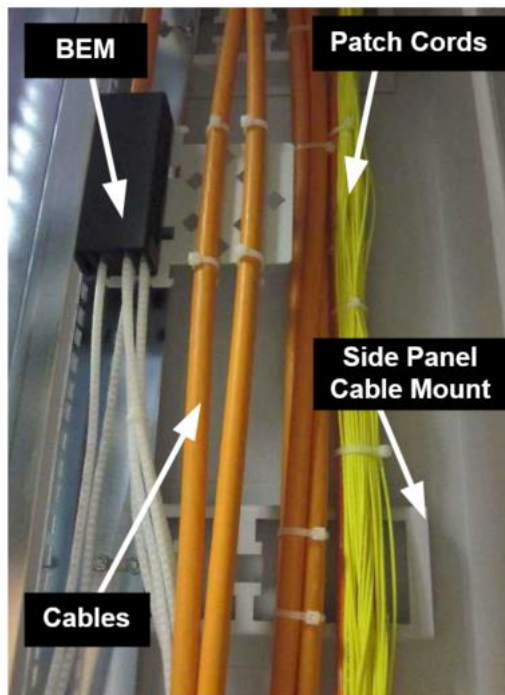
- Patch cords can be routed out of the rack through the top exit or by removing knockouts in the rack panels.

Installation techniques

PRODUCT OVERVIEW:

The RS4000 rack is primarily designed to be used with the SRS range of products but will equally work with other 19" or ETSI products.

The concept behind the 900mm wide rack is that the left-hand side channel is used for the inputs. The centre section is for mounting the equipment and the right-hand side is used to outputs.



INPUT:

Within the left-hand side of the rack there are cable mounting points on the inside of the side panel and there is also an additional rail. Inputs can be routed through the top or bottom of the rack. The rail can be used for fixing the cable anchor brackets supplied in the kit. Fit these using the cage nuts and M6 screws provided.

Installation techniques

The Cable Anchor Bracket can be used for fixing:

- ✓ Cables using cable ties. Maximum cable tie positions for 4 cables. Cables can be tied to each other for greater capacity. Cables can be mounted either side of the bracket.
- ✓ BEM devices which anchor cables and distribute up to 16 elements/192F in 5mm bend limiting tube. The benefit of these devices is that there is more space to work and that elements can easily be split across different shelves. These can be mounted at an angle if required. Maximum 1 per bracket.
- ✓ ARS devices which anchor cables and distribute up to 4 elements/48F in 5mm bend limiting tube. These can be mounted at an angle if required. Maximum 2 per bracket
- ✓ Patch cords using cable ties.

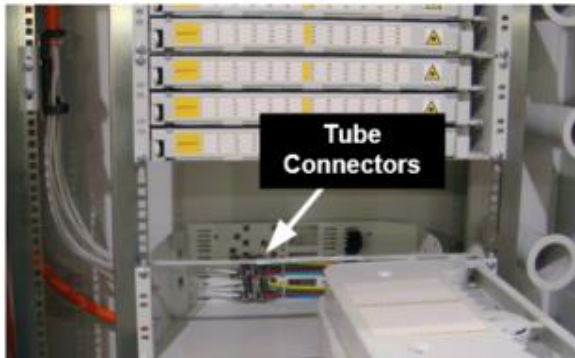
Recommended Prysmian Rack Management Products:

Rack Management products are available from the Prysmian range to complement the RS4000 installation, details can be found below:

Reference Product Datasheets:

- ARS / BEM Cable Anchor - Refer to datasheet AC0001
BEM Suggested Part Number XEXSC00960.
ARS Suggested Part Number XEXSC00962.
- Patch Cords - Refer to datasheet AC004 for more details.
- Cable Anchor Bracket Kit (Pack of 2): Part Number XKTSC00285

Installation techniques

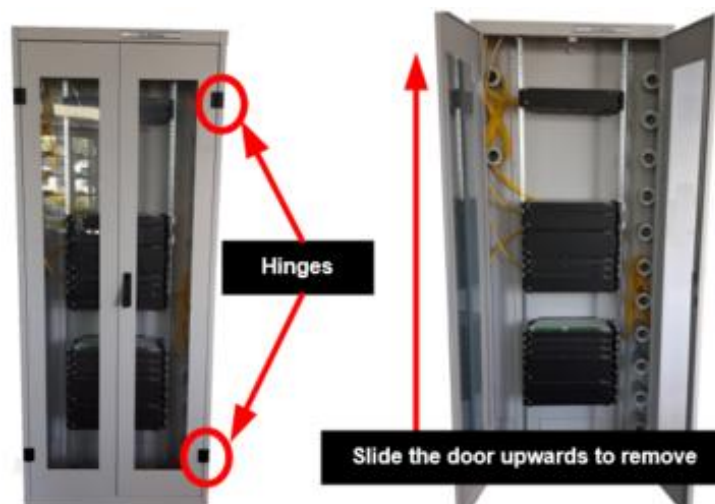


Removing and replacing the doors:
To remove the doors, rotate the doors into the open position and lift them upwards. When fitting new doors align the holes in the hinge on the door with the pins on the hinge that fixed to the rack. Close the doors and ensure the locking mechanism engages with the rack.

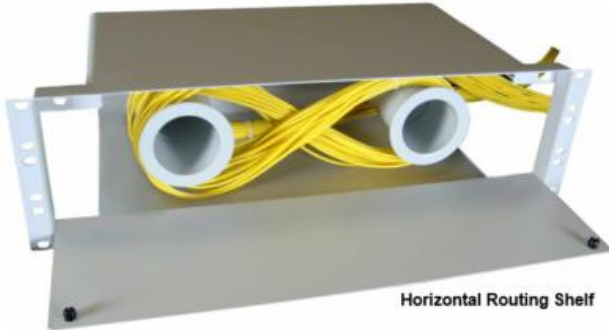
CABLE BREAKOUT USING ARS/BEM SOLUTION:

Using the ARS / BEM solution the cable can be broken out in the left-hand side of the rack. The tubes can then be routed to the shelf.

These can either be taken onto the shelf directly and installed using the supplied tube insertion tool with the SRS products or be connected as shown above using 5mm to 5mm straight connectors (XAGSC00462A pack of 10).



Installation techniques



OUTPUTS:

The outputs are typically routed through the right-hand side of the rack. Most outputs tend to be patch cords, but cables can also be fixed.

Patch cords (Refer to datasheet AC004 for more details) are routed around the mandrels in the right-hand

side of the rack. This helps to distribute patch cords between shelves, lose over length and manage patch cords so that they are tidy within the rack. Outputs can be routed out of the top or the bottom of the rack.

Cables can be attached using cable ties to the inside of the side panel.

Recommended Prysmian 19" Exchange Equipment:

Additional 19" products are available from the Prysmian range to complement the RS4000 installation, details can be found below:



Reference Product Datasheets:

- SRS3000 1U Splice and Patch Shelf - Refer to datasheet RM014
- SRS3000 2U/3U Distribution Sub Rack Refer to datasheet RM015
- SRS3000 1U Splice Only Shelf - Refer to datasheet RM018
- SRS3000 1U Patch Only Shelf - Refer to datasheet RM019
- SRS3000 1U Patch Cord Storage Shelf - Refer to datasheet RM020
- SRS3000 1U Connectorized Splitter Shelf - Refer to datasheet RM022
- Horizontal Routing Shelf - Refer to datasheet RM023
- SRS3000 1U MPO Patch Only Shelf - Contact Prysmian for more information
- Modular Splitter Shelf - Refer to datasheet RM024
- SRS4000 Sub Rack – Refer to data sheet RM038