

FIBER OPTICAL PRODUCTS

APC and UPC | Single / Multi Mode | FttH and FttX



Patch Panels

A Fiber optic network is distributed from cross-connection site into apartment and floor termination closures through the patch panel. Orbis patch panels are adapted to the 19-inch width standard racks and frames. A patch panel with a bottom plate can also be attached to the wall. Panels are available in two different depth sizes 140mm and 200mm. The housing of the patch panel is made of metal. It is safe, does not contain sharp corners, and is painted in gray. In the front size of the panel there is a plate with openings, which are marked with numbers 1-24, 1-48 or 1-96, depending on the adapters. The front plate is easily removable and the front plate can be opened without the need to remove it. The back side of the panel has enough space for the trunk cable entry. The patch panels always include equipment for rack-mounting and the ground terminal. If you do not find suitable options from the list below, please ask our sales department for more options.

Empty panel closures

Include a panel closure and a front plate. Height 1U.



Orbis OP200T 24SC DPX

Empty panel closures with a bottom plate

Panel closures include the front panel and also a bottom plate which operates as impact protector, cable holder and storage. The height of the bottom plate can be adjusted between 1U-2U depending on the need of storage space. A panel with a bottom plate can be installed also on the wall. The bottom plate increases the depth of the panel 125mm. Height of the impact shield is 30mm.



Orbis OP200T 24SC DPX + bottom plate

Empty panel closures with a fiber holder

Besides the front panel, panel closures also have a fiber holder. Panel's height is 1U with holder and a depth is 300mm. The fiber holder's height is 20mm.



Orbis OP200T 24 LC DPX + fiber holder

Fiber holders

Fiber holders or “forks” suit panels without bottom plates. Holder is installed below the rack mounting screws, so the height of the panel remains as 1U. Holder reduces the strain of fiber optic cables and protects its connectors, for example, from impacts. The fiber holder’s height is 20mm.



OMUF110



Fiber Holder

Fiber to the Home – panel series with APC fiber optic pigtail

Patch panel series has a full assembling kit for installation of the fiber optic panel: panel closure, bottom plate, APC colored pigtailed, adapter sets and splicing materials. The bottom plate acts as an impact protection, cable support and cable storage. The height of the bottom plate can be adjusted within 1-2U.



Orbis OP200SET 24 SC DPX

Installation shelves

Open wall-mount shelves are suitable for mounting fiber optic panels. They are simple metal frames, which are delivered unassembled. The shelf has to be fixed to the wall to keep it standing.



Installation shelf

Indoor fiber optical cables

Cables for indoor installation have four fibers and they are packed in cardboard boxes, which are easy to transport and with size 350x350x350mm.



Orbis indoor fiber optical cable

Apartment boxes

In the Fiber-to-the-Home applications to the termination box (connection enclosure) are terminated at least four fibers per apartment. An indoor cable with adapters can be pre-assembled to the closures already in Orbis production.

Empty termination boxes for apartments

Empty boxes do not include adapters. Orbis adapter's holder can be mounted to the apartment cross-connection site. In the holder connectors are placed at the slight angle to make their final testing easier.



Orbis box 4 SC G657



Orbis Box 2 SC DPX

Apartment boxes with APC and UPC polished cables

To the termination box (connection enclosure) in the Fiber-to-the-Home applications are terminated at least four fibers per apartment. Indoor cable with adapters can be pre-assembled in the closures already in Orbis production.

In a pre-assembled apartment box there are connections ready to be used and the open end of the cable is pulled during the installation to cross-connection site of the building.



Orbis 4 SC APC 20m / 30m / 40m

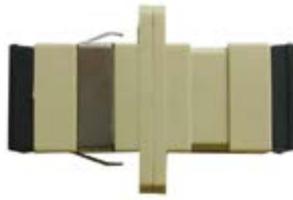


Orbis 4SC UPC 20m - 70m

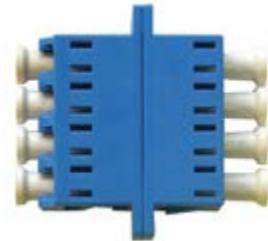
Adapters, APC and UPC polished



Adapter SC UPC SIN



Adapter SC MM BEI



Adapter LC UPC QT SIN

Pigtails

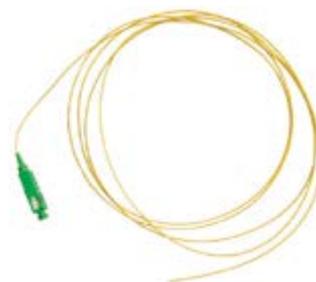
Colored pigtails can be spliced directly to 6 – 12 colored trunk cable. Splicing to the corresponding colors is clearer, because in this case additional marking is not required. Use of one-colored pigtails is color independent. It means that cables can be freely spliced to trunk cable colored fiber combinations, but marking is needed to be done separately. FIN2012 standard 12-color fiber combination is: blue, white, yellow, green, gray, orange, brown, turquoise, black, purple, pink and red. There are 12 pigtails in one package.

Colored pigtails sets, APC and UPC

Different colors of pigtails make the marking process much easier. If you use colored pigtails, you do not need special stickers or panel numbering. Also colors make cable splicing more clear.



Orbis LC UPC OS2 SFS



SC APC

Patch cords, APC and UPC

“Fiber to the home” - patch cords are single-mode OS2 type. Simplex fibers are 2 mm and duplex 8- figure. Fiber jacket is from low-smoke and halogen-free material (LSFH). Single-mode fibers are available in both APC and UPC polished connectors.

Patch cord portfolio also includes patch cords with multimode OM1, OM3 and OM4 fibers and in different lengths.

Single mode OS2



Patch cord LC APC-LC UPC



Patch Cord SC APC-SC APC



Patch Cord LC-SC UPC DPX

Multi mode OM1 (62,5um)



Patch Cord SC-SC OM1

Multi mode OM3 (50um)



Patch Cord LC-LC OM3

Measurement Instruments and Tools



Fusion Splicer AV6417

Orbis' product range includes everything for the optical fiber splicing, for troubleshooting, traffic detection and measurement devices. Also there are available launch fiber sets. Please contact our customer service if you would like more information about the product or to make a quotation.

Launch box

Launch Fibers are used at the OTDR measurements of optical fibers to eliminate the effect of the dead zone of the actual fiber or optical fiber cable line measurement.

For the improvement of fiber handling in the on-field conditions Launch Fibers are packed into a small durable plastic enclosure in which ends of the fiber connectors are featured and secured. Launch Fibers typically have a length of 150 meters, but they are also available in the length 500 and 1000 meters. Launch Fibers are available with both LC or SC connectors and both fiber types single mode (SM), multimode (MM).



Orbis Launch Box SC-SC UPC 1km

Stripping and cleaning accessories

Important for the optical fiber network has been purity of the connectors and adapters, so that the signal passes through network without interference. Cleaning processes and accessories are different and they are used for different purposes. The most commonly used cleaning accessories are cleaning cloths, swabs, cassettes and cleaning fluids. The purpose of the cleaning is to remove from the end of the fiber grease, fingerprints and other contaminants.



Cleaning accessories



Miller

Splicing accessories

Splicing protective sleeves are needed for splicing pigtails to the trunk cable. Sleeves are attached to the splicing holders.

Cover caps are assembled to adapter's openings which are not used in the patch panel to prevent dust and dirt getting inside the panel.

Orbis Oy is a Finnish company which trades products of data transmission in Finland, Estonia, Latvia, Lithuania and Russia. Orbis holds decades of experience in radio frequency and fiber optic technologies.

The company provides solutions for fixed and wireless networks in apartment houses, public buildings, transportation, mobile networks, data centers and industry. Its imported product portfolio is complemented with Orbis' own product development and manufacturing operations such as high quality cable assemblies.

Read more from our web page

www.orbis.eu

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