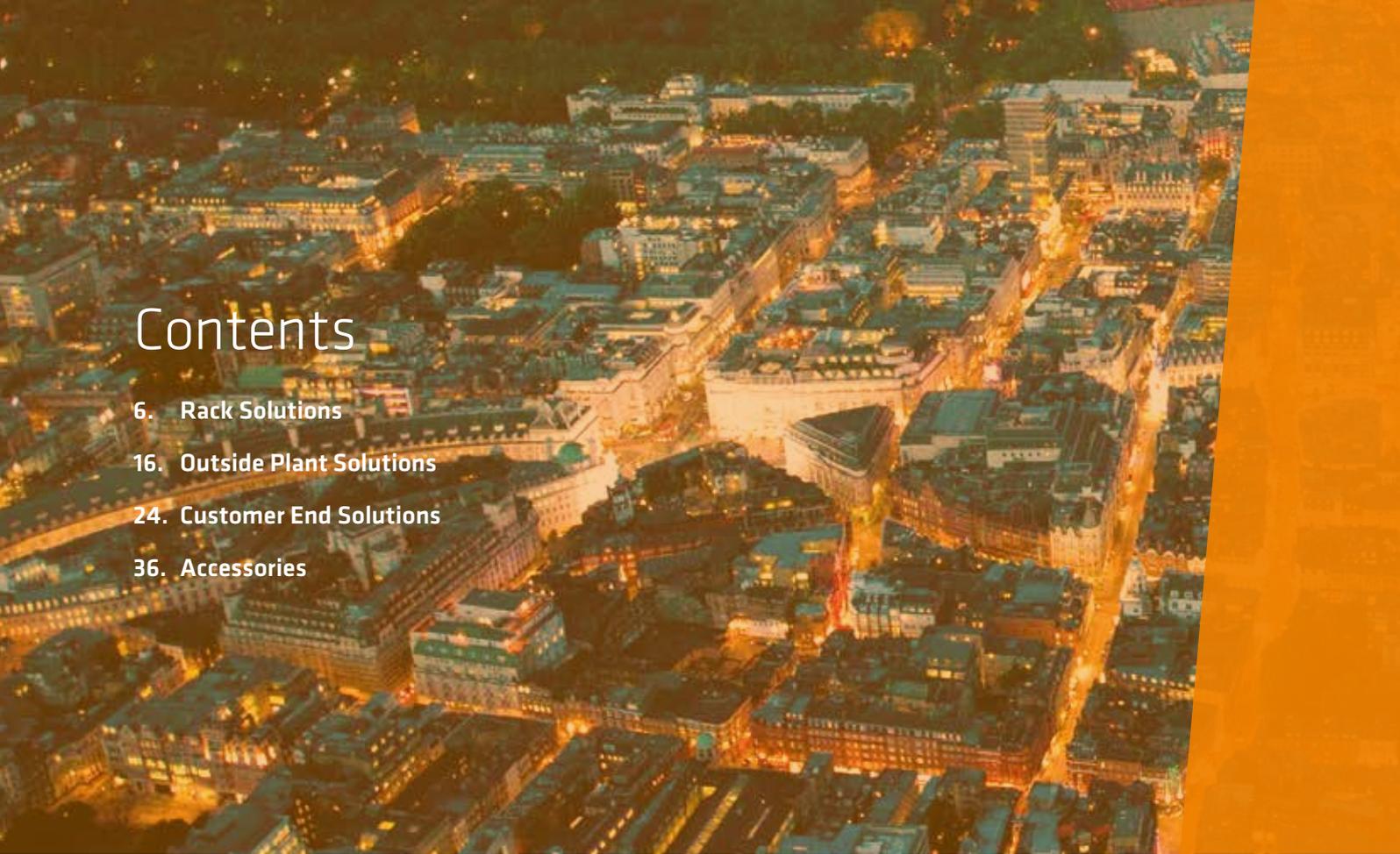


OASYS

Optical connectivity for next-generation performance





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Prysmian Group

Linking the future

As the worldwide leader in the cable industry, Prysmian Group believes in the effective, efficient and sustainable supply of energy and information as a primary driver in the development of communities.

With this in mind, we provide major global organisations in many industries with best-in-class cable solutions, based on state-of-the-art technology. Through two renowned commercial brands – Prysmian and Draka – based in around 50 countries, we're constantly close to our customers, enabling them to further develop the world's energy and telecoms infrastructures, and achieve sustainable, profitable growth.

In our energy business, we design, produce, distribute and install cables and systems for the transmission and distribution of power at low, medium, high and extra-high voltage.

In telecoms, the Group is a leading manufacturer of all types of copper and fibre cables, systems and accessories – covering voice, video and data transmission.

Drawing on over 130 years' experience and continuously investing in R&D, we apply excellence, understanding and integrity to everything we do, meeting and exceeding the precise needs of our customers across all continents, at the same time shaping the evolution of our industry.



OAsys

Optical Connectivity – it's in our DNA

For Prysmian, Connectivity is central to the integrated optical fibre management solutions we offer to customers around the world. Connectivity – and its evolution – has formed part of our DNA for more than two decades.

It's been a fundamental foundation of our business throughout that time, as we've built a long tradition of delivering state-of-the-art cabling technology.

The standards we set ourselves are impeccable. As the designers, developers and producers of our cable and fibre management products, we retain complete control over quality throughout the process. These uncompromising standards mean many of the world's major global operators work in close partnership with us today.

Progress and innovation are constant within our telecoms business. By listening to our customers and investing in R&D, we consistently arrive at more effective, more relevant solutions.

Within our OAsys portfolio we address the many requirements of incumbent and private customers for high-capacity transmission and distribution networks. As part of the trend to take fibre deeper into the network, the opportunities presented by Fibre To The Home (FTTH) implementation are the driving force behind the creation of our range of next-generation cable and connectivity solutions.

Features & Benefits

The OAsys connectivity portfolio uses well established technology that is constantly being upgraded and improved to provide customers with a series of significant benefits for the planning and operation of their network.

Flexible design options

Optimised products are available for any network type.

Installation time and cost are reduced

OAsys products are built for rapid installation and easy access/maintenance.

Upgrading is simple

The majority of the range is built using a modular approach.

High Performance

Products are tested in accordance with world class standards.

Quality

Maintained through the expertise of staff working to world class standards (ISO 9001 & 14000).



From the Biggest Cities to the Smallest Communities

Many of our products, especially for Fibre To The Home (FTTH) applications, form part of a complete system together with optical fibre cable e.g. *SIROCCO*^{XS} Air Blown Solutions, the *QUICKDRAW*^{XS} pre-connectorised solution for last mile applications, an Optical Aerial Drop System and the *VERTICASA*^{XS} solution for business and MDU apartment blocks. However, for simplicity, our product range can be grouped into the following:

Racks & Rack Mounted Products

A range of racks together with a wide variety of shelves and trays (suitable for splicing, patching, splitting and/or storage) suitable for application in exchanges/central hubs/offices/data centres.

Outside Plant – External Solutions

Joints and cabinets that can manage the splicing and distribution of optical fibres throughout the network in Point-to-Point (P2P) and Passive Optical Network (PON) environments.

Customer End – Wall Mounted Solutions

Focussing on products for cable entry into business or residential premises and distribution to the final customer.

Accessories

A range of additional items that can assist network operators and installers to complete their network build, including pigtailed, patchcords, adapters and installation tools.



Rack Solutions



A range of high performance optical fibre management racking systems, together with a wide variety of complimentary shelves and trays to maximise the utilisation and effectiveness of the fibres, achieving strategic objectives of performance and continuity from one end of the network to the other.

The portfolio covers integrated rack and rack mounted solutions developed to address the specific requirements of major international telecom operators to a more modular building-block approach to benefit those customers whose needs fluctuate as the application, competitive pressure and environment dictate.

Whilst the range of racks are suitable for application in exchanges, central hubs or data centres, the individual optical fibre management shelves also have application in the external network (in streetside cabinets) and in customer premises e.g offices. The range of shelves are suitable for splicing and patching, management of pre-connectorised splitters and storage of patchcords or patchcord overlengths.



Data Sheet RA009

Optical Consolidation Rack (OCR) & Sub-Racks

The OCR is designed for use in the exchange for the splicing of network fibres to pre-terminated drop cables, for direct connection to the active equipment. The rack can accommodate up to eight OCR sub-racks with each containing twelve pull-out modules, each with six splice trays.

- Eliminate the use of single fibre jumper cables, avoid over-length storage & congestion.
- Each sub-rack has a capacity of 144 fibres, managed on a single circuit basis.
- The total capacity of the rack is 1152 fibres on a dual fibre per tray basis.
- Unique fibre storage – install and store network cables on day one without installing sub-racks.
- Rack is pre-tubed. When a sub-rack is installed and connected via a multi-way connector block, previously stored fibres can be simply routed to required splice tray.
- OCR sub-rack can be installed in any one of eight pre-determined levels.
- Supplied with an integral high level storage shelf.

The required space envelope is: (w) 900mm x (d) 300mm x (h) 2200mm.



Data Sheet RA002

Generic Rack 3A & Sub-Racks

The Generic Rack 3A (GR3A) is designed for use in the exchange, cable chamber and customer premises for cross-connection purposes. The rack can be used for the transition of external to internal cables. The GR3A can accommodate up to twelve Rack Splicing Modules (RSM) with each having 12 “swing-out” splice modules, each housing 2 splice trays (up to 48 fibres).

- The rack has a capacity of 288 spliced fibres (single fibre working).
- The maximum capacity of the rack is 576 spliced fibres for single circuit management.
- Each RSM can be installed in any one of twelve pre-determined levels.
- Accepts cables from overhead or underfloor and jumper cables from top, bottom, sides or rear.
- Storage area for excess lengths of jumper cables / patchcords.
- Required height envelope for sub-racks 250mm (ETSI-10SU) or 244mm (TEP-1E 8 VU)

The required space envelope is: (w) 900mm x (d) 300mm x (h) 2200mm.



Data Sheet RA012

ODF Flex Rack System

This is a modular rack system for use in the exchange or communications room, consisting of modular vertical pillars and sub-racks. Each modular pillar can accommodate up to six sub-racks, each having the capacity for 144 fibres on a splice and patch basis, giving a total of 864 fibres per vertical rack pillar. Other pillars can be added as and when required.

- A four vertical pillar rack has a capacity of 3456 spliced fibres.
- Vertical pillars and sub-racks are available for network cable termination (splice and patch) or equipment cable termination (patch only).
- Network sub-racks are supplied with SC/APC pigtailed and adapters, equipment sub-racks with SC/APC adapters.
- The racks have multiple built-in raceways for patchcord routing and bend management.
- Perimeter kits are available to protect the rack from damage by trollies or other vehicles.

Four Pillar Rack Dimensions: (w) 1700mm x (d) 784mm x (h) 2240mm.



Data Sheet RA007

RS3000 Rack

Supplied with mounting rails, accommodates 19" rack mounted shelves and sub-racks for splicing, patching, storage and / or managing splitters. Supplied with side panels and transparent doors plus mandrels installed on the right hand side (for patchcord management) it can be supplied with cable anchor brackets on the left.

- Designed for use with SRS3000 range of shelves and sub-racks.
- Also compatible with other 19" rack products.
- Supplied fully configured as a composed rack.
- See Data Sheet RA011 for option with mandrels on both sides.
- A 42U rack takes up to 40 (1U) shelves (capacity up to 1920 fibres, splice & patch).
- A 47U rack takes up to 45 shelves for 2160 fibre capacity.

The required space envelope is: (w) 900mm x (d) 300mm x (h) 2000mm or 2200mm.



Data Sheet RA004



Data Sheet RM015

19"/ETSI Racks

Standard 19"/ETSI racks supplied configured with 19" or ETSI mounting rails, accommodates 19" rack mounted shelves and sub-racks for splicing, patching, storage and / or managing splitters. Supplied with a frame, side and rear panels, steel or glass doors and a brushed exit roof for patchcord routing.

- Suitable for use with SRS3000 range of shelves and sub-racks.
- Also compatible with other 19" rack products.
- Available in 42U or 47U heights.
- Double depth racks (600mm) available for increased capacity (modules arranged back to back).
- Capacity dependent on equipment mounted / configuration.

The required space envelope is: (w) 600mm x (d) 300mm x (h) 2000mm or 2200mm.

SRS3000 Distribution Sub-Racks

The SRS Distribution Sub-Rack is a modular sub-rack available in a variety of configurations, utilising the individual shelves shown on the following pages, for integration into 19"/ETSI/ANSI racks, streetside or wall mounted cabinets. This allows users to customise the product for different applications using the same building blocks.

- Consists of a metal chassis in 2U or 3U containing a choice of modules.
- Front mounted as standard with modules pivoting outwards for easy access.
- Modules available as Splice & Patch, Patch Only, Splice Only, Connectorised Splitter & Patchcord Storage.
- Modules can be supplied in 12, 24 or 48 fibre capacities within a single 1U unit.
- Modules can be supplied with a range of connector types for singlemode or multimode fibre.
- Components can be factory fitted, or part-loaded or supplied as a kit for later configuration.
- Cables are completely protected from entry to exit from the panel.
- Drop down fronts for easier patchcord routing, enclosing patchcords and protecting adapters.

The required space envelope is: (w) 480mm x (d) 245mm x (h) 44.5mm per 1U shelf.



Data Sheet RM014

SRS3000 Splice & Patch Shelf

The SRS3000 Splice & Patch Shelf is a modular unit available in a variety of configurations, for integration into 19"/ETSI/ANSI racks, streetside or wall mounted cabinets. It comprises a metal chassis, a lightweight plastic splice & patch module and a cable anchoring system.

- High splice & patch density – capacity to 48 fibres in a 1U unit (SC / LC) or to 24 (FC/ST/E2000).
- Easy capacity upgrades from 12 to 48 fibres.
- Front mounted, with modules pivoting outwards for easy access.
- Built-in fibre management to ensure the product is installed correctly and consistently.
- Fully compatible with all cable types including blown fibre tube cables.
- Components can be factory fitted, part-loaded or supplied as a kit for later configuration.
- Cables are completely protected from entry to exit from the panel.
- Drop down front for easier patchcord routing, enclosing patchcords and protecting adapters.

The required space envelope is (w) 480mm x (d) 245mm x (h) 44.5mm.



Data Sheet RM019

SRS3000 Patch Only Shelf

The SRS3000 Patch Only Shelf is a modular unit available in a variety of configurations, for integration into 19"/ETSI/ANSI racks, streetside or wall mounted cabinets. It comprises a metal chassis, a lightweight plastic patch module and a cable anchoring system.

- High patch density – capacity to 48 fibres in a 1U unit (SC / LC) or to 24 (FC/ST/E2000).
- Easy capacity upgrades from 12 to 48 fibres.
- Front mounted, with modules pivoting outwards for easy access.
- Built-in fibre management to ensure the product is installed correctly and consistently.
- Fully compatible with most cable types including blown fibre cables.
- Components can be factory fitted, or part-loaded or supplied as a kit for later configuration.
- Cables are completely protected from entry to exit from the panel.
- Drop down front for easier patchcord routing, enclosing patchcords and protecting adapters.

The required space envelope is (w) 480mm x (d) 245mm x (h) 44.5mm.



Data Sheet RM018

SRS3000 Splice Only Shelf

The SRS3000 Splice Only Shelf is a modular unit available in a variety of configurations, for integration into 19"/ETSI/ANSI racks, streetside or wall mounted cabinets. It comprises a metal chassis, a lightweight plastic splicing module and a cable anchoring system.

- High splice density – capacity to 48 fibres in a 1U unit.
- For cable to cable or cable to blown fibre splicing, a panel is fitted with bulkhead connectors.
- For cable to ruggedised pigtail splicing, panels enable aramid restraints to be fitted and secured.
- Front mounted, with modules pivoting outwards for easy access.
- Built-in fibre management to ensure the product is installed correctly and consistently.
- Cables are completely protected from entry to exit from the panel.
- Drop down front prevents accidental disconnection of fibres during installation.

The required space envelope is (w) 480mm x (d) 245mm x (h) 44.5mm.

SRS3000 Patchcord Storage Module

The SRS3000 Patchcord Storage Module is a 1U shelf for the storage of patchcords or patchcord overlengths, within a 19"/ETSI/ANSI rack, streetside or wall mounted cabinet. It comprises a metal chassis and a lightweight plastic module.

- Storage capacity - up to 2 metres of 24 patchcords (2.8mm diameter) or 48 patchcords (2mm).
- Overlength capacity - up to 2.5 metres of the same.
- Front mounted, with modules pivoting outwards for easy patchcord access.
- Cables are completely protected from entry to exit from the panel.
- The unit can be subsequently upgraded into a Patch Only Shelf with an upgrade kit.

The required space envelope is: (w) 480mm x (d) 245mm x (h) 44.5mm.



Data Sheet RM020



Data Sheet RM025

SRS3000 Connectorised Splitter Shelf

The SRS3000 Connectorised Splitter Shelf is a 1U shelf that allows pre-connectorised splitters to be mounted onto adapter panels, for use within a 19"/ETSI/ANSI rack, streetside or wall mounted cabinet. It comprises a metal chassis fitted with a lightweight swing-out plastic shelf holding the splitters and adapters.

- It can accommodate a number of connectorised splitters from 1x2 to 1x32 configurations.
- Compatible with all types of connectors.
- The shelf is supplied with splitters pre-installed with both input and output fibres connectorised.
- Dedicated positions for splitter legs making splitter patching for PONs extremely easy.
- Front mounted, with modules pivoting outwards for easy access to splitter storage area.
- Cables are completely protected from entry to exit from the panel.

The required space envelope is: (w) 480mm x (d) 245mm x (h) 44.5mm.



Data Sheet RM022



Data Sheet RM023

SRS3000 1U MPO/MTP Shelf

The SRS3000 MPO/MTP is a 1U modular pre-terminated patching shelf available in a variety of configurations for use in 19" or ETSI racks, streetside or wall mounted cabinets. It has the capacity of up to 48 adapters (SC or LC) and is supplied with pre-installed MPO/MTP fan outs. It comprises a metal chassis, a lightweight plastic splicing module and a cable anchoring system.

- Enables rapid installation without splicing, simply connecting pre-terminated cables to the shelf.
- It can be supplied with four 12 fibre MPO or MTP fan outs pre-installed.
- Patch module pivots outwards for easy access and maintenance.
- Drop down front for easier patchcord routing, enclosing patchcords and protecting adapters.

The required space envelope is: (w) 480mm x (d) 245mm x (h) 44.5mm.

Horizontal Routing & Storage Shelf

The horizontal routing and storage shelf is a 3U shelf used to transport patchcords from one side of a 19" or ETSI rack to the opposite side. The shelf can be used as a storage shelf for patchcord overlengths. It has a steel chassis that contains two routing mandrels for coiling the patchcords.

- It can be mounted in racks, streetside or wall mounted cabinets.
- It fits directly into 19" racks and cabinets.
- It can also be mounted into ETSI versions using conversion brackets supplied.
- It can be rear mounted using alternative brackets (upgrade kit available).

The required space envelope is: (w) 480mm x (d) 245mm x (h) 133.5mm.



PSP Splice & Patch Shelf

The PSP Splice & Patch Shelf is a low cost plastic 1U shelf for the data market, allowing the connection of up to 48 fibres. It is compatible with 19" and ETSI racks, streetside or wall mounted cabinets. It comprises a lightweight plastic chassis, splicing module and a cable anchor plate.

- High splice density – capacity to 48 fibres in a 1U unit (SC/LC) or 24 with FC, ST or E2000.
- Cables enter at the rear left hand side and pigtails exit from the front face.
- Supplied empty, in kit form or with pigtails and adapters pre-installed.
- The shelf pivots outwards for easy access to the splice tray and pigtail area.
- Compatible with blown fibre using a manifold, allowing up to 6 tubes to be routed onto the shelf.

The required space envelope is: (w) 481mm x (d) 230mm x (h) 44.5mm.



Connectorised Splitter Shelf

The Connectorised Splitter Shelf is a low cost plastic 1U shelf that allows pre-connectorised splitters to be mounted onto adapter panels. It is compatible with 19" and ETSI racks, streetside or wall mounted cabinets. It comprises a lightweight plastic chassis and splitter module.

- Can accommodate connectorised splitters from 1x2 to 1x32 using SC or LC connectors.
- Splitters are pre-installed with both input and output fibres being connectorised.
- Dedicated input and output positions for the splitter legs.
- Patchcord entry and exit from the front face.
- The shelf pivots outwards for easy access to the splitter storage area for maintenance.
- Ideal for high density FTTH applications using PONs.

The required space envelope is: (w) 481mm x (d) 230mm x (h) 44.5mm.



3U Modular Splitter Shelf

The 3U Modular Splitter Shelf is used to mount pre-connectorised splitters into a 19" or ETSI racks, streetside or wall mounted cabinets. Up to 14 splitter modules can be installed into each 3U shelf. The modules are simply located using plastic pop rivets. It comprises a mild steel chassis for the splitter modules to be attached to.

- Accommodate connectorised splitter modules from 1x4 to 1x64 using FC, SC or LC connectors.
- Splitters are pre-installed with both input and output fibres being connectorised.
- Splitter input and output legs are 2mm in diameter, 2.5m in length.
- Can be mounted directly into a 19" rack or with conversion brackets into an ETSI rack.

The required space envelope is: (w) 480mm x (d) 245mm x (h) 133.5mm.



DOBEX - 2U Distribution Drawer

This is a 2U splice & patch panel compatible with 19" and ETSI racks. The product is fully metallic and comprises a drop down front and pull out drawer. The drop down front panel prevents accidental disconnection of the patchcords and provides additional space for patchcord routing. The pull down drawer provides easy access to the fibre splicing area.

- Capacity up to 96 fibres on a splice and patch basis.
- Can accommodate 48 adapters of SC, ST, FC or E2000 type or 96 adapters of LC type in a 2U panel.
- Can accommodate up to 4 splice trays, each able to accommodate up to 24 splices.
- Patchcord entry and exit from the front face, routed to the left or right side of the rack.
- Cables enter the unit from the rear. Up to 4 cables (up to 21mm) can be accommodated.
- Minimum cable and patchcord movement.

The required space envelope is: (w) 482mm x (d) 300mm x (h) 88mm.



Data Sheet RM027

MPSP – 1 & 2U Distribution Drawers

The MPSP – Distribution Drawer is compatible with 19" and ETSI racks or cabinets. The drawer is fully metallic and is pre-loaded with splice cassettes, pigtails and patch panels according to the design for 48 or 96 SC type optical connectors. The swing out design allows easy access to the splice cassettes and the back of the patch panel.

- Capacity of up to 48 fibres (1U) or 96 fibres (2U) on a splice & patch basis.
- Can be supplied either left or right hand pivoting.
- Supplied with single element splice cassettes, each able to accommodate up to 12 splices.
- Designed for use with ANT or mini heat shrink splice protectors.
- Up to 2 cables can enter the unit from the rear (optional left or right).
- Minimum cable and patchcord movement.

The required space envelope is: (w) 480mm x (d) 302mm x (h) 44.5mm per 1U.



Data Sheet RM028

MEB144 – 4U Splice & Patch Pivoting Shelf

The MEB144 – 4U Splice & Patch Pivoting Shelf is compatible with 19" racks and street cabinets. The shelf can splice and terminate 144 fibres within six 24 fibre splice trays. The unit is supplied with 144 SC/APC pigtails and adapters that are pre-installed onto a patch panel. It is a robust metallic shelf with a metallic cover and a drop down front cover. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Capacity of up to 144 fibres (4U) on a splice & patch basis.
- The patch panel contains 12 columns of 12 single SC connector positions.
- The MEB144 is a left hand pivoting splice and patch shelf.
- The pivoting support can fix up to nine 5mm tubes/cables.

The required space envelope is: (w) 480mm x (d) 302mm x (h) 178mm.



Data Sheet RM029

POB36 – 1U Splice & Patch Pivoting Shelf (36 fibre)

The POB36 – 1U Splice & Patch Pivoting Shelf is compatible with 19" racks and street cabinets. The shelf can splice and terminate 36 fibres within three 12 fibre splice trays. The unit is supplied with 36 SC/APC pigtails and adapters that are pre-installed onto a patch panel. It is a robust metallic shelf with a metallic cover and a drop down front cover. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Capacity of up to 36 fibres (1U) on a splice & patch basis.
- The patch panel contains 3 columns of 12 single SC connector positions.
- The splice trays are each capable of accepting up to a 1 x 8 planar splitter.
- The POB36 is a left hand pivoting splice & patch shelf.
- The pivoting support can fix up to three 5mm tubes/cables.

The required space envelope is: (w) 480mm x (d) 302mm x (h) 44.5mm.



Data Sheet RM030

MOE96 – 1.5U Pivoting Splice Shelf (96 fibre)

The MOE96 – 1.5U Pivoting Splice Shelf is compatible with 19" racks and street cabinets. The shelf can splice up to 96 fibres within twenty-four 4 fibre splice trays (2 rows of 12). It is a robust metallic shelf with a metallic cover and a drop down front cover. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Capacity of up to 96 fibres (1.5U) on a splice only basis.
- The MOE96 is a left hand pivoting splice shelf.
- The pivoting support can fix up to six 5mm tubes/cables and a 11.5mm outside diameter cable.
- Can be used in ETSI racks and cabinets using conversion brackets.

The required space envelope is: (w) 480mm x (d) 302mm x (h) 66.75mm.



Data Sheet RM032

The required space envelope is:
(w) 480mm x (d) 302mm x (h) 44.5mm.

MEC32 – 1U Pre-Terminated Splitter Pivoting Shelf

The MEC32 is a 1U Shelf, compatible with 19" racks and street cabinets. The shelf can accommodate up to eight 1x4 splitters, four 1x8 splitters or a single 1x32 pre-terminated splitter. It is a robust metallic shelf with a metallic cover and drop down front cover to protect and guide the patchcords. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Supplied with SC/APC adapters and splitters pre-installed.
- Capacity of up to 32 output fibres.
- Can be supplied either left or right hand pivoting.
- The patch panel contains 8 columns of 4 single SC/APC adapter positions.
- Equipped with 12 fibre splice tray for connecting incoming fibres to splitter input fibres.
- The pivoting support can fix up to two 5mm tubes/cables.
- Can be used in ETSI racks and cabinets using conversion brackets.

MEC64 – 1.5U Pre-Terminated Splitter Pivoting Shelf

The MEC64 is a 1.5U Shelf, compatible with 19" racks and street cabinets. The shelf can accommodate either two 1x32 splitters or a single 1x64 pre-terminated splitter. It is a robust metallic shelf with a metallic cover and drop down front cover to protect and guide the patchcords. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Supplied with SC/APC adapters and splitters pre-installed.
- Capacity of up to 64 output fibres.
- Is supplied right-hand pivoting.
- The patch panel contains 13 columns of 5 single SC/APC adapter positions.
- Equipped with 12 fibre splice tray for connecting incoming fibres to splitter input fibres.
- The pivoting support can fix up to two 5mm tubes/cables.
- Can be used in ETSI racks and cabinets using conversion brackets.



Data Sheet RM035

The required space envelope is:
(w) 480mm x (d) 302mm x (h) 66.75mm



Data Sheet RM033

The required space envelope is:
(w) 480mm x (d) 302mm x (h) 133.5mm

MEC128 – 3U Pre-Terminated Splitter Pivoting Shelf

The MEC128 is a 3U Shelf, compatible with 19" racks and street cabinets. The shelf can accommodate up to four 1x32 splitters or two 1x64 pre-terminated splitters. It is a robust metallic shelf with a metallic cover and drop down front cover to protect and guide the patchcords. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Supplied with SC/APC adapters and splitters pre-installed.
- Capacity of up to 128 output fibres.
- Can be supplied either left or right hand pivoting.
- The patch panel contains 16 columns of 8 single SC/APC adapter positions.
- Equipped with 12 fibre splice tray for connecting incoming fibres to splitter input fibres.
- The pivoting support can fix up to nine 5mm tubes/cables.
- Can be used in ETSI racks and cabinets using conversion brackets.

MOB128 – 3U Patch Panel Pivoting Shelf

The MOB128 is a left-hand pivoting 3U Shelf, compatible with 19" racks and street cabinets. The shelf can accommodate up to 128 adapters. It is a robust metallic shelf with a metallic cover and drop down front cover to protect and guide the patchcords. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Supplied with (or without) SC/APC adapters pre-installed.
- Capacity of up to 128 output fibres.
- The patch panel contains 16 columns of 8 single SC/APC adapter positions.
- The pivoting support can fix up to nine 5mm tubes/cables.
- Can be used in ETSI racks and cabinets using conversion brackets.



Data Sheet RM034

The required space envelope is:
(w) 480mm x (d) 302mm x (h) 133.5mm

POS – 1 Tube Storage Pivoting Shelf

The POS is a 1U Shelf, compatible with 19" racks and street cabinets. The shelf can store up to 18 metres of 5mm tube/ cable in three metallic trays. It is a robust metallic shelf with a metallic cover. The shelf is retained by three 19" rails, two at the front and one at the rear.

- Capacity of up to 18 metres of 5mm tube (1U).
- The POS is a left hand pivoting storage shelf.
- In each of the 3 trays there are 2 stowage pockets each accepting up to a 3m coil of 5mm tube.
- The pivoting support can fix up to six 5mm tubes/cables and a 11.5mm outside diameter cable.
- Can be used in ETSI racks and cabinets using conversion brackets.

The required space envelope is: (w) 480mm x (d) 302mm x (h) 44.5mm.



Data Sheet RM031



Data Sheet RM010



Data Sheet RM011



Data Sheet RM009

Sliding Sub-Rack (Splicing & Patching)

The Sliding Sub-Rack (Splicing & Patching) is a 3U shelf for use within 19" and ETSI racks. It is used to connect up to 72 fibres onto adapter panels. The shelf contains six modules, which each house a splice tray and 12 adapters.

- The shelf pulls outwards to provide easy access to the splice trays.
- The modules hinge upwards to provide easy access to the module below.
- Supplied with all of the pigtailed and adapters pre-installed to save installation time.
- Can accommodate a variety of different adapters (SC, LC, ST, FC and E2000).
- Fibres are fully bend-managed to 30mm minimum bend radius.

The required space envelope is:

19" rack (w) 415mm x (d) 280mm x (h) 133.5mm.
 ETSI rack (w) 495mm x (d) 280mm x (h) 133.5mm.

Sliding Sub-Rack (Patching)

The Sliding Sub-Rack (Patching) is a 3U shelf for use within 19" and ETSI racks. It is used to connect up to 72 fibres onto adapter panels. The shelf contains six modules, which each house 12 adapters.

- The shelf pulls outwards to provide easy access to the patching modules.
- The modules hinge upwards to provide easy access to the module below.
- Supplied with all of the adapters pre-installed to save installation time.
- Can accommodate a variety of different adapters (SC, LC, ST, FC and E2000).
- Fibres are fully bend-managed to 30mm minimum bend radius.

The required space envelope is:

19" rack (w) 415mm x (d) 280mm x (h) 133.5mm.
 ETSI rack (w) 495mm x (d) 280mm x (h) 133.5mm.

Sliding Sub-Rack (Splicing)

The Sliding Sub-Rack (Splicing) is a 3U shelf for use within 19" and ETSI racks. It is used to splice internal cables directly to connectorised pigtailed or for cable to cable jointing. The shelf can adopt single circuit management (up to 4 fibre per splice tray) or single element management (up to 12). Transport tubes are pre-installed and located at the left side.

- Can accommodate 96 splices (19") or 120 (ETSI) for cable to pigtail splicing (or 144 splices for cable to cable splicing).
- The shelf pulls outwards for easy access to splice trays.
- The shelf is supplied without splice trays.
- Splice tray holders are available for crimp, heatshrink or fibrelock (only with half the capacity).
- Fibres are fully bend-managed to 30mm minimum bend radius.

The required space envelope is:

19" rack (w) 440mm x (d) 280mm x (h) 133mm.
 ETSI rack (w) 490mm x (d) 280mm x (h) 133mm.





Outside Plant Solutions

A range of high performance optical fibre management solutions for use in the external network to maintain the effectiveness of the fibres and to achieve strategic objectives of performance and continuity from one end of the network to the other.

The portfolio covers a range of fibre jointing solutions developed to address the specific requirements of major international telecom operators to a more modular building-block approach benefitting those customers whose needs fluctuate as the application, competitive pressure and environment dictate. These include integrated system solutions such as *SIROCCO^{XS}* air blown solutions, *RETRACTANET^{XS}* retractable solutions and the *QUICKDRAW^{XS}* plug & connect solution.

In addition, the range of products includes streetside cabinets, intended to manage and distribute high volumes of traffic through a hub located far from the central office, providing splicing, patching and splitting capacity particularly for PONs.



Data Sheet OP053

Compact Multi-Function Joint (CMJ)

The CMJ is for jointing optical cables. It is ideal for use as a Cable Chamber Joint, Track Joint, Spur Joint or Distribution Joint due to its capacity and small size. With factory fitted splice trays, each able to accommodate 12 fibres, the joint capacity is 144 fibres. The joint has four circular ports for mechanical entry glands, one oval port (heatshrink or mechanical entry) plus two small emergency ports (heatshrink). IP rating of 68.

- An ultra compact closure for optical cable splicing.
- Maximum capacity is 144 fibres using 12 fibre single element trays.
- Alternatively, using single circuit trays capacity is 96 fibres (24 trays each accommodating up to 4 splices).
- An input manifold manages cable tubes to a common routing channel (provision for 4 splitters).
- Cables up to 20mm can be installed into each main port, 12mm into each of the emergency ports.
- Circular port cables are sealed using a mechanical sealing gland.
- Multi Way Entry Glands provide alternate mechanical entry to allow up to 4 cables (5-7mm) to be installed in each circular port.

The required space envelope is: (w) 231mm x (d) 164mm x (h) 290mm.



Data Sheet OP057

Medium Multi-Function Joint (MMJ)

The MMJ is for jointing optical cables. It is ideal for use as a Cable Chamber Joint, Track Joint, Spur Joint or Distribution Joint due to its capacity and small size. With factory fitted splice trays, each able to accommodate 12 fibres, the joint capacity is 288 fibres. The joint has four circular ports for mechanical entry glands, one oval port (heatshrink or mechanical entry) plus two small emergency ports (heatshrink). IP rating of 68.

- A compact closure for optical cable splicing.
- Maximum capacity is 288 fibres using 12 fibre single element trays.
- Alternatively, using single circuit trays capacity is 192 fibres (48 trays each accommodating up to 4 splices).
- An input manifold manages cable tubes to a common routing channel (provision for 4 splitters).
- Cables up to 20mm can be installed into each main port, 12mm into each of the emergency ports.
- Circular port cables are sealed using a mechanical sealing gland.
- Multi Way Entry Glands provide alternate mechanical entry to allow up to 4 cables (5-7mm) to be installed in each circular port.

The required space envelope is: (w) 231mm x (d) 164mm x (h) 380mm.



Data Sheet OP058

Large Multi-Function Joint (LMJ)

The LMJ is used for access applications within the external optical network and can be used for track, spur and loop applications. The modular tray system is designed for positive fibre management for Single Circuit Management (SCM) and Single Element Management (SEM), and the splice trays can accommodate a variety of different types of splice protectors and splitters. The joint has ten circular ports and one oval port, all using mechanical sealing glands. IP rating of 68.

- A large closure for optical cable splicing with two vertical tray stacks.
- Different cap lengths are available to configure the closure to the number of trays required.
- Maximum capacity is 1344 fibres (12 fibre SEM) or 2688 fibres (24 fibre SEM).
- Contains a mechanical oval port and central loop storage for up to 360 fibre cable loop (loose tube).
- Two input manifolds manage cable tubes to a common routing channel.
- A number of bases are available to support a variety of cable diameters and port configurations.
- Multi Way Entry Glands provide alternate mechanical entry to allow up to 4 cables (5-7mm) to be installed in each circular port.

The required space envelope is: (Ø) 260mm x (h) 340, 452, 564 or 676mm.



Data Sheet OP001

Compact Joint

Its primary application is connecting optical cables at cable element level, so the Compact Joint is ideal as a cable chamber, track of spur joint. Available for 48 or 144 fibres (not upgradeable), the joint is sealed to IP68 and can be used for direct burial, or aerial with a wall or pole mounting bracket.

- Factory fitted 12 fibre splice trays can accept heatshrink or crimp splice protectors.
- Splice trays are hinged upwards for full access without disturbing adjacent trays.
- The base has 6 circular entry ports or an oval port and four circular ports.
- Cables (up to 22mm Ø) are sealed using heatshrink sleeves.
- Also available as a Compact Node with 12 single circuit splice trays (24 fibre drops).
- The Compact Node, with a pressure relief valve, can be used with *SIRCOCCO^{XS}* air blown solutions.

The required space envelope is:

- 48 fibre (w) 231mm x (d) 164mm x (h) 410mm.
- 144 fibre (w) 231mm x (d) 164mm x (h) 500mm.



Data Sheet OP004

ESDF-4 In-Line Joint

The ESDF-4 is used for jointing and branching optical fibre cables and has a total capacity of 72 fibres. The joint is sealed to IP68. It is an underground in-line joint suitable for direct burial and underground chamber applications.

- The joint will manage from 4 to 16 cable entries (depending upon cable diameter) – up to 4 per port.
- Reliable sealing is achieved using a mechanical gasket, while allowing easy entry.
- Cable sealing is also mechanical, using cable entry glands (bought separately to suit application).
- It is supplied with six 12 fibre splice trays (using heatshrink or crimp splice protectors).
- Splice trays are hinged upwards for full access without disturbing adjacent trays.

The required space envelope is: (w) 160mm x (d) 90mm x (l) 560mm.



Data Sheet OP535

In-Line Splice Closure (ILC01)

The ILC01 is a generic closure used for in-line jointing and branching optical fibre cables and has a total capacity of 96 fibres. The joint is sealed to IP68. It is an underground in-line joint suitable for direct burial and underground chamber applications / in a handhole.

- The closure has a total of six entry ports (3 at either end of the joint).
- Six single cable grommets (14-19mm) are factory fitted – alternatives available on request.
- On cable entry, the cable is mechanically fixed either side of the grommet (aiding watertightness).
- It is supplied with four 24 fibre splice trays (96 heatshrink splice protectors included).
- Large area under the trays for excess cable length or cable element storage.

The required space envelope is: (w) 240mm x (d) 172mm x (l) 512mm.



Data Sheet OP041

Universal Metallic Joint Closure (XOK)

The XOK universal joint closures are designed to provide water and pressure tight environmental protection for optical fibres and splices regardless of cable design. Available in two sizes – XOK 103 with capacity for 192 splices and XOK 107 with capacity for 336 splices. The joint is sealed to IP68 so suitable for direct burial, duct / handhole or aerial application with high crush and impact resistance.

- The closure is available in 7 basic configurations, with two, three or four cable entry ports.
- Using extension collars and/or ribbon fibre trays capacity can be increased to 1000 splices.
- Splice trays are heatshrink.
- Space available for storage of spare fibres.

The required space envelope is:

- (w) 230mm x (d) 100mm or 140mm x (l) 560mm (excl. inlet tubes).



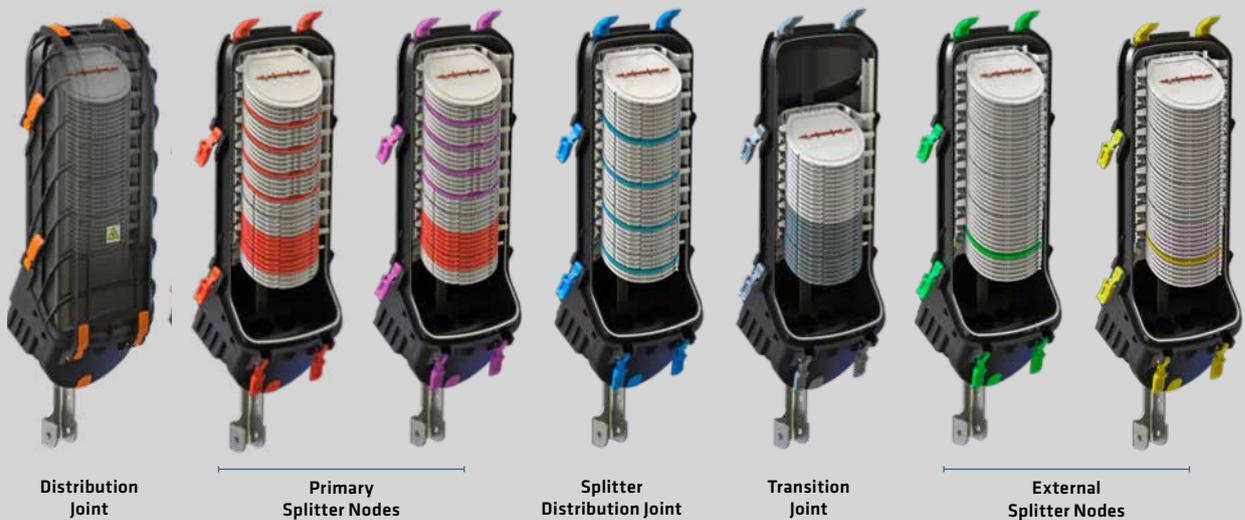
Data Sheet OP028

32 Customer Distribution Joint

It is a multi-purpose joint, used to distribute external network fibres to customer premises via blown fibre tube cables. The joint has 38 tray positions and can accommodate single element or customer locking trays (the latter contain several coils of transport tube to lock the blown fibre units to prevent movement at the splice). The joint is sealed to IP68.

- Can accommodate splitters and splitter assemblies (1x8 or 1x32).
- Splice trays are hinged upwards for full access without disturbing adjacent trays.
- The base has an oval port which will accommodate a 10mm cable input.
- The base also has six circular ports, accommodating a 25mm flexible conduit to protect blown tubes.
- There is a loop storage facility .
- Several configurations, from track joint to splitter node (toggles coloured for differentiation).

The required space envelope is: (w) 210mm x (d) 165mm x (h) 560mm.



Distribution Joint

Primary Splitter Nodes

Splitter Distribution Joint

Transition Joint

External Splitter Nodes



Data Sheet OP025

QUICKDRAW^{XS} Connectorised Lead-In Joint (CLJ)

It is a purpose built customer access termination that allows the rapid and incremental activation of customer services. It allows the plug-in connection of up to 8 individual customer Lead-In Assemblies (LIAs) at the time of service activation. The CLJ is designed to be cascaded on a single distribution cable (PON or PTP) and can, with splitters, feed 8 customers from a single incoming fibre. The closure is sealed to IP68, the LIAs to IP67.

- Designed for one-man customer connection with semi-skilled labour.
- The CLJ and customer LIAs are supplied for a single fibre (SC) or dual fibre (LC) connection.
- Can be supplied with pre-installed connectorised passive splitters (1x8 or 1x16).
- The base has an oval port (stored loop at rear of joint), 8 lead-in seal ports and 2 spur ports.
- LIA connectors protected by pulling shroud at one end and a transport tube at the other.

The required space envelope is: (w) 231mm x (d) 164mm x (h) 300mm (410mm with heatshrink).

Tube Distribution Closure (TDC)

The Tube Distribution Closure (TDC) is a direct buried in-line sealed closure (IP68) for intercepting a *SIROCCO*^{XS} blown fibre tube cable/duct assembly to allow multiple spurs to smaller blown tubes or ducts. It is purely a mechanical breakout device without splicing capability. Will manage 5mm in-line tube cables from 7 to 24 tube and drop cables from 1 to 12 tube (4 large and 6 small ports).

- Many different distribution options e.g. large drop port will accept 4, 7 or 12 tube or multiple 1 tube.
- Installed at the time of tube installation or retro-fit for greater network flexibility.
- The closure protects the accessed tubes and connectors from water or material ingress.
- There is a pressure relief valve to prevent accidental over-pressurisation.
- The cover is held in place with toggle clips for easy access.
- Rubber seals for the in-line cables and cable glands for drop cable distribution are sold separately.

The required space envelope is: (w) 290mm x (d) 108mm x (l) 550mm.



Data Sheet OP017



Data Sheet OP039/040/042/043

Tube In-Line & 'T' Closures

These In-Line & 'T' Closures provide an alternative jointing system for *SIROCCO*^{XS} air blown tube cables (IP41 rated), designed to allow simple interconnection of tube cables or spurs to smaller blown tubes. It is purely a mechanical breakout device without splicing capability. Will manage up to 24 x 5mm tube cables or a 40mm sub-duct containing various tube options e.g. 10mm, 14mm.

- Installed at the time of tube installation or retro-fit for greater network flexibility.
- 40mm Swept T Closure for 1 or 2 way cable drops (OP039)
 - fibre installed from one direction only.
- 40mm 90° T Closure for 1 or 2 way cable drops (OP043)
 - fibre installed from both directions.
- 40mm In-Line Closure for tube cable connection (OP040).
- 50mm Extended In-Line Closure for tube cable connection and drops (OP042).

The required space envelope is:

40mm T Closure	(w) 200mm x (d)100mm x (l) 260mm.
40mm In-Line	(w) 100mm x (d)100mm x (l) 260mm.
50mm In-Line	(w) 100mm x (d)100mm x (l) 640mm.

Resin Filled Joints

Resin Filled Joints provide a cost effective jointing system for *SIROCCO*^{XS} blown fibre tube cable (IP68 rated), designed to allow simple interconnection of low tube count cables or spurs to smaller blown tubes. It is purely a mechanical breakout device without splicing capability. Will manage 5mm in-line and drop tube cables from 1 to 4 tube.

- Installed at the time of tube installation or retro-fit for greater network flexibility.
- The closure provides a block to the longitudinal passage of water within a cable.
- Once the resin has cured, the joint is re-enterable to allow re-configuration of tube if required.

The required space envelope is:

1 or 2 tube in-line	(l) 189mm x (Ø)40mm.
4 tube in-line	(l) 275mm x (Ø)50mm.
drop off	(l) 220mm x (Ø)76mm.



Data Sheet OP026



Data Sheet OP018

SIROCCO^{XS} DB1 Connection Kit

The DB1 Connection Kit is used to connect two single *SIROCCO*^{XS} blown fibre direct buried tube cables together. Its application is likely to be in last mile FTTH customer drops or campus networks for simple length enhancement prior to blowing. The tubes are connected using standard 5mm connectors.

- Conduit protects the joint and then sealed to the sheath using low temperature heatshrink.
- The connection achieves IP68.
- Maximum cable diameter is 16mm.

The required space envelope is: (l) 250mm x (Ø)22mm.

Fibre Distribution Hub (FDH)

The FDH cabinet has been developed for outdoor applications, particularly FTTH PON applications. It is equipped with front mounted 19" uprights and has a large accessible front plus access through the side panels if required. Robust heavy duty but lightweight casing material, sealed to IP55.

- 20U of available workable space for location of connectivity shelves.
- Can be loaded with splice & patch, splice, patch, storage and splitter shelves.
- Fibre capacity 960 splices (where patching with SC or LC) or 480 where patching with ST, FC or E2000.
- Designed for operation in a wide variety of climatic conditions.
- Can be supplied with pre-terminated input and output tail cables to the internal patch panel.
- Supplied with a plinth for easy installation.

The required space envelope is: (w) 790mm x (d) 310mm x (h) 1420mm (including plinth at 395mm).



Data Sheet OP015

SC3000 Streetside Cabinet

The SC3000 Streetside Cabinet has been developed for outdoor applications, particularly FTTH PON applications. It is equipped with front mounted 19" uprights and has a large accessible front (two doors). Robust heavy duty but lightweight casing material, sealed to IP54.

- 18U of available workable space for location of connectivity shelves.
- Can be loaded with splice & patch, splice, patch, storage and splitter shelves.
- Fibre capacity 864 splices (where patching with SC or LC), 432 where patching with ST, FC or E2000.
- Fully configured with patchcord storage mandrels on the right and cable anchor brackets on the left.
- Supplied with a plinth for easy installation.

The required space envelope is: (w) 1200mm x (d) 330mm x (h) 1300mm (including plinth at 300mm).



Data Sheet OP023

FSC Street Cabinets

FSC Street Cabinets have been developed for outdoor applications, particularly FTTH PON applications. They are equipped with two front-mounted 19" rails and a rear rail for additional support to accommodate the Prysmian MEB, MEC, MOB, MOE, POB and POS range of shelves. Available as a single or double unit, with one or two doors providing easy access. Robust heavy duty but lightweight casing material, sealed to IP55.

- 14U (single) or 28U (double) of available workable space for location of connectivity shelves.
- Can be loaded with splice & patch, splice, patch, storage and splitter shelves.
- Fully configured with patchcord storage drums on the left and cable anchor brackets on the right.
- Can accommodate up to 10 cable entries (maximum cable diameter 16mm).
- Supplied with a 200mm plinth for easy installation.

The required space envelope is:

Single (w) 803mm x (d) 354mm x (h) 1188mm.
 Double (w) 1564mm x (d) 354mm x (h) 1188mm.



Data Sheet OP061



Data Sheet OP031

Tapping Box (TBE-I2)

The TBE-I2 Tapping Box is used to breakout and distribute fibres from a *RETRACTANET^{XS}* cable. It is purely a mechanical breakout device without splicing capability. It is sealed to IP68 so is suitable for direct burial. It provides protection for a window-cut in a *RETRACTANET^{XS}* cable (10 to 15mm diameter) where a fibre is extracted and fed into a drop tube to customer premises.

- Mechanical system uses gel sealing to provide protection from water ingress (IP68).
- Can accommodate two drop tubes up to 10mm in diameter.
- Impact, crush & UV resistant.
- Ideal for FTTH drops especially where breakout locations match extractable fibre lengths.

The required space envelope is: (w) 190mm x (d) 72mm x (h) 32mm.



Data Sheet OP038

Tapping Box (TBE-I4)

The TBE-I4 Tapping Box is used to breakout and distribute fibres from a *RETRACTANET^{XS}* cable. It contains a splice tray so will allow up to 16 splices. It is sealed to IP68 so is suitable for outdoor installation. It provides protection for a window-cut in a *RETRACTANET^{XS}* cable (up to 13mm diameter) where a fibre is extracted/spliced and fed into a drop tube to customer premises.

- Mechanical system uses gel sealing to provide protection from water ingress (IP68).
- Unused drop positions have protective inserts to maintain integrity.
- Can accommodate four drop tubes up to 9mm in diameter.
- Impact, crush and UV resistant.
- Ideal for FTTH drops especially where breakout locations exceed extractable fibre lengths.

The required space envelope is: (w) 220mm x (d) 95mm x (h) 35mm.



Data Sheet OP055

Tapping Box (TBE-I4ST)

The TBE-I4ST Tapping Box is used to breakout and distribute fibres from a *RETRACTANET^{XS}* cable. It contains a unique fibre module breaking mechanism that avoids fibre modules being pulled out of the customer premise FTU. It provides protection for a window-cut in a *RETRACTANET^{XS}* cable (up to 15mm diameter) where a fibre is extracted and fed into a drop tube to the customer premises.

- In the event of damage to the in-line cable, each fibre connection can be repaired without access to the home.
- Can accommodate four drop tubes up to 7mm in diameter.
- Impact and crush resistant and "sand tight" (IP40) for direct buried FTTH drops.

The required space envelope is: (w) 185mm x (d) 113mm x (h) 38mm.



Data Sheet OP035

Cable End Seals

The Cable End Seal is used with a *RETRACTANET^{XS}* cable at the point of a splice closure entry port or a PoP building wall entry to ensure it remains water tight and provides tension relief. The cable sheath and fibre modules are mechanically interconnected in a protective tube by means of a two-component polyurethane filling compound.

- Retains protection from water ingress (IP68).
- Available in single and multiple versions.
- Any combination up to 18mm in diameter.
- Impact and crush resistant.

The required space envelope is:

Single	(w) 240mm x (d) 25mm x (h) 25mm.
Multiple	(w) 200mm x (d) 40mm x (h) 40mm.



Optical Aerial Drop System

A complete system solution is available to enable operators to rapidly establish a final short-span aerial drop to its customers. In addition to a small lightweight cable (2-12 fibre) that can be supplied, there are many fibre management and installation accessories available to support the build.

The range includes helical tension clamps, pole head rings, clamps and cleats to secure the cable, anti-creep devices to anchor the fibres, special stripping tools, underground and aerial joints with suitable mounting brackets and a range of customer termination boxes.

The cable is normally supplied in 300m lengths, installed using standard cabling practices. Suitable for new or existing wooden poles, between buildings, across bridges and on powerline routes.

24 Customer Pole Mounted Drop Box

The Pole Mounted Drop Box is designed for use on poles to distribute drop cables to multiple homes. The unit houses 4 single element splice trays and allows fibre from up to two input cables to be spliced to 24 customer drop cables. All cables enter through the bottom of the box. A pole mounting bracket is supplied, adjustable for various pole diameters. The joint is sealed to IP55.

- Removable cover for easy access and fitting.
- Each splice tray can accommodate 12 splices.
- Splice trays are hinged upwards for full access without disturbing adjacent trays.
- Cables up to 13mm diameter can be accommodated.
- Can accommodate splitters and splitter assemblies.

The required space envelope is: (w) 160mm x (d) 80mm x (h) 250mm.



Data Sheet OP054



Data Sheet OP062

Pole Mounted Distribution Cabinet

The Pole Mounted Distribution Cabinet is designed for use on poles to distribute drop cables to up to 32 customers (version 1: up to 12 customers). The unit houses 6 single element splice trays for through functions and 16 or 32 single address point customer locking trays, each providing locking and water blocking for overhead fibres and storage for up to 12 fibres. The cabinet is made from stainless steel and sealed to IP65.

- For use with blown fibre tube cables.
- Removable cover for easy access and fitting, closed with a D lock.
- Splice trays are hinged upwards for full access without disturbing adjacent trays.
- Cables enter the unit via the top or bottom face and are sealed using cable glands.

The required space envelope is:

- | | |
|--------|------------------------------------|
| 12 way | (w) 215mm x (d) 177mm x (h) 661mm. |
| 32 way | (w) 215mm x (d) 177mm x (h) 773mm. |

Optical Joint Box - EWMJ

The EWMJ joint boxes are designed to provide the maximum versatility for OPGW (aerial optical groundwires) splicing which enables their use for OPGW and other optical cable systems. The cabinet is made from aluminium alloy (steel fastenings) and sealed to IP67. A pre-moulded neoprene anti-aging gasket, perfectly inserted in the cover groove, provides excellent sealing against dust and water.

- Can accommodate 8 splice trays (each 24 splices) providing a maximum capacity of 192 fibre splices.
- The joint box can accommodate cable with plastic sheaths as well as a range of OPGW styles.
- Can be supplied with 2, 3 or 4 cable entries (up to 25mm).
- OPGW cables are sealed with cable glands & heavy walled heatshrink tube (other cables just the latter).

The required space envelope is: (w) 219mm x (d) 110mm x (h) 319mm.



Data Sheet OP032

Customer End Solutions

A range of high performance optical fibre management solutions for use in the final mile of the network to maintain the effectiveness of the fibres to achieve strategic objectives of performance and continuity from one end of the network to the other.

As this section of the network is closest to the individual customer base, it is the most potentially influenced by the aesthetics of the products (visibility in or on buildings) and so need to be attractively styled. However, it is also the most labour intensive, so products that offer simplicity of installation particularly within a system solution (such as that achieved through pre-connectorisation and/or the retractable internal cabling system, *VERTICASA^{XS}*) supporting minimalisation of cost are most attractive.

The portfolio covers a range of fibre connectivity for building entry / termination and distribution, from the largest industrial or commercial complex to the simplest apartment in a residential multi-dwelling unit (MDU) or individual home in a suburb or remote residential location.



Data Sheet WM022



Data Sheet WM030

Ultra Compact Termination Box (Mark 1 & 2)

There are currently two versions of the Ultra Compact Termination Box (UCTB), designed for use in residential and business applications for the termination of up to two incoming fibres. The UCTB enables a small cable, *VERTICASA*^{XS} bundle or *SIROCCO*^{XS} blown fibre unit to be spliced to up to two SC pigtails (PC or APC) which connect to shuttered adapters at the base of the unit.

- Simple and rapid installation of the unit.
- Compact, with attractive design features for internal wall mounting.
- Allow cables to enter from the rear, bottom or top of the unit (plus either side for Mark 2 unit).
- All fibres are managed to maintain a 20mm bend radius.
- Removable cover and flip tray allow easy access to connectorised tails and cable entry.
- Heatshrink or mechanical splices can be accommodated.
- The Mk 2 unit is supplied with a security screw to prevent unauthorised access.

The required space envelope is:

Mk 1	(w) 80mm x (d) 24mm x (h) 100mm.
Mk 2	(w) 83.5mm x (d) 25mm x (h) 106mm.

Compact Termination Box (Mk 1 & 2)

There are currently two versions of the Compact Termination Box (CTB), designed for use in residential and business applications for the termination of up to four incoming fibres. The CTB enables a small cable, *VERTICASA*^{XS} bundle or *SIROCCO*^{XS} blown fibre unit to be spliced to up to four SC pigtails (PC or APC) which connect to adapters at the base of the unit (shuttered in the Mk 2 unit).

- Simple and rapid installation of the unit.
- Compact, with attractive design features for internal wall mounting.
- Allow cables to enter from the rear or bottom of the unit (plus top and either side for Mk 2 unit).
- All fibres are managed to maintain a 30mm bend radius (20mm in the Mk 2 unit).
- Removable cover and flip tray allow easy access to connectorised tails and cable entry.
- Heatshrink, crimp or mechanical splices can be accommodated in the Mk 2 unit.
- Supplied with a security screw to prevent unauthorised access.
- The Mk 2 unit is provided with a bracket for wall mounting or mounting directly onto a DIN rail.

The required space envelope is:

Mk 1	(w) 120mm x (d) 25mm x (h) 80mm.
Mk 2	(w) 100mm x (d) 27mm x (h) 83mm.



Data Sheet WM001



Data Sheet WM044



Data Sheet WM049



Data Sheet WM058

Pre-Terminated Compact Termination Box

There are currently two versions of the Pre-Terminated Compact Termination Box (CTB), designed for use in residential and business applications. Version 1 contains a 4mm internal cable with up to four fibres terminated with up to four SC pigtails (PC or APC) connected to shuttered adapters at the base of the unit. Version 2 contains a 6mm internal / external cable with up to four fibres terminated in the same way.

- Eliminates the need for splicing (time spent) in the customer's premises.
- Very simple and very rapid installation of the unit.
- Compact, with attractive design features for internal wall mounting.
- Version 1 available in lengths of 30 & 50 metres (50 & 100 metres in the case of version 2).
- Cable is wound on a cardboard reel and supplied in a cardboard box with easy access to CTB.
- Fully factory tested (each box contains insertion loss and return loss data).

For datasheets or more details about all our products please visit www.prysmiangroup.com

QUICKDRAW^{XS} Demarcation Unit

The demarcation unit enables up to two QUICKDRAW^{XS} cable lead-in assemblies (LIAs) to be terminated on the outside wall of a building. The LIAs are pre-terminated robust cables provided with a transport tube at one end (for protection) and a pulling shroud at the other (for ease of drawing through pipes to the customer premises). Patchcords can then be passed through the wall for connection to active FTTH equipment.

- Simple and rapid installation of the unit.
- Provides a connection on the external wall for test and maintenance access.
- The unit is sealed to prevent the ingress of moisture to IP55.
- The unit accommodates up to two simplex SC adapters or two duplex LC adapters.
- Supplied with tamperproof screws for enhanced security.

The required space envelope is: (w) 60mm x (d) 37mm x (l) 275mm.



Data Sheet WM028



Data Sheet WM017



Data Sheet WM014



Data Sheet WM015

External Customer Splice Box

The external customer splice box is designed for use in residential or small business premises. It houses a single integral splice tray, allowing fibres from external cables to be spliced to pigtails for connection to an adapter panel with exit patchcords managed through the wall fabric.

- There is a removable cover for access, with tamperproof screws available as an option for security.
- The unit is sealed to prevent the ingress of moisture to IP55.
- The unit accommodates up to 4 SC pigtails and adapters.
- Designs available for use with heatshrink or crimp splice protectors.

The required space envelope is: (w) 220mm x (d) 50mm x (h) 150mm.

Internal / External Compact Termination Wall Box

The internal / external compact termination wall box is designed for use in residential and business premises. It houses a single splice tray, allowing fibres from external cables to be spliced to pigtails for connection to customer drop patchcords. Patchcords can then be passed through the wall or through split grommets directly from the base of the unit for connection to active FTTH equipment.

- Simple and rapid installation of the unit, there is a removable cover for easy access.
- The unit is sealed to prevent the ingress of moisture to IP54.
- The splice tray is hinged for easy access to pigtails and connectors.
- The unit accommodates up to 8 splices, 4 SC pigtails and adapters or 8 LC pigtails and adapters.
- Interchangeable inserts for heatshrink or crimp splice protectors or mechanical splices.
- Lockable for enhanced security.

The required space envelope is: (w) 140mm x (d) 32mm x (h) 185mm.

Internal Customer Splice Box

The internal customer splice box is designed for use in residential or business premises. It houses a single splice tray, allowing fibres from internal or external cables to be spliced to pigtails for connection to an adapter panel with exit patchcords at the bottom protected by a snap on cover.

- There is a removable cover for access, with tamperproof screws available as an option for security.
- The splice tray is hinged for easy access to pigtails and connectors.
- The unit accommodates up to 12 SC pigtails and adapters.
- Designs available for use with heatshrink or crimp splice protectors.

The required space envelope is: (w) 220mm x (d) 50mm x (h) 150mm.

Customer Lead-In Unit (FTTH)

This Customer Lead-In unit (CLI) is designed for use in residential or small business premises to manage the entry of cables into buildings. It prevents the accidental damage of cables during installation through walls, eliminating return to site costs due to macro-bending or fibre breaks.

- Can be used as a transition point between external and internal tubing (gas/water block if required).
- Three versions: for single blown tube without blocking, with blocking or cable transition (up to 13mm).
- Removable cover for easy access.
- External unit is IP68 when fully resin sealed.

The required space envelope is:

(w) 26mm x (d) 15mm x (h) 65mm for small unit.

(w) 36mm x (d) 36mm x (h) 180mm for large unit.



Data Sheet WM002



Data Sheet WM003

Customer Lead-In Unit (Business)

This Customer Lead-In unit (CLI) is typically used in large business premises to manage the entry of cables into buildings. It prevents the accidental damage of cables during installation through walls, eliminating return to site costs due to macro-bending or fibre breaks. It comprises two separate units mounted on either side of the wall.

- Suitable for up to 24 x 0.5mm blown fibre tubing or conventional cable transition (up to 30mm).
- Removable cover for easy access.
- External unit can be resin sealed to avoid the ingress of water or gas to customer premises.

The required space envelope is: (w) 58mm x (d) 68mm x (h) 182mm.



Data Sheet WM007



Data Sheet WM016

SIROCCO^{XS} Blown Fibre Gas Seal Unit

The SIROCCO^{XS} Blown Fibre Gas Seal Unit is typically used in large business premises or apartment blocks to manage the entry of cables into buildings. Wall mounted internally at the cable entry point, incoming external blown tube cables are connected to internal blown tube cables for distribution. It can house gas seal connectors which prevent water/gas ingress through the tubes.

- Suitable for connection of a 12 x 0.5mm external tube cable to a combination of internal tubes up to 12.
- Unit can be resin sealed to avoid the ingress of water or gas through cable interstices.
- Gas block connector operates when empty or when populated with blown fibre bundle.
- Removable cover for ease of access.

The required space envelope is: (w) 96mm x (d) 63mm x (h) 253mm.

SIROCCO^{XS} Single Tube Gas Block Housing

The SIROCCO^{XS} Single Tube Gas Block Housing is typically used in small business premises or single residential accommodation to manage the entry of a single tube cable into a building. Wall mounted internally at the cable entry point, an incoming external blown tube cable is connected to an internal blown tube cable using a gas seal connector which prevents water/gas ingress through the tube.

- Compact, low profile unit for simple installation.
- Manages a single tube entry for later blown fibre installation for FTTH applications.
- Gas block connector operates when empty or when populated with blown fibre bundle.

The required space envelope is: (w) 25mm x (d) 25mm x (h) 90mm.



Data Sheet WM019

Internal / External Termination Box – 12 Fibre

The internal/external termination box is a lockable wall mounted unit that allows connection of 12 fibres to an adapter panel. It contains six single circuit splice trays and 12 pigtails and adapters (each tray has 2 splices for customer segregation). The box can be supplied with splice trays for either heatshrink or crimp splice protectors. The box is fitted with a gasket to achieve a rating of IP55.

- A variety of connector types can be accommodated (SC, LC, FC, ST or E2000).
- Input cables up to 16mm can be utilised. The exit cable gland can secure a 25mm corrugated tube.
- Manufactured from UV resistant material, so suitable for internal or external use.
- It has two cable entry ports and one exit port for up to 12 patchcords or cables.
- The splice trays are hinged for easy access to the adapter panel.

The required space envelope is: (w) 270mm x (d) 272mm x (h) 100mm.



Data Sheet WM020

Internal / External Termination Box – 24 Fibre

The internal/external termination box is a lockable wall mounted unit that allows connection of 24 fibres to an adapter panel. It contains 12 single circuit splice trays and 24 pigtails and adapters (each tray has 2 splices for customer segregation). The box can be supplied with splice trays for either heatshrink or crimp splice protectors. The box is fitted with a gasket to achieve a rating of IP55.

- A variety of connector types can be accommodated (SC, LC, FC, ST or E2000).
- Input cables up to 16mm can be utilised. The exit cable gland can secure a 25mm corrugated tube.
- Manufactured from UV resistant material, so suitable for internal or external use.
- It has two cable entry ports and one exit port for up to 24 patchcords or cables.
- The splice trays are hinged for easy access to the adapter panel.

The required space envelope is: (w) 270mm x (d) 272mm x (h) 100mm.



Data Sheet WM068

OneBox – Small

The OneBox (small) is a termination wall box for use in residential or small business premises. The unit houses two splice trays and allows fibres from external cables to be spliced to splitters, pigtails or directly to drop cables. The unit can accommodate a single splitter and has a dedicated patch panel for up to 4 SC type pigtails or 8 LC type pigtails. There are four exit ports for customer drop cables incorporating a cable anchoring system. Customer drop cables can be pre-connectorised.

- Can be used internally or externally (sealed to IP55).
- Two splice trays, each can accommodate up to 12 crimp splice protectors or 24 heatshrink.
- External input cables can enter the box from the top or bottom (cables 2 to 7mm are accepted).
- Customer drop cables exit from the bottom of the unit: sealed with a split grommet.

The required space envelope is: (w) 200mm x (d) 52mm x (h) 215mm.



Data Sheet WM069

OneBox – Medium

The OneBox (medium) is a termination wall box for use in residential or business premises. The unit houses two splice trays and allows fibres from external cables to be spliced to splitters, pigtails or directly to drop cables. The unit can accommodate two splitters and has a dedicated patch panel for up to 12 SC type pigtails or 24 LC type pigtails. There are 8 exit ports for customer drop cables incorporating a cable anchoring system. Customer drop cables can be pre-connectorised.

- Can be used internally or externally (sealed to IP55).
- Two splice trays, each can accommodate up to 12 crimp splice protectors or 24 heatshrink.
- External input cables can enter the box from the top or bottom (cables 2 to 7mm are accepted).
- Customer drop cables exit from the bottom of the unit: sealed with a split grommet.

The required space envelope is: (w) 240mm x (d) 55mm x (h) 250mm.



Data Sheet WM038

Home Hub

The stylish Home Hub box is designed for use in a residential dwelling or business to manage all types of networking equipment in a simple, attractive modular unit. The modular design enables the installer to stack boxes using one or more joining bars to accommodate the equipment to be housed.

- Quickly installed on or within a wall in new or existing buildings.
- Supplied with a keyed lock for secure access or a slotted lock for easy access as required.
- The front cover can be fitted with the hinge to the left or right.
- Cable entry from the top, bottom or rear.
- Tailored mounting brackets, patch panels etc. can be fitted internally (ready for ONT, GTU insertion).

The required space envelope is: (w) 400mm x (d) 131mm x (h) 307mm.



Data Sheet WM054

Small Distribution Wall Box

The small distribution wall box is used to distribute fibres to up to six customer drop cables. Each customer has an individual splice tray that can house up to 4 splices (3 double splice trays - 6 customer trays plus a single element splice tray for spare fibre storage).

- Unique figure of eight locking system preventing movement of fibres where aerial input cables.
- The splice trays are hinged for easy access to fibres without disturbance to adjacent live fibre trays.
- The unit is sealed to IP55.
- The unit is supplied with a gas/water block for input cable.
- Designed for use with heatshrink splice protectors.

The required space envelope is: (w) 220mm x (d) 50mm x (h) 150mm.



Data Sheet WM060

Medium Distribution Wall Box

The medium distribution wall box is used to distribute fibres to customer drop cables. Up to 32 drop cables (3-6mm diameter) plus 4 drop cables (6-12mm) can be distributed from the box. The capacity of the unit is 168 splices (single element trays) from a butt or in-line cable. Drop cable ports are provided on top and bottom faces of the box.

- Can be supplied with single circuit trays (capacity reduced to 112 splices).
- The splice trays are hinged for easy access to fibres without disturbance to adjacent live fibre trays.
- For internal or external use (choice of colours). The unit is sealed to IP55.
- Manifolds provide easy routing of the fibres to top or bottom faces.
- Uses 1.5mm heatshrink splice protectors (capacity lower using crimp splices in single element trays).

The required space envelope is: (w) 250mm x (d) 100mm x (h) 280mm.



Data Sheet WM055

Large Distribution Wall Box

The large distribution wall box is used to distribute fibres to customer drop cables. Up to 48 drop cables (3-6mm diameter) plus 8 drop cables (6-12mm) can be distributed from the box. The capacity of the unit is 240 splices (single element trays) from a butt, loop or in-line cable. Drop cable ports are provided on top and bottom faces of the box.

- Can be supplied with single circuit trays (capacity reduced to 160 splices).
- The splice trays are hinged for easy access to fibres without disturbance to adjacent live fibre trays.
- For internal or external use (choice of colours). The unit is sealed to IP55.
- Manifolds provide easy routing of the fibres to top or bottom faces.
- Uses 1.5mm heatshrink splice protectors (capacity lower using crimp splices in single element trays).

The required space envelope is: (w) 320mm x (d) 115mm x (h) 410mm.



Data Sheet WM059

32 Way Splitter Node

The 32 way splitter node is a wall mounted unit used for distribution of fibres to customer drop cables. Up to 32 drop cables (3-6mm diameter) can be distributed from the box using the output legs of the 1 x 32 splitter. Each customer has its own individual splice tray that can house up to 4 splices. Drop cable ports are provided on top and bottom faces of the box.

- 32 splice trays (16 double), a splitter input tray & 3 single element trays for storage/splice through.
- Inherent capacity enables future PTP upgrade if required.
- The splice trays are hinged for easy access to fibres without disturbance to adjacent live fibre trays.
- For internal or external use (choice of colours). The unit is sealed to IP55.
- Manifolds provide easy routing of the fibres to top or bottom faces.

The required space envelope is: (w) 320mm x (d) 115mm x (h) 410mm.



Data Sheet WM008

MDU Wall Box

The MDU wall box enables the distribution of optical fibres within a large residential dwelling or business. There are two standard sizes of MDU wall box, covering a wide range of applications.

- Can house various passive optical splitter modules from 1x2 to 1x64 (address up to 480 customers).
- Modular system supports easy installation and system upgrade e.g. by adding splitters later.
- Optional adapter panel which can house up to 48 SC or 96 LC connections.
- Single circuit or single element trays can be used.
- The splice trays are hinged for easy access to fibres without disturbance to adjacent live fibre trays.
- Input gland for cables 8-13mm diameter, a brush option will assist with second phase cable input.

The required space envelope is: (w) 450mm x (d) 145mm x (h) 550mm or 860mm.



Data Sheet WM036

Wall Mounted Cabinets

A range of strong and robust 19" wall mounted cabinets, with sliding mounting rails front and rear. Fully vented with lockable steel framed glass doors for safety and security. The doors, which can be left or right hinged, will open to 180°. Gland plate covers and cable strain relief positions are included top and bottom. Sealed to IP20.

Additional range of wall mounted cabinets with a swing-out frame (see data sheet WM051) for related applications but to IP54. Available in 6U (380mm), 11U (600mm) and 14U (760mm) heights, all 600mm wide and 300mm deep.

- Can accommodate a range of 19" products including SRS3000 splicing, patching, splitting & storage.
- Quick release hinges provide easy access for loading equipment and cables.
- Removable side panels allow access from each side. A rear panel is included.
- Standard ventilation is supplied top and bottom. Two fans can be fitted to cool active equipment.
- Available in a range of sizes from 6U to 22U.

The required space envelope is:

6U	(w) 600mm x (d) 450mm x (h) 368mm.
9U	(w) 600mm x (d) 450mm or 600mm x (h) 501mm.
12U	(w) 600mm x (d) 450mm x (h) 635mm.
15U	(w) 600mm x (d) 450mm or 600mm x (h) 767mm.
18U	(w) 600mm x (d) 450mm or 600mm x (h) 900mm.
22U	(w) 600mm x (d) 450mm x (h) 1034mm.



Data Sheet WM013

Riser Box

The riser box is designed for use in apartment blocks and mid to high rise office blocks. It houses a single integral splice tray, allowing fibres from an in-line or butt cable to be spliced to up to 12 customer drop cables which exit the unit from the bottom. Conventional cables are secured using rubber grommets while blown fibre tube cables are plugged into bulkhead connectors.

- This compact wall mounted unit provides easy handling, allowing installation in small spaces.
- Tamperproof screws can be supplied to limit access to the splice tray.
- Designs for heatshrink or crimp splice protectors or mechanical splices (different integral splice trays).
- Cables up to 18.6mm in diameter can be accommodated.

The required space envelope is: (w) 220mm x (d) 50mm x (h) 150mm.



Data Sheet WM034

VERTICASA^{XS} Top Loop Box

The VERTICASA^{XS} Top Loop Box is designed for use in apartment blocks and mid to high rise office blocks. It is a secure box allowing the coiling and storage of extra lengths of VERTICASA^{XS} fibre modules to enable extended lengths of fibre units to be extracted at a lower level.

- Robust, rigid construction.
- Separate mandrels for simplified identification of individual bundles.
- The box does not include any splice trays; it is purely for coiling extra lengths of bundle.
- This wall mounted unit is provided with a keyed lock to prevent unauthorised access.
- The unit enables one cable of up to 15mm to enter through the centre of the base.

The required space envelope is: (w) 270mm x (d) 100mm x (h) 272mm.



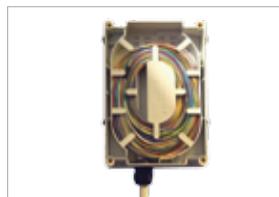
Data Sheet WM045

Riser Box Multi Tray (RBMT)

The Riser Box Multi Tray (RBMT) is designed for use in apartment blocks and mid to high rise office blocks. It houses either 8 splice trays or four with a module storage area. Each splice tray can accommodate up to 8 fusion splices or 4 mechanical splices, making a total of 64 and 32 respectively for the RBMT8 and 32 and 16 respectively for the RBMT4. Optical splitters can be accommodated.

- This compact wall mounted unit provides easy handling, allowing installation in small spaces.
- Suitable for 2 butt cables or one in-line cable up to 15mm in diameter.
- The inner tray module can slide to the left or right enabling the box to be located in either position.
- Will facilitate up to 24 drops using 5mm cables or 32 using 4.2mm drop cables.
- Will accommodate heatshrink splice protectors or mechanical splices.

The required space envelope is: (w) 130mm x (d) 60mm x (h) 176mm.



Data Sheet WM056

VERTICASA^{XS} Storage Box

The VERTICASA^{XS} Storage Box provides an alternative solution to allow the coiling and storage of extra lengths of VERTICASA^{XS} fibre modules to enable extended lengths of fibre units to be extracted at a lower level. Used in apartment blocks and mid to high rise office blocks.

- Can accommodate up to 225m of 900 micron fibre modules.
- Compact wall mounted construction. Variants available for internal or external use.
- Cable management that ensures the minimum bend radius of the fibre is not exceeded.
- The box does not include any splice trays; it is purely for coiling extra lengths of bundle.
- The unit enables one cable of up to 15mm to enter through the base.

The required space envelope is: (w) 150mm x (d) 50mm x (h) 220mm.



Data Sheet WM027

VERTICASA^{XS} Cable Protection Cover

The VERTICASA^{XS} cable system is a solution for FTTH apartment blocks or in office accommodation. It is used to provide an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes. The Cable Protection Cover is used to protect the cable where VERTICASA^{XS} fibre modules have been cut to enable extended lengths of fibre units to be extracted at a lower level.

- Simple design – top and base snap together around the in-line cable.
- Uses cable ties (included) to secure in-line cable to base unit.
- Can accommodate cables of up to 15mm with snap out ends.

The required space envelope is: (w) 24mm x (d) 27mm x (h) 90mm.



Data Sheet WM041

VERTICASA^{XS} Breakout Unit – 2 Port

The VERTICASA^{XS} cable system is a solution for FTTH apartment blocks or in offices. It is used to provide an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes. The Breakout Unit (2 port) is used to protect the cable and the drop tube (5mm) where a VERTICASA^{XS} fibre module has been extracted.

- Simple design – top and base snap together around the in-line cable.
- Uses cable ties (included) to secure in-line cable to base unit.
- The part is reversible, which allows the drop tubes to be taken out from either the left or right side.
- Can accommodate cables of up to 15mm with snap out ends.

The required space envelope is: (w) 35mm x (d) 26mm x (h) 127mm.



Data Sheet WM026

VERTICASA^{XS} Breakout Unit – 4 Port

The VERTICASA^{XS} cable system is a solution for FTTH apartment blocks or in offices. It is used to provide an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes. The Breakout Unit (4 port) is used to protect the cable and the drop tubes (5mm) where VERTICASA^{XS} fibre modules have been extracted.

- Simple design – top and base snap together around the in-line cable.
- Uses cable ties (included) to secure in-line cable to base unit.
- The part allows the drop tubes to be taken out from both left and right sides (two drops each side).
- Can accommodate cables of up to 15mm with snap out ends.

The required space envelope is: (w) 50mm x (d) 27mm x (h) 120mm.



Data Sheet WM025

VERTICASA^{XS} Internal Transition Box (ITB)

The VERTICASA^{XS} cable system is a solution for FTTH apartment blocks or in offices. It is used to provide an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes. The ITB is used to splice up to 4 drop cables where, through preference or necessity, VERTICASA^{XS} fibre modules need to be spliced.

- Simple design – top and base snap together around the in-line cable.
- Uses cable ties (included) to secure in-line cable to base unit.
- Accepts drop tubes of 5mm or conventional cables from 2.5 to 5mm.
- Splice tray can accommodate up to 4 fusion splices or two mechanical splices.
- Two versions, to accommodate cables of 12.5mm or 15mm.

The required space envelope is: (w) 80mm x (d) 32mm x (h) 100mm.



Data Sheet WM024

VERTICASA^{XS} Mechanical Splice Holder (MSH)

The VERTICASA^{XS} cable system is a solution for FTTH apartment blocks or offices. It is used to provide an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes. The MSH is used to splice fibres from VERTICASA^{XS} modules to extend the length of the drop (may be restricted extractable length available).

- Suitable for splicing together up to 2 fibres using mechanical splices or 4 using heatshrink.
- Will accept 2 x 2 fibre VERTICASA^{XS} fibre module drops or small cables (up to 6mm).
- Cover hinges for easy access.

The required space envelope is: (w) 165mm x (d) 13mm x (h) 46mm.



Data Sheet AC020

VERTICASA^{XS} Bend Managers

The VERTICASA^{XS} cable system is used in FTTH apartment blocks or offices. It provides an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes. Bend Managers are used to control the bend radius of 5mm internal drop tubes, clipping around the tube to ensure that the bend does not go below 15mm.

- Eases fibre installation where long drop lengths and multiple bends are present.
- Multi-purpose; used where the tube goes through 90° inside or outside bends.
- Also used when the tube needs to pass through a wall (where a cover is supplied).

Dimensions are 80mm (length) x 8.2mm (diameter).



Data Sheet WM042

VERTICASA^{XS} Breakout Unit – 8 Port

The VERTICASA^{XS} cable system is used in FTTH apartment blocks or offices. It provides an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes. The Breakout Unit (8 Port) is used to protect the cable and the drop tubes (only 3mm) where VERTICASA^{XS} fibre modules have been extracted.

- Simple design – top and base snap together around the in-line cable.
- It allows the drop tubes to be taken out from both left and right sides (four drops each side).
- Can accommodate cables of up to 12mm.

The required space envelope is: (w) 45mm x (d) 25.5mm x (h) 71mm.



Data Sheet AC009/022



Data Sheet AC010

VERTICASA^{XS} Tools

The VERTICASA^{XS} cable system is used in FTTH apartment blocks or offices. It provides an internal building optical fibre network with easy breakout of fibres by extracting fibre bundles from the riser cable and feeding into drop tubes.

A number of special tools have been identified and/or developed in order to maximise the efficiency and effectiveness of the installation of VERTICASA^{XS} and the product once in place.

Stripping Tools have been developed to create a longitudinal window cut into the VERTICASA^{XS} cable in order to extract the fibre modules. Their special design means that the cable elements can be exposed without any damage to the fibres. Using the dedicated adapters supplied, the breakout tool is suitable for 12, 24 and 48 fibre cables (the compact tool is used on 8-9mm cables without GRP inside the sheath).

The crimping tool is used to crimp a fibre module to the pulling rope which is used to pull fibre bundles into drop tubes (pulling rope is supplied in the drop tube).



Data Sheet WM052

VERTICASA^{XS} EMBEDDED Mini Branching Unit

The VERTICASA^{XS} Embedded cable system is a solution for FTTH apartment blocks or offices, providing an internal building optical network with easy breakout of fibres by extracting bundles from the riser cable and feeding into drop tubes. The cable is installed within the wall cavity and breakout units are located in a back box recessed in the wall. The Mini Branching Unit is used to protect the cable and the drop tube where a VERTICASA^{XS} fibre module has been extracted.

- Compact, low profile wall mounted unit with snap on cover (bottom section can be removed).
- Will accept VERTICASA^{XS} cables up to 9mm in diameter.
- There are 8 positions for 3mm drop cables or 2 positions for 5mm.

The required space envelope is: (w) 40mm x (d) 20mm x (h) 71mm.



Data Sheet WM053

VERTICASA^{XS} EMBEDDED Mini Riser Box

The VERTICASA^{XS} Embedded cable system is a solution for FTTH apartment blocks or offices, providing an internal building optical network with easy breakout of fibres by extracting bundles from the riser cable and feeding into drop tubes. The cable is installed within the wall cavity and breakout units are located in a back box recessed in the wall. The Mini Riser Box is a compact splicing box enabling the splicing of up to 6 drop cables of 2.6mm diameter to a main in-line cable.

- Compact, low profile wall mounted unit with hinged tray for easy access to fibres.
- Up to 6 fusion splices can be accommodated on the splice tray, fibre bend managed to 15mm.
- Will accept VERTICASA^{XS} cables up to 9mm in diameter.

The required space envelope is: (w) 50mm x (d) 25mm x (h) 70mm.



Data Sheet AC024

VERTICASA^{XS} EMBEDDED Secondary Manifold

The VERTICASA^{XS} Embedded cable system is a solution for FTTH apartment blocks or offices, providing an internal building optical network with easy breakout of fibres by extracting bundles from the riser cable and feeding into drop tubes. The cable is installed within the wall cavity and breakout units are located in a back box recessed in the wall. The Secondary Manifold is used to drop fibres from a multi-fibre tube to single or multi-fibre tubes while controlling bending (15mm).

- Compact, low profile wall mounted unit with snap on cover.
- Will accept input of 5mm multi-fibre tube.
- There are drop ports for 3 x 5mm multi-fibre tube and 4 x 3mm single fibre tubes.

The required space envelope is: (w) 40mm x (d) 11mm x (h) 40mm.



Data Sheet WM057

ROE - 24 Customer Distribution Wall Box

The ROE is an optical distribution box typically used in large MDUs for connecting customer cables to a building cable via optical splitters. The unit can be supplied as a plate to install inside existing internal or external wall boxes or it can be supplied already configured inside a range of plastic boxes. Supplied with four single element splice trays, providing a total capacity of 48 fibre splices.

- Can accommodate up to three splitters (1x4, 1x8 or 1x16).
- Supplied with a fixed 24 fibre SC adapter panel for network cable.
- Supplied with a hinged 24 fibre SC adapter panel for the building cable.
- For multi-operator systems, the plate can be installed with a 48 fibre SC patch panel.

The required space envelope is: (w) 220mm x (d) 90mm x (h) 240mm.



Data Sheet WM062

MDB-M24 Modular Distribution Box

The MDB-M24 is an indoor wall box, particularly for FTTH (MDU) building cabling. It allows the connection through patch panels, or directly by splices, of the external fibres feeding the MDU and the fibres from the in-building network. Also available as a 48 fibre module, they can be stacked and interconnected to increase the capacity and provide separate customer & operator modules. IP rating of 41.

- A protected central area for organising the fibres, splitters and feeds to patch panels.
- A covered right hand side, allowing access to a common patch panel of up to 24 SC positions.
- Top and bottom walls of this section are removable to allow patching between modules.
- Two cable entry ports available.

Can be configured as:

- A Patch Module: capable of managing up to 2 pre-terminated SC cables.
- A Splice Module: splice up to 24 fibres to pigtailed connected to a patch panel.
- A Splitting Module: mount 6 off 1x4 or 3 off 1x8 splitters connected to a patch panel.
- A Storage Module to manage patchcords and unused cable elements.

The required space envelope is: (w) 450mm x (d) 150mm x (h) 100mm.



Data Sheet WM064

MDB-M48 Modular Distribution Box

The MDB-M48 is an indoor wall box, particularly for FTTH (MDU) building cabling. It allows the connection through patch panels, or directly by splices, of the external fibres feeding the MDU and the fibres from the in-building network. Also available as a 24 fibre module, they can be stacked and interconnected to increase the capacity and provide separate customer & operator modules. IP rating of 41.

- A protected central area for organising the fibres, splitters and feeds to patch panels.
- A covered right hand side, allowing access to a common patch panel of up to 48 SC positions.
- Top and bottom walls of this section are removable to allow patching between modules.
- Four cable entry ports available.

Can be configured as:

- A Patch Module: capable of managing up to 4 pre-terminated SC cables.
- A Splice Module: splice up to 48 fibres to pigtailed connected to a patch panel.
- A Splitting Module: mount 12 off 1x4 or 6 off 1x8 splitters connected to a patch panel.
- A Storage Module to manage patchcords and unused cable elements.

The required space envelope is: (w) 450mm x (d) 150mm x (h) 180mm.



Data Sheet WM066

MOMI Multi Operator Modular Box Internal

The MOMI is an indoor wall box, particularly for FTTH (MDU) building cabling. It allows the connection through patch panels, or directly by splices, of the external fibres feeding the MDU and the fibres from the in-building network. These units can be stacked and interconnected to increase the capacity. IP rating of 54.

- A protected central area for organising the fibres, splitters and feeds to patch panels.
- A covered right hand side, allowing access to a common patch panel of up to 48 SC positions.
- Top and bottom walls of this section are removable to allow patching between modules.
- Four cable entry ports available.
- Can accommodate a loop for mid-span breakout.

Can be configured as:

- A Customer Module: supplied with 16 SC/APC adapters & pigtailed (a kit, not installed).
- An Operator Module: supplied with an SC patch panel.

The required space envelope is: (w) 450mm x (d) 150mm x (h) 180mm.

Accessories

Prysmian offers an extensive range of high performance optical fibre accessories that maximise the utilisation and effectiveness of the fibres to achieve strategic objectives of performance and continuity from one end of the network to the other. Supplied separately or as an essential part of an integrated product or networking solution from managing racking systems, outside plant applications or in customer end deployment, these elements can make or break the performance of the network.

As the manufacturer of interconnecting products, we recognise that the quality and reliability of pigtails, patchcords,

adapters and splitters are a pre-requisite of a successful network. Taking the opportunity to avoid the risks and costs of having to retain more skilled personnel has encouraged the on-site deployment of factory-fitted or pre-terminated solutions that can be fully quality and performance tested prior to getting on site when time and cost can be under intense pressure.

Our aim is to assist our customers to build a better network and our emphasis on product development, innovative solutions, total system performance and quality achievements are helping to create low cost enriched network roll outs across the globe.



Data Sheet AC003

Pigtails

High performance optical pigtails are a defining factor in ensuring any network performs to the highest level. An extensive range of pigtails is available for all telecom and datacom applications. All connectors have ceramic ferrules. Available in multimode (OM1 to 4 and OM4+) and singlemode (the standard is G.657.A1 although other fibres are available).

The standard length is 2 metres and the standard diameter 900 micron with easy strip buffering with other options being available.

- Can be supplied in a variety of lengths, colours and connector types e.g. SC, LC, FC, ST, DIN and E2000.
- Ultra polish (UPC) is standard with angle polish (APC) also available.
- Untuned as standard although tuned pigtails are available.
- All pigtails are fully qualified to Telcordia GR326 and IEC 61300, with all materials RoHS compliant.
- Full traceability and test certification supplied with each assembly.
- Both fibre and buffer are coloured to ensure ease of identification when stripped.



Data Sheet AC004

Patchcords

High performance optical patchcords are a defining factor in ensuring any network performs to the highest level. An extensive range of patchcords is available for all telecom and datacom applications. All connectors have ceramic ferrules. Available in multimode (OM1 to 4 and OM4+) and singlemode (the standard is G.657.A1 although other fibres are available).

Lengths available from 1 to 99 metres with the standard cable diameters 1.6, 2.0 and 3.0mm with other options being available.

- Can be supplied in a variety of lengths, colours and connector types e.g. SC, LC, FC, ST and E2000.
- Ultra polish (UPC) is standard with angle polish (APC) also available.
- Untuned as standard although tuned patchcords are available.
- All patchcords are fully qualified to Telcordia GR326 and IEC 61300, with materials RoHS compliant.
- Full traceability and test certification supplied with each assembly.
- Hybrid patchcords, with different connectors on each end, are also available.



Data Sheet AC002/019

Adapters / Shuttered Adapters

An extensive range of optical adapters are available for all telecom and datacom applications. These include shuttered adapters which contain a spring loaded door which closes automatically when the connector is not installed. All adapters have ceramic inserts.

- Can be supplied in a variety of connector types e.g. SC, LC, FC, ST and E2000 (shuttered adapters SC only).
- Ultra polish (UPC) is standard with angle polish (APC) also available.
- All adapters are fully qualified to Telcordia GR326 and IEC 61300, with materials RoHS compliant.
- Supplied in different colours to match the connector type e.g. blue for PC, green for APC.
- Both simplex and duplex adapters are available.



Data Sheet AC015

FAST – Field Installable Connectors

Field installable connectors provide a quick, simple and clean solution for on-site terminating of SC and LC connectors. The connectors provide a dual terminating solution for 0.25mm or 0.9mm diameter fibres, achieved through a “stepped” clamping method to the outer coating of the fibres. Stable optical performance is achieved through the use of V-groove mechanical splice technology.

- Connectorisation time of less than 30 seconds.
- No specialised tooling required, only standard fibre preparation tools.
- Factory polished, eliminating the need for polishing materials on site.
- SC/PC, LC/PC and SC/APC have an insertion loss of ≤ 0.4 dB for singlemode (≤ 0.2 dB for multimode).
- Return loss is ≥ 40 dB for singlemode PC and ≥ 65 dB for APC.

For datasheets or more details about all our products please visit www.prysmiangroup.com



Data Sheet AC023/007



Data Sheet AC005

Splices & Splice Protectors

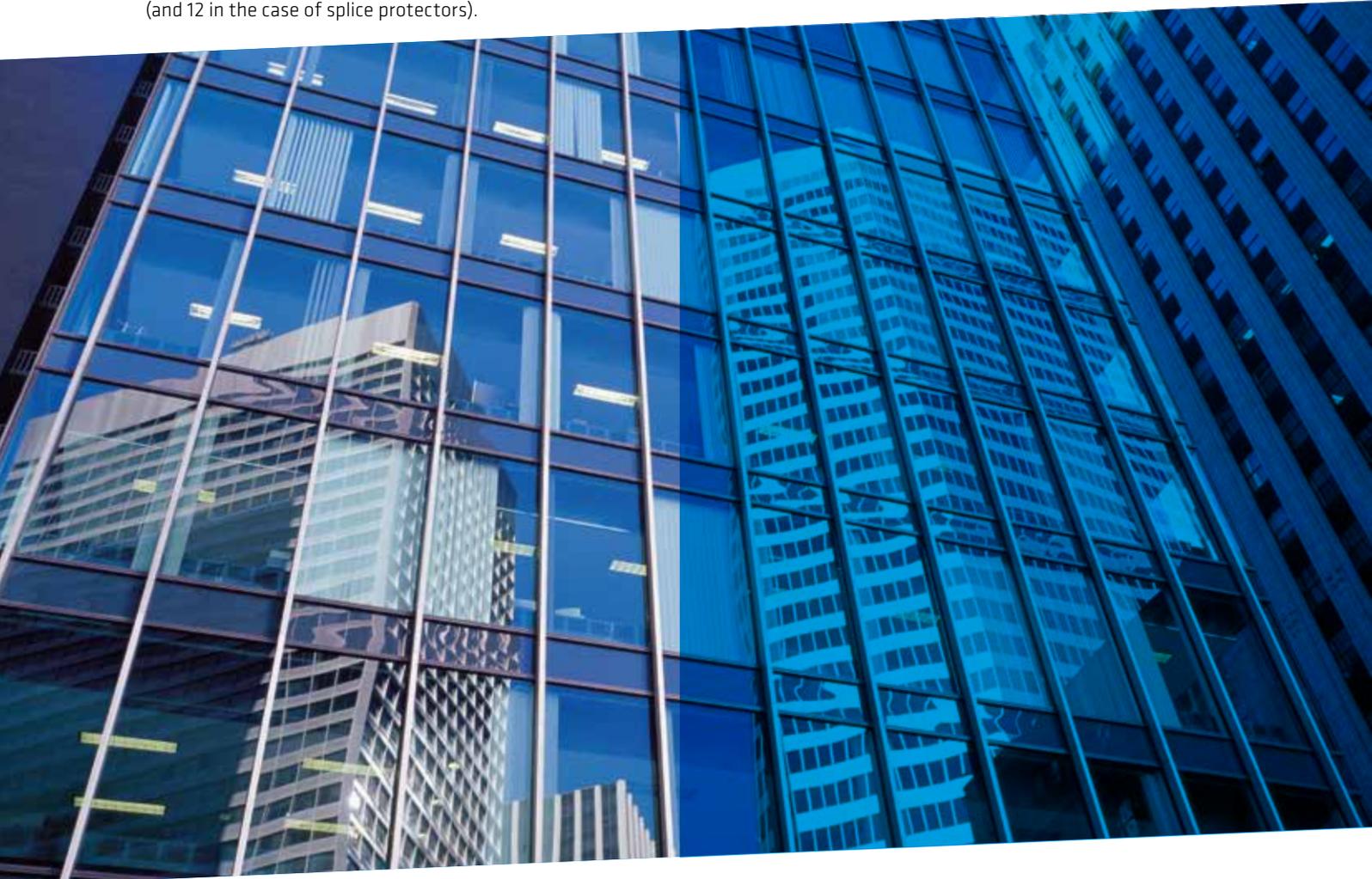
The traditional method of splicing involved the fusion of the fibres to form a single entity and this would then be protected inside a splice protector. The alternative is to use a mechanical splice, based on cladding alignment and clamping the fibres using a mechanical push-pull wedge process. Both have their advantages and disadvantages but both produce a good quality splice.

- Fusion splice protectors can be either heatshrink or mechanical crimp.
- Heatshrink protectors are made from polyolefin tube containing a steel pin and hot melt adhesive glue.
- Heatshrink protectors are available in sizes 1.3mm, 2.0mm and 2.4mm in diameter after shrinkage.
- Heatshrink protectors are available in lengths of 30mm, 45mm and 60mm.
- Crimp splice protectors are metal, 1.3mm x 3.3mm x 30mm.
- Mechanical splices are PPS with a beryllium spring clamp and silicon gel, 4mm x 4mm x 40mm.
- Mechanical splices will connect 250µm to 250µm, 900µm to 900µm or 250µm to 900µm fibres.
- Packaging is normally 50 units (and 12 in the case of splice protectors).

PLC Splitters

Using advanced planar technology, optical splitters are used to provide a compact and reliable method of splitting an optical signal. These are available with up to 64 outputs and are ideal for passive optical networks (PONs). They have excellent uniformity together with low insertion loss, return loss and Polarisation Dependent Loss (PDL).

- Can be supplied with a variety of different connector types e.g. SC, LC, FC, ST, DIN and E2000.
- All adapters are fully qualified to Telcordia GR1209 and GR1221.
- Full traceability and test certification supplied with each assembly.





Data Sheet AC027

Pre-Connectorised EPFU

The *SIROCCO*^{XS} blown fibre module EPFU (Enhanced Performance Fibre Unit) is normally supplied in 500 to 6000 metre pans and the fibre unit is cut to length as part of the installation process. In certain circumstances it may be necessary or desirable to minimise the time spent / disruption in customer premises. Pre-Connectorised EPFU avoids field termination at the customer end.

- 1,2 or 4 singlemode fibres with SC/UPC or SC/APC connectors.
- The assembly is stored on a plastic reel with a cover.
- Available in a variety of lengths from 30m to 500m.
- The end is available with connectors in parallel, staggered or re-inforced with protective tubing.
- Standard installation blowing process with EPFU fed from the reel on a spindle.



Data Sheet AC030 & AC031

Pre-Connectorised Riser Cable

Designed specifically for bringing optical fibre directly to residents in high rise apartments and offices, the heart of the *VERTICASA*^{XS} system is an optical cable construction that allows remarkably easy fibre access and breakout, reducing the demand for skilled labour. Pre-Connectorised Riser Cable takes this a step further by factory fitting some or all of the riser modules with connectors to further reduce installation time and cost.

- Cable comprises *FLEX*TUBE[®] modules, normally 4 fibre, with G.657.A2 *BENDBRIGHT*^{XS} inside.
- Cables up to 144 fibres can be supplied with a percentage of connectors pre-fitted.
- Terminated with SC/UPC or SC/APC connectors.
- 100% connectorisation to allow simple presentation of total customer network at patch panel/s.
- 4 fibre module designs may be 25% connectorised (facilitate multi-operator service provision).
- Test certificate supplied with each assembly.

Linking communications to communities

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