HellermannTyton

Last Mile Solutions

Better Technology through Innovation

MADE TO CONNECT

The Last Mile with HellermannTyton

HellermannTyton Connectivity are leaders in product innovation and development when it comes to fibre to the home and all last mile fibre applications.

With an extensive range of purpose designed and engineered products, we have a connectivity solution for every aspect of your fibre network.

From the street to the house, aerial connectivity to the building and a strong range of MDU solutions for internal applications.

Our duct manufacturing facilities allow us to offer a wide selection of sizes and bundled configurations, delivering world class connectivity from point to point and providing our customers with a one-stop-shop for all their network requirements.

Hellermann Tyton   Further information at **www.htdata.co.uk**

Working with Customers

Only through truly understanding our customers is HellermannTyton Connectivity able to deliver the perfect solution. This is achieved with direct dialogue and regular discussions to establish the best approach and suitable products to meet the needs of the project.

Drawing on years of skill and experience, HellermannTyton can provide advice, innovative ideas and ultimately the best solution for our customers. With an industry reputation for quality and reliability, HellermannTyton is a company customers can trust to deliver to their exacting requirements.

> *It's the personal approach which sets you apart from others as relationships have been built and to take the time to meet with us face to face to discuss updates and latest products shows just how much you care about your clients.*
>
> Customer Satisfaction Survey 2024

Product Design and Development

Our in-house design and development team are highly skilled and responsive. Where required, our team are able to listen to customer project needs and adapt products from our existing portfolio to provide solutions to meet the connectivity demands.

Known for our expertise and innovation, HellermannTyton will work closely with our customers to design and develop products specific to their network needs.

Product Compatibility and Ease of Use

Our products are designed for ease of use and compatibility, not only with our own products in any given application, but any other product installed in the network.

All products are supplied with detailed installation guides or with QR codes to access full installation instructions digitally from a mobile device or tablet.

All products are designed with common components providing familiarity across the range, especially fibre management trays, with our Integrated Routing (IR) system leading the way.

Our MDU series and wall boxes have a distinct design making them easily identifiable from other products on the market.

Sustainability and the Environment - Making positive differences

HellermannTyton is committed to reducing the emissions generated by our business operations, products and services, whilst actively supporting our customers to meet their sustainability ambitions.

With ISO 9001 and 14001 accreditation, HellermannTyton works tirelessly to ensure all waste is recycled where possible and anything non-recylable is disposed of in an appropriate way.

Our purpose built manufacturing facilities in Northampton have been designed to be energy efficient, minimising energy usage in areas not in use and our company vehicles are mostly electric or hybrid with multiple charging points available to employees.

We are constantly finding innovative ways to design and manufacture our products from sustainable materials with our Toby Box being one of the first of its kind to be made from recycled materials.

Fibre to the Home and Beyond

The future for FTTH (fibre to the home) and FTTP (fibre to the premises) indicates continued growth, with several trends and developments emerging as the technology advances.

Increased Deployment

As demand for high-speed internet and digital services continues to rise, there will likely be increased investment in last mile infrastructure deployment.

Governments, telecommunications companies, and internet service providers recognise the importance of reliable, high-speed connectivity for economic growth, education, healthcare, and overall quality of life.

Gigabit and Beyond

FTTH / FTTP networks will continue to push the boundaries of speed, with gigabit-per-second and even multi-gigabit-per-second connections becoming more common.

As bandwidth-intensive applications like 4K and 8K video streaming, virtual reality, augmented reality, and Internet of Things (IoT) devices become mainstream, there will be a need for faster and more robust internet connections.

Symmetrical Speeds

The trend toward symmetrical upload and download speeds in FTTH / FTTP networks is likely to continue, enabling seamless two-way communication for applications such as video conferencing, cloud computing, and remote work.

5G Integration

FTTH / FTTP infrastructure provides the high-capacity backbone for 5G networks.

As 5G networks roll out, there may be increased collaboration between fibre and wireless providers to deliver ultra-fast, low-latency connectivity to end-users.

Smart Cities and IoT

FTTH / FTTP infrastructure will play a crucial role in the development of smart cities and IoT ecosystems, providing the backbone for connected devices, sensors, and intelligent infrastructure. This will require scalable and resilient fibre networks capable of handling massive amounts of data traffic.

Technological Innovations

Ongoing research and development in fibre optic technology, such as improved fibre materials, more efficient signal processing techniques, and advances in network architecture, will further enhance the performance and capabilities of last mile networks.

Environmental Considerations

FTTH / FTTP is considered a more environmentally friendly option compared to traditional copper-based networks, as fibre optic cables require less energy to operate and have a longer lifespan.

As sustainability becomes a greater concern, FTTH / FTTP may see increased adoption as a greener alternative for broadband infrastructure.

HellermannTyton

Further information at www.htdata.co.uk

Reducing crowding and increasing curb appeal

Multi-vendor sites are seeing an ever-increasing presence of telecoms furniture that can lead to problems in crowded residential areas and poor aesthetic curb appeal.

There is a requirement to find innovative ways to reduce the footprint and clutter that telecoms equipment creates.

One of our solutions is the concept of "complete below-ground" mounting and building entry.

Optimal Solution | External Entry | Altnet
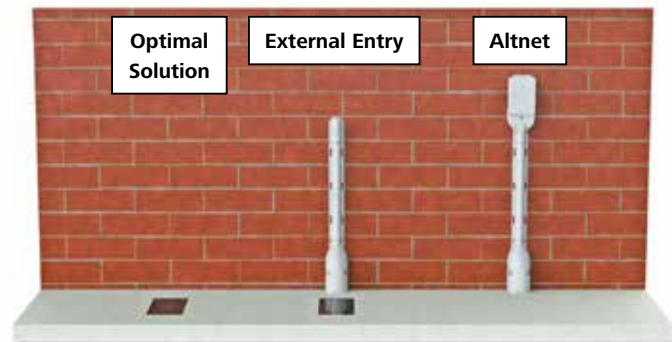
Optimal Solution

- Build includes:
  - TobyBox300
  - CEP Enclosure
- Below ground < 15m from Internal exit point
- Simple cable renewal with no disturbance
- No external furniture on show
- Aesthetically pleasing
- No drilling
- Insulation not disturbed

External Entry

- Build includes:
  - TobyBox300
  - Micro Capping Base
  - Micro Capping
  - Lead-in-Kit
- Ideal for retro-fit and Altnet installation
- CEP Enclosure housed below ground < 15m from Internal exit point or internally for Altnets
- Minimal external furniture
- Improved aesthetic

Altnet

- Build includes:
  - CEP Enclosure
  - Micro Capping Base
  - Micro Capping
  - Capping Adaptor
- CEP Enclosure Lead-in-Kit Options for existing or micro capping
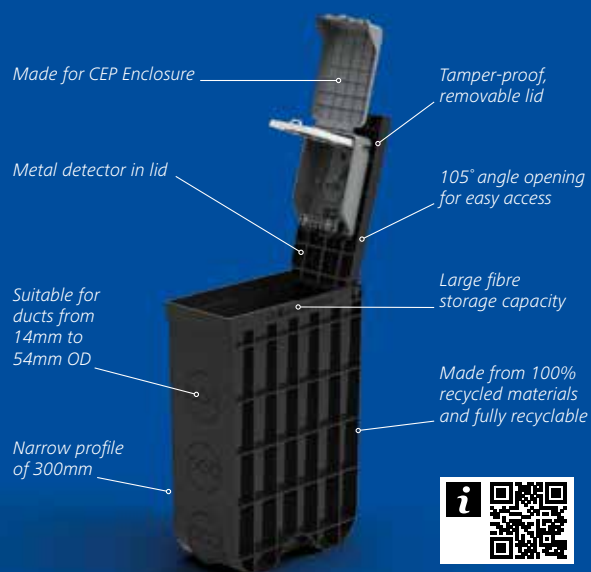- Utilises existing fixing points

TobyBox300

Small Subterranean Access Chamber

Made for housing small format broadband enclosures, the TobyBox300 is used as a demarcation point external to the connected premise in the FTTX network and also provides a maintenance or network test point.

It is located at the boundary of the property or on the curb next to the premise to prevent further trenching or digging when access is required. It has been tested to BS 5834-2-2011 Class to sustain a 5kN load.

Each side features knock out circles for two different size ducts: 14mm diameter or 54mm diameter. There is a pre-drilled drainage hole at the base to evacuate excess water.

The TobyBox300 is manufactured from non-slip black polypropylene and is 100% recycled and recyclable.

Made for CEP Enclosure

Metal detector in lid

Suitable for ducts from 14mm to 54mm OD

Narrow profile of 300mm

Tamper-proof, removable lid

105° angle opening for easy access

Large fibre storage capacity

Made from 100% recycled materials and fully recyclable

PRODUCT FOCUS

Last Mile Features and Challenges

HellermannTyton understands delivering fibre to the property requires careful planning, coordination and communication.

Our last mile solutions are designed to help overcome these challenges and provide high-quality fibre broadband connectivity in any business, shared commercial or residential environment.
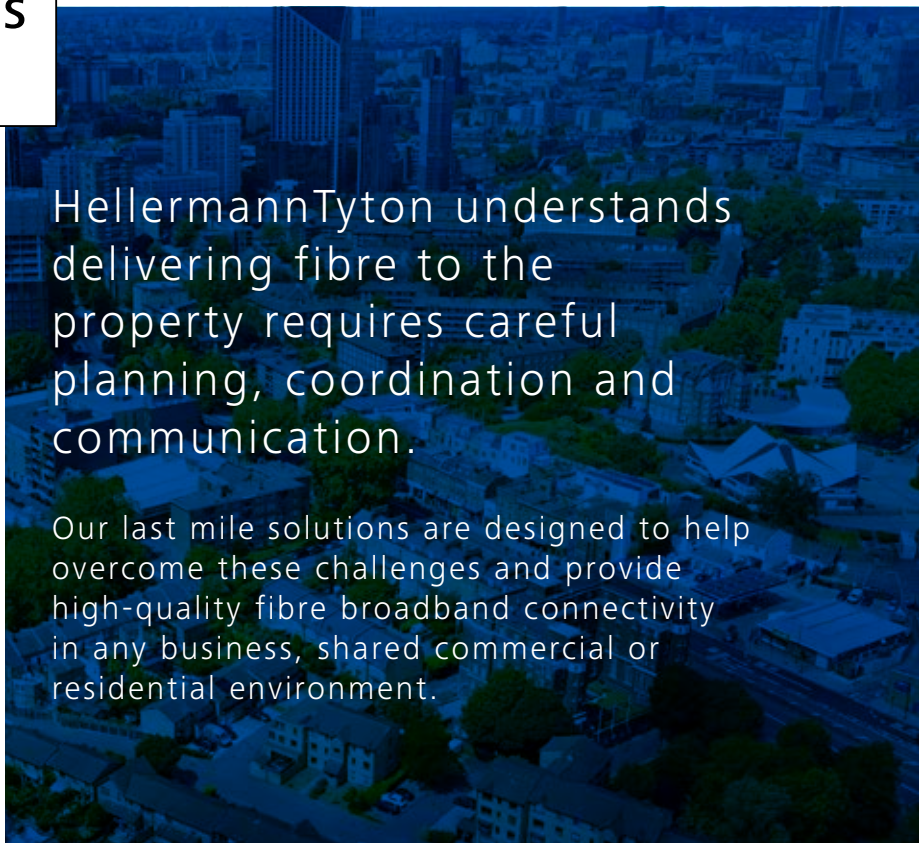
Single Dwelling Units (SDU's)

HellermannTyton have developed a range of products that offer ease and flexibility at installation, but also take into consideration the aesthetics of the property, both inside and out while understanding the internal requirements of the resident.

SDU's are residential properties designed to accommodate a single household or family unit.

An SDU will typically have direct access to the street without using a shared hallway or corridor. It can be a terraced, detached or semi-detached property where the owner or tenant is responsible for any work or maintenance on that building and any outdoor space attached to it.
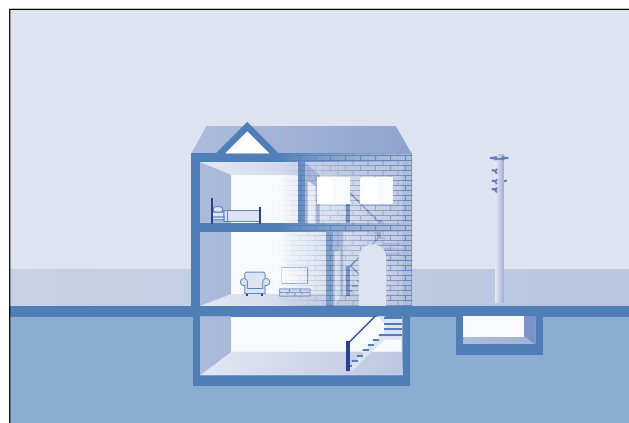
Challenges

When delivering fibre to a SDU, installers may encounter several challenges:

- Access issues
- Homeowner permission
- Interior wiring
- Home construction and layout

- Customer expectations
- Regulatory and permitting requirements
- Environmental factors

HellermannTyton   Further information at **www.htdata.co.uk**

Multi Tenant Units (MTU's)

An MTU can present additional complexities in product selection and deployment due to the multi-use nature of this type of property. The infrastructure may need to consider both commercial and residential use and therefore needs to offer flexibility, functionality and security. HellermannTyton have designed a range of connectivity solutions to provide exactly that.

MTU's can refer to a range of property types like townhouse conversions and uses including residential, commercial or industrial buildings that are divided into multiple rental spaces, each occupied by a different resident or tenant.

Landlords of MTU's are responsible for managing the property, maintaining common areas, and ensuring that facilities and services meet the needs of tenants.

Challenges

When delivering fibre to a MTU, installers encounter specific challenges due to the shared nature of the property and the presence of multiple tenants or businesses:

- Access and permission
- Shared infrastructure
- Tenant coordination
- Tenant compliance
- Aesthetic considerations

- Interior wiring and infrastructure
- Service interruptions
- Regulatory compliance

Multi Dwelling Units (MDU's)

HellermannTyton offer a full range of MDU solutions, designed with scalability in mind. From the smallest shared building to the largest apartment complex, you will find a suitable product to meet the capacity demands of your project. Whether it's a single floor or multi-floor installation, HellermannTyton have the best solution to deliver fibre from the street to the property with all the connectivity needed in between.

MDU's refer to residential buildings or apartment complexes that contain multiple separate living spaces within a single structure.

These units are designed to accommodate multiple households or individuals while sharing common areas such as hallways, entrances, and sometimes amenities like car parking. MDU's are commonly found in urban areas where space is limited, and population density is high.
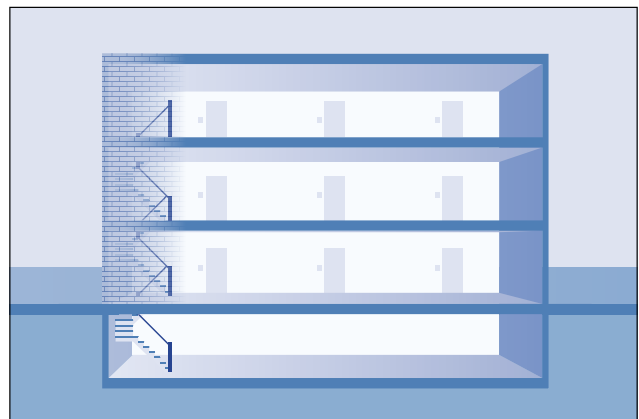
Challenges

When delivering fibre to a MDU, installers encounter unique challenges due to the variety of scale of the property and the presence of multiple tenants or homeowners:

- Access restrictions
- Limited space
- Complex infrastructure
- Coordination with property management

- Tenant communication
- Aesthetic considerations
- Service interruptions
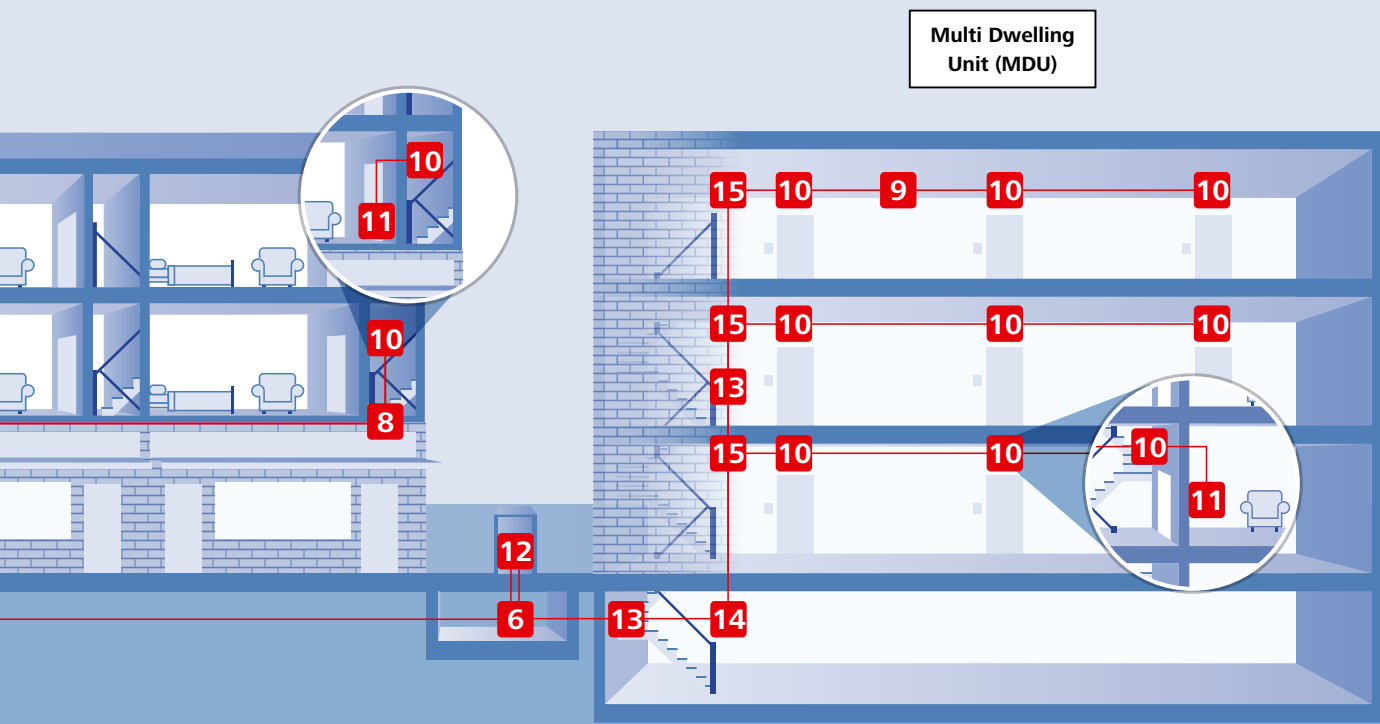- Regulatory compliance

Fibre Connectivity, Whatever the Property...

Multi Tenant Unit (MTU)

Single Dwelling Unit (SDU)
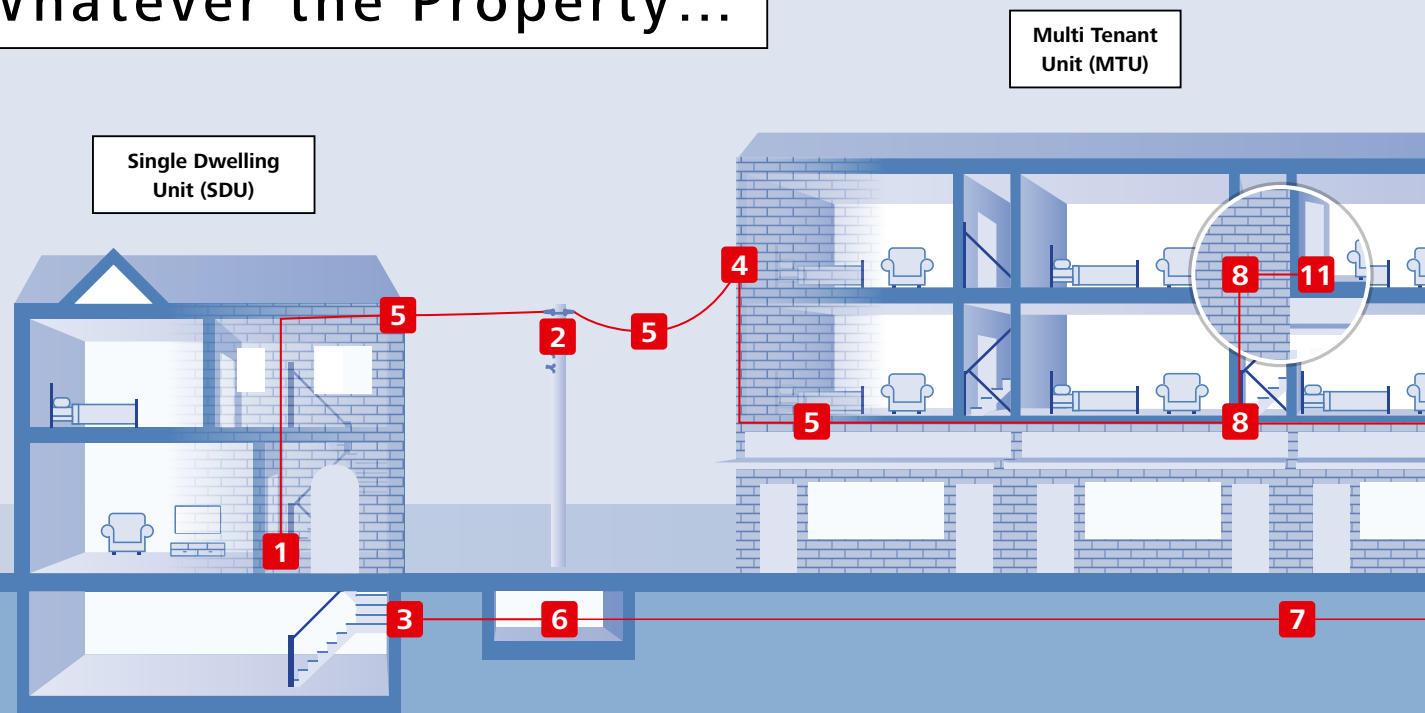
This diagram showcases all products and their potential installation locations (numbered **1** to **15**) within various configurations.

Repeated numbers indicated where products can be used in more than one location. (Refer to pages 10-20 for product information)

1

Customer Wall Box (CWB)

Customer Connection Enclosure (CCE)

Customer Entry Point (CEP)

Building Entry Point Accessories

2

Aerial Fibre Node (AFN)

Fibre Façade Enclosure (FFE)

Pole/Wall/Façade Mounting Brackets

3

TobyBox300

4

Multi Customer Connection Enclosure (MCCE)

5

Drop Cable & Accessories

6

CFN

FRBU

FDN

Dome Closure Wall/Pole/ Mobra Mounting Kits

7

External Duct & Accessories

8

Customer Connection Point (CCP)

Micro Compact Distribution Node (MCDN)

Multi Dwelling
Unit (MDU)

9

Indoor Corridor Cable

Internal Ruggedised
Cable

10

Internal Corridor Box
(ICB)
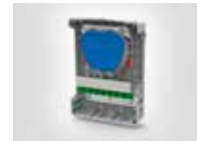
11

Fibre Wall Outlet
(FWO)

Faint Fibre Outlet
(FFO)

12

Street Cabinet

13

Internal Duct &
Accessories

14

MDU S3

MDU S4

MDU S5

15

MDU S1XS

MDU S1

MDU S2 / S2XL

Wall/Façade Mounting
Brackets

Find the right product

Our fibre connectivity solutions are compatible with almost any fibre network design. If you can't find the exact product to meet your needs, don't worry our extensive range will have the right solution for you.

Scan for more applications online.

1 CWB - Customer Wall Box

The CWB is an SDU Building Entry Point (BEP) providing a fibre termination and demarcation point external to the connected premise in a Fibre to the Home (FTTH) network. A customer drop cassette houses up to 2 x LC DX/SC SX adaptors. A module with inner and outer fibre storage allows for the management of excess fibre.

Colours available: ■ ■ ■

Features and benefits

- Max. 4 customer connections
- 6 x Ø 8mm or 3 x Ø 10mm inbound / outbound ports
- Inner storage: 30m of Ø 1.2mm or 10m of Ø 3mm Outer storage: 5m of Ø 5mm
- Up to 4 x 3A splices
- Through the wall capability

- IP54 and IK07 Rating
- Tamper-proof
- Separation of inbound fibre from connectorised drop cables
- UV Stable
- 198 x 154 x 44mm (HxWxD)

CWB shown open with cassette fitted with 2 x LC/APC DX adaptors.

1 CCE - Customer Connection Enclosure

The Customer Connection Enclosure (CCE) is a Building Entry Point (BEP) to provide a fibre termination and network demarcation point external to the connected premise in a Fibre to the Home (FTTH) network. The CCE houses up to 2 x LC DX/SC SX adaptors. In addition to providing an external test point the enclosure will also store excess fibre.

Colours available: ■ ■

Features and benefits

- Max. 4 customer connections
- 6 inbound / outbound ports
- Fibre storage of 50m of Ø 1.1mm cable
- Up to 4 x 3A splices
- Through the wall capability
- Loop through facility

- IP54 and IK07 Rating
- Tamper-proof
- UV Stable
- 263 x 130 x 37mm (HxWxD)

CCE shown open with 2 x LC/APC DX adaptors.

1 CEP - Customer Entry Point

The CEP is a splice only external building entry point which provides access to the FTTH network external to the customer property.

Designed to be housed inside the TobyBox300 or mounted on a wall / façade, its compact size reduces the physical footprint of the enclosure on the property whilst maintaining all the functionality of a larger enclosure.

A wide range of accessories have been developed for the CEP. See page 11 for more information.

Colours available: ■ ■ ■

Features and benefits

- Max. 2 customer connections
- 2 inbound / 2 outbound ports
- Up to 2 x 3A splices
- Through the wall capability
- Physical separation of the fibre storage area

- IP55 and IK07 Rating
- Snap on lid
- UV Stable
- 125 x 81 x 33mm (HxWxD)

CEP Enclosure shown open with splice tray up.

1 Building Entry Accessories

The UV stabilised Lead-in-Kit has been designed to hide and protect the fibre when it bends to enter the customer property.

The 500mm Micro Capping is a narrow and discreet capping with multiple fixing points. It protects and hides any cables up to 20mm OD.

The Micro Capping Base has a wider base which covers Duct 56 access holes and protects from water and debris ingress.

The CEP Adaptor clips on at the base of the CEP enclosure to provide protection of fibre between the Micro Capping and the enclosure.

Colours available: ■ ■ ■

Features and benefits

- Positive fibre management via cable retention guides
- Discreet, façade mounted solution
- Range of colours
- UV Stable
- Designed to clip together
- Improves building aesthetics

Top left: Lead-in-Kit shown in Grey.
Top right: Micro Capping shown in Brown.
Bottom left: Micro Capping Base shown in Black.
Bottom right: CEP Adaptor shown in Grey.

2 AFN - Aerial Fibre Node

The AFN has been designed for deployment within the last mile of the FTTX network. This external enclosure can be used within a P2P (Point to Point) or P2MP (Point to Multi Point) network with the addition of connectorised PLC splitters or pigtails and adaptors.

The 24 drop AFN fits up to 24 LC / SC SX adaptors, whilst the 32 drop AFN accepts up to 8 LC QD adaptors. The hinged tray allows quick and clear access to the internal fibre for splicing and termination.

Colours available: ■ ■

Features and benefits

- Max. 32 customer connections
- 4 inbound / 24 outbound ports
- Fibre storage of 4m of Ø 7mm Ultra Light Weight cable
- Up to 48 x 3A or ANT splices
- PLC splitter accommodation (60mm x 7mm x 4mm)
- IP55 and IK08 rating
- Pole or building / façade mounted
- Separation of inbound fibre from connectorised drop cables
- UV Stable
- 342 x 177 x 90mm (HxWxD)

Main image left: AFN shown from front.
Top right: AFN 32 Way showing fibre splice management tray.
Bottom right: AFN 24 Way showing drop cable management tray.

2 FFE - Fibre Façade Enclosure

The FFE has been designed to provide an building / façade or pole mounted fibre connection point. This enclosure can be used within a P2P or P2MP network with the addition of connectorised PLC splitters or pigtails and adaptors.

The FFE accommodates up to 12 SC or LC Simplex adaptors. The external enclosure has 3 separate management areas for inbound cable, fibre splice management and drop cable (customer connection) management.

Colours available: ■ ■

Features and benefits

- Max.12 customer connections
- 4 inbound / 12 outbound ports
- Fibre storage of 1.5m of Ø 7mm cable
- Up to 24 x 3A or ANT splices
- PLC splitter accommodation (60mm x 7mm x 4mm)
- IP55 and IK08 Rating
- Pole or building / façade mounted
- Separation of inbound fibre from connectorised drop cables
- UV Stable
- 241 x 154 x 72mm (HxWxD)

FFE shown open with 12 x LC/APC SX adaptors.

2 Pole / Wall / Façade Mounting Brackets

A range of wall and pole mounting brackets have been designed to accommodate the FFE, the AFN or both enclosures.

Single Enclosure: there are 3 'single enclosure' mounting brackets, both offering cable or duct anchoring and fibre storage at the rear.

Multiple Enclosures: there are 2 mounting brackets that have been designed to be able to support more than one enclosure.

Features and benefits

- Extensive range of brackets
- Drop cable management for aerial applications
- Multiple enclosures brackets maximise space on the pole
- Small footprint

Pole/façade mounting bracket designed for use with AFN.

3 TobyBox300

Made for housing small format broadband enclosures, the TobyBox300 is used as a demarcation point external to the connected premise in the FTTX network and also provides a maintenance or network test point.

It is located at the boundary of the property or on the curb next to the premise to prevent further trenching or digging when access is required.

Colours available: ■

Features and benefits

- Mounting point for Customer Entry Point (CEP)
- Self-venting
- Narrow profile with a 300mm depth
- Tamper-proof lid
- Secured lid with a 105° angle
- Suitable for ducts from 14mm to 54mm OD
- Sustains a 5kN load BS 5834-2-2011
- Includes drainage hole
- UV Stable
- 207 x 100 x 300mm (LxWxD)

TobyBox300 shown with CEP in lid.

4 MCCE - Multi Customer Connection Enclosure

Designed for external deployment within the last mile of the FTTx network, the MCCE can used within a P2P or P2MP network with the addition of PLC splitters, connectorised or bare end, pigtails and adaptors.

The MCCE manages up to 6 LC DX/SC SX adaptors and has features to secure a maximum of 30 fibre splices. The hinged tray allows quick and clear access to the internal fibre for splicing and termination.

Colours available: ■ ■

Features and benefits

- Max. 12 customer connections
- 6 x Ø 8mm or 3 x Ø 10mm inbound / outbound ports
- Up to 30 x 3A or ANT splices
- Optional PLC splitter bridges (60mm x 7mm x 4mm)
- IP54 and IK07 Rating
- Tamper-proof
- Slim Profile
- UV Stable
- 233 x 135 x 37mm (HxWxD)

MCCE shown with 6 x LC/APC DX adaptors.

5 Drop Cable and Accessories

The single fibre drop cable has been specially designed for overhead installations or for installing cable routes on façades for a maximum span of up to 70m. It is also suitable for pulling into ducts.

The metal bracket is a triangular anchor bracket and works in conjunction with the aerial drop cable clamp.

The aerial drop cable clamp can be installed directly on the pole hardware with opening bail and integrated cable tie.

Features and benefits

- Pre-connectorised cable for ease of installation
- Range of pre-cut lengths available
- Max. aerial span 70m
- Approved for use in OpenReach PIA network
- Metal bracket used where no available pole hardware exists
- Direct install UV rated thermoplastic clamp

Main image left: Single fibre aerial drop cable.
Top right: ADC-BRACKET22 metal cable anchor bracket.
Bottom right: ADC-CLAMP-3-4MM aerial drop cable clamp.

6 CFN - Compact Fibre Node

The CFN closure range offers an underground solution for a wide range of FTTX applications for both P2P and P2MP topologies. The CFN 27 port IR closure is supplied with a UV stable polypropylene base. The base configurations accommodates a cable diameter range of 1.7-20.0mm when using mechanical Cablelok seals. The closure can be supplied in a splice or connectorised format providing a solution for a broad range network designs.

Mounting brackets available. See page 14 for more information.

Features and benefits

- Max. fibre splice capacity 288 SE-IR 3A splices (M-length)
- Max. 24 LC connectorised drops
- Fibre storage basket for loop through applications
- Bi-directional routing
- Max. of 12 CFN SE trays or 24 CFN SC-B trays (M-length)
- Off-tray PLC splitter accommodation
- Cablelok compatible ports
- MOBRA, pole and façade fixing with closure mounting points
- Conforms to EN 50411and EN 61753

Left: CFN 27 port M-length shown with SC-B trays.
Right: Connectorised CFN 27 port S-length shown with 2 x SE-IR trays and 1 x connectorised tray with LC/APC QD adaptors.

6 FRBU - 16 Port

The FRBU is an IP68 rated sealed dome closure which offers 16 drop ports for cables or duct up to 9.5mm in a smaller footprint than the FDN or CFN dome closure. The FRBU can be supplied in splice or connectorised formats and the mechanically sealed base provides an IP68 seal. The versatility of this closure provides a P2P or P2MP solution which fits into a wide range of network designs.

Mounting brackets available. See page 14 for more information.

Features and benefits

- Max. fibre splice capacity 144
- Max. 16 LC connectorised drops
- 16 round ports and 1 oval port
- Suitable for underground or pole mounted
- Fibre storage basket for loop through applications
- Base mounting features allowing in-situ installation and maintenance
- Cablelok compatible ports
- Conforms to EN 50411and EN 61753

Left: FRBU 16 port B-length closure shown with Hellapon Medium trays.
Right: FRBU 16 port connectorised M-length closure shown with Hellapon Small trays and LC/APC QD adaptor plate.

6 FDN - 59 Port

The FDN fibre splice closure delivers fibre to individual buildings or properties. The FDN is an oval shaped fibre closure with a high drop count making it the ideal solution for built up areas where there are multiple buildings to service.

The closure can be supplied in a splice or connectorised format providing a solution for a broad range network designs.

Features and benefits

- Max. fibre splice capacity 432 SE-IR 3A splices / 864 SC-B 3A splices
- Wide range of splice options including ANT/Ribbon and 6A
- Max. 48 LC connectorised drops
- IR and connectorised configurations

- Optional fibre storage for loop through applications
- Available in multiple lengths
- Cablelok compatible
- Conforms to EN 50411and EN 61753

FDN-IR 59 Port AB Length closure shown with 12 x SE-IR MKII splice trays and basket.

6 Dome Closure Wall/Pole/Mobra Mounting Kits

A range of mounting bracket kits are available for use with the HellermannTyton dome closures. The kits are designed to allow closures to be mounted in a pit using a Mobra Pit Arm or onto a Wall or Pole.

The mounting bracket is attached to the base allowing the cover to be removed and the closure to be worked on whilst in situ. The brackets simple design makes them quick and easy to install.

Features and benefits

- Simple design, easy to install
- Lightweight

- Cover can be removed, allowing the closure to be worked on whilst in situ
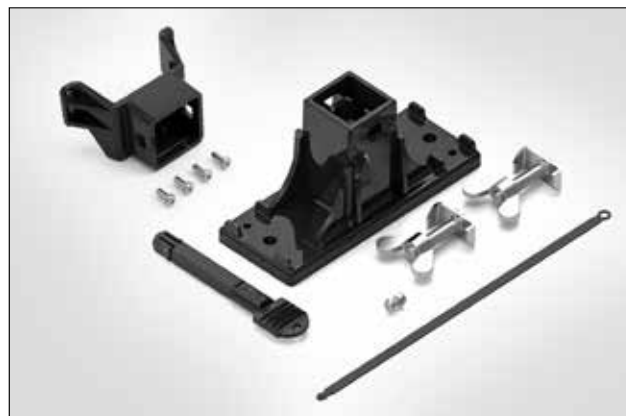
FBRU 16 Port Mobra Bracket kit shown.

7 External Duct and Accessories

A range of duct suitable for use in direct burial or sub-duct applications with a complete range of microduct and accessories. Our range of direct buried and sub-duct comes in both single or bundled options with an extensive range of connectors, end caps and gas seals designed for all stages of your network build.

A comprehensive range of accessories are also available in our internal duct range.

Features and benefits

- Direct burial or sub-duct
- Single or bundled duct
- Accessories include end caps, gas seals and connectors
- Duct diameter ranges include; 7, 8, 10, 12, 14, 16, 18, 20 and 25mm

- Available in a range of lengths and colours
- Conforms to BS EN 61386 and BS EN 60794-5
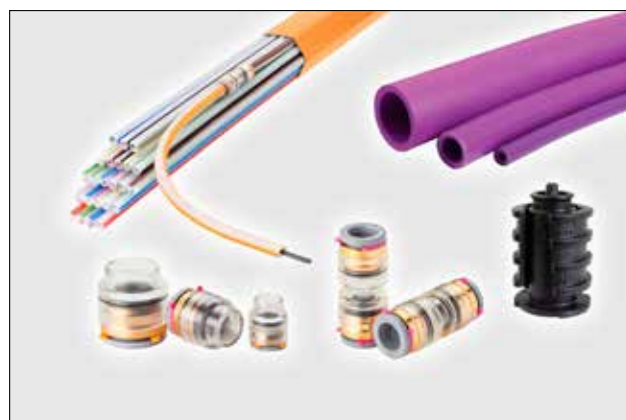
Single, bundle duct, sealing elements including end caps, connectors and divisible EZA-t - gas / cable seals.

8 CCP - Customer Connection Point

The CCP range offers different sizes and port configurations of external building entry points with high IP rating (IP68). This allows flexibility for the CCP as they can either been buried in a small chamber or wall-mounted.

Can be used with TobyBox300. See page 12 for more information.

Colours available: ■ □

Features and benefits

- Max. 4 customer connections
- Up to 5 cable entry points
- Variety of seals for cable diameter of 2.2mm - 8.0mm
- Up to 4 x 3A or ANT splices
- Through the wall capability
- Optional PLC splitter bridges (60mm x 7mm x 4mm)

- IP68 and IK08 rating
- Hinged tray or removable cassette version
- Gortex breather to prevent moisture condensation
- UL-94 V0 / UV Stable
- Available in a range of sizes

Top left: CCP shown in White and Black.
Top right: CCPC with removable cassette.
Bottom left: CCP XL 2 Port Inline.
Bottom right: CCP XT 4 Port with hinged tray.

8 MCDN - Micro Compact Distribution Node

The MDCN is a compact hardened connector enclosure which is suitable for underground and aerial applications: it has been designed to be used in areas where space is at premium and speed of installation is important. The MCDN is available in 7 base configurations to manage IP9 SN or SC connections and bayonet connections.

Colours available: ■

Features and benefits

- Max. 4 customer connections
- Simplex, duplex and multi-fibre interface options
- Variety of seals for bayonet connection
- Up to 12 x 3A or ANT fibre splices
- Optional PLC splitter bridges (60mm x 7mm x 4mm)

- IP68 and IK08 Rating
- Gortex breather to prevent moisture condensation
- Pass through facility
- UV Stable
- 151 x 97 x 35mm (HxWxD)

MCDN shown with 4 x IP9 ports and 2 x bayonet ports.

9 Indoor Corridor Cable

The Indoor Cable is available in 2, 4, 8 or 12 core bare end 500m drums or in a pre-terminated LC/APC or SC/APC fanout design. It is a B2ca compliant fibre cable. It exists in 2 or 4 fibre with a diameter of 2.3mm or in 8 or 12 fibre with a diameter of 2.8mm.

Designed to service four or twelve apartments within a multi tenant or multi dwelling unit environment, the cable has been specifically chosen to facilitate rapid deployment for efficient customer connections.

Features and benefits

- 2.3mm or 2.8mm (outer diameter)
- G.657.A2 fibre (B3 on request)
- 2, 4, 8 or 12 fibre
- For use as a flame retardant cable indoors

- Metal-free cable with central loose tube
- Operation and installation temperatures -10°C to 60°C
- Cable contains a ripcord for easy mid-span access
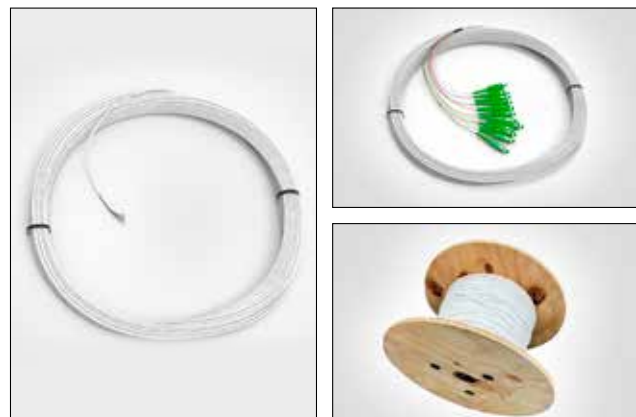
Main image left: 12 fibre bare end.
Top right: 12 fibre SC / APC SX fan out.
*Bottom right: 12 fibre 500m drum.*

9 Internal Ruggedised Cable

The Internal Ruggedised Cable is available in a 1 core, 2 core or 4 core. It is a B2ca compliant 4.8mm diameter fibre cable.

It is designed to work with the HellermannTyton family of MDU solutions and facilitates rapid deployment for efficient customer connections. Ideal for extended runs.

Features and benefits

- 4.8mm (outer diameter)
- G.657.A2 fibre
- 1, 2 or 4 fibre
- Bare end, pigtail or patch lead design with SC or LC connectors
- Durable cable
- Operation and installation temperatures -40°C to +80°C
- Cable contains 2 ripcords for easy mid-span access
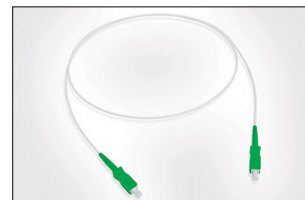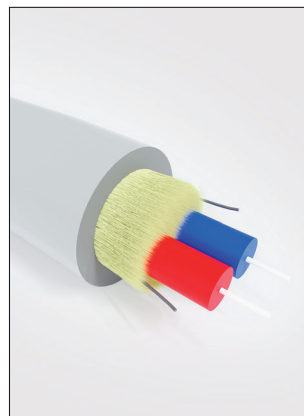
Main image left: 2 fibre bare end cable.
Top right: 1 fibre SC / APC SX pigtail.
Bottom right: 1 fibre SC / APC SX patch lead.

10 ICB - Internal Corridor Box

The ICB provides a connection point within the MTU/MDU environment. The enclosure allows a multi-fibre cable up to 2.8mm or internal duct up to 5.0mm (max. outer diameter) to be routed along a corridor. Up to 2m of cable can be stored inside the box (or 3m if stripped back fibre).

The midspan capability allows one fibre to be dropped off at each customer location allowing the remainder of the cable to feed additional customer connections.

Range of accessories available. See page 20.

Colours available: ☐

Features and benefits

- Max. 4 customer connections
- Up to 12 x 3A or ANT splices
- Small, low-profile design
- 4 corner cable access points
- Through the wall capability
- IP20 and IK07 rating
- Clipped on cover
- UL-94 V0 Rating
- 66 x 144 x 15mm (HxWxD)
- Multi operator version
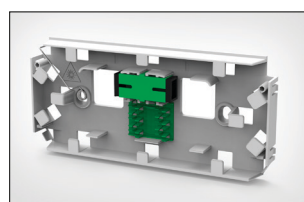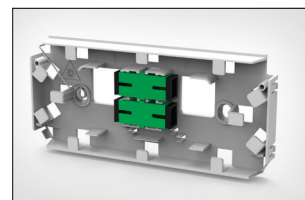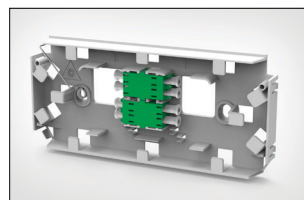
Top left and right: ICB with 2 adaptors (multi operator).
Bottom left: ICB with 1 adaptor and 1 splice bridge (3A).
Bottom right: ICB shown with cover.
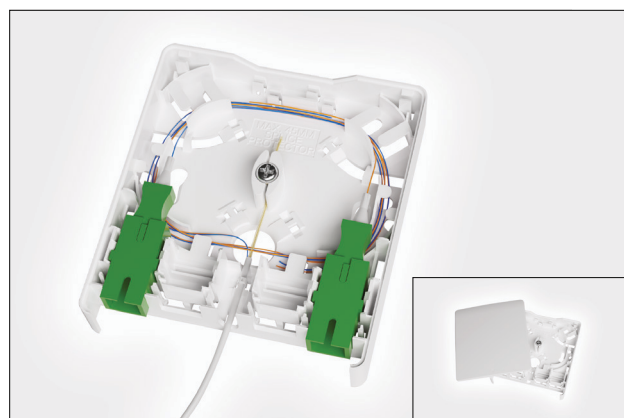
11 FWO - Fibre Wall Outlet

The FWO is a single gang socket size outlet. The outlet has cable entry positions at the base, rear and on each side. Designed with fibre management features which ensure a 30mm minimum bend radius and cable tie fixings at all entry ports to provide strain relief.

Available in 3 configurations: Pre-terminated connector to bare end connection cable, adaptors and pigtails and unloaded. Accommodates up to 4 x LC DX or SC SX adaptors.

Colours available: ☐

Features and benefits

- Max. 8 customer connections (pre-terminated solution only)
- Up to 4 x 3A splices
- Safety features to restrict connector / adaptor removal
- IP20 and IK07 rating
- G657.A1 fibre
- UL-94 V0 Rating
- 96 x 86 x 21mm (HxWxD)

Fibre Wall Outlet shown with SC/APC SX adaptors and pre-terminated cable.

11 FFO - Faint Fibre Outlet

The FFO is a single gang socket size outlet, with a built-in fibre spool of 30m pre-terminated white fibre that can be run within the property.

The outlet allows you to re-position an existing hub / router or ONT connection within your home, providing added flexibility and better wi-fi coverage.

A fixing kit with internal and external corner bend managers, hole plugs and caps allows the fibre to be safely routed along skirting, doorways and through walls. Accommodates 1 x LC DX or SC SX adaptor.

Colours available: ☐

Features and benefits

- Up to 30m of pre-terminated 600µm fibre
- Minimal tools required
- Safety features to restrict connector / adaptor removal
- IP20 and IK07 rating
- G657.A2 fibre
- UL-94 V0 Rating
- 96 x 86 x 24mm (HxWxD)

Faint Fibre Outlet with LC/APC DX adaptor and 30m spool of 600µm pre-terminated fibre.

12 Street Cabinets

Our fibre street cabinets and backboards are designed to provide, quick installation, simple connectivity, flexibility and scalability in your network.

Utilising the HellermannTyton Integrated Routing system, the street cabinet and backboards can be configured for both PON and P2P applications with the amount of splice trays or connectors needed for your install.

With fibre entry and exit options, the street cabinets can be positioned throughout the fibre network at primary and secondary distribution points.

Features and benefits

- Positive fibre management throughout
- Support for 250µm and 900µm fibre routing and management
- Fibre storage basket for loop through applications
- Modular construction allows for the design of customised build and grow networks
- Quick and easy installation of additional trays / drop patch modules

Example of a street cabinet with a polycarbonate backboard.

13 Internal Duct and Accessories

A range of duct suitable for internal applications with a complete range of accessories. Our internal duct is a single duct with an extensive range of connectors, end caps and gas seals designed for all stages of your internal network build.

HellermannTyton's indoor duct solutions have been specially designed for an in-building air blown application. Manufactured from special low smoke fire hazard material, the internal duct range conforms to international standards.

Features and benefits

- White duct for internal use
- Accessories include end caps, gas seals and connectors
- Duct diameter ranges include; 4, 5, 7, 10, 12 and 14mm
- Available in a range of lengths
- Conforms to IEC 61386-22, IEC 60684-2, IEC 61034-2, IEC 60332-1-2, DIN EN 13501-1 and UL2024

Internal single duct, sealing elements including connectors and end caps.
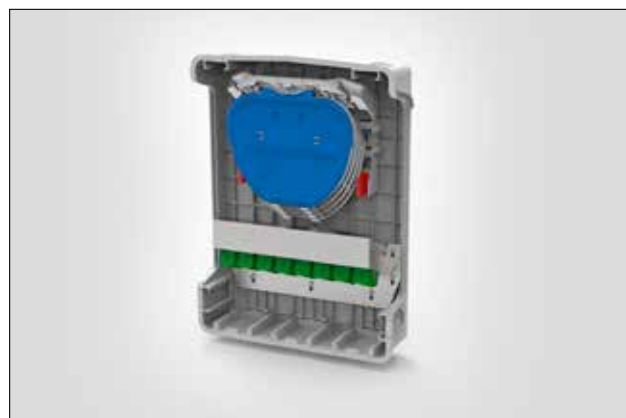
14 MDU - S3

The S3 is a versatile splice only or pre-connectorised enclosure able to be scaled from 24 customer connections up to 64, which makes it ideal as the first phase in multi-floor fibre distribution. It is suitable for both internal and external applications. This enclosure can be used within a P2P (Point to Point) or P2MP (Point to Multi Point) network with the addition of connectorised PLC splitters or pigtails and adaptors. Easy installation to corridor walls, either above or below the ceiling level as well as in MDU risers or comms cupboards.

Mounting brackets available. See page 20 for more information.

Colours available: ▪

Features and benefits
- Max. 64 customer connections
- Up to 48 x 3A or ANT splices
- 4 x SE-IR or 8 x SC-B trays
- Works with 2, 4, 8 or 12 way corridor cable (see page 15/16)
- IP54 and IK08 rating
- UL-94 V0 / UV Stable
- 340 x 247 x 76mm (HxWxD)

S3 shown with 16 x LC/APC QD adaptors.

14 MDU - S4

The S4 is a wall or façade mounted enclosure that offers the adaptability of a P2MP or P2P configuration. It is suitable for both internal and external applications. The enclosure can be supplied in a splice only configuration or as a connectorised version with the addition of connectorised PLC splitters or pigtails and adaptors.

The S4 provides a flexible solution at the first phase in multi-floor fibre distribution. The S4 offers ease of installation, fast customer connection and scalability for future subscribers.

Mounting brackets available. See page 20 for more information.

Colours available: ▪

Features and benefits
- Max. 48 customer connections
- Up to 240 x 3A or ANT splices
- 10 x SE-IR or 20 x SC-B trays
- Range of network and drop cable accessories
- IP54 and IK08 Rating
- Optional internal loop storage basket
- UL-94 V0 / UV Stable
- 470 x 307 x 147mm (HxWxD)
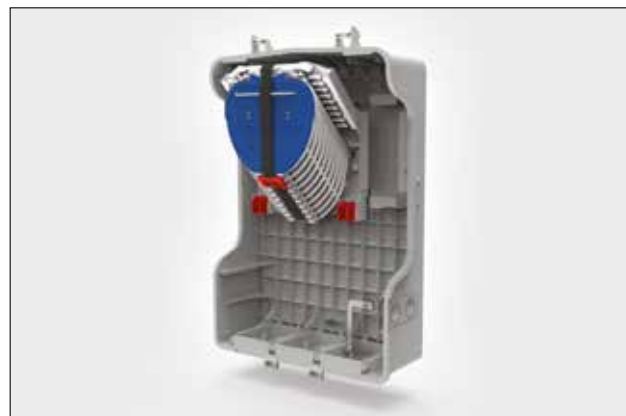
S4 shown in a splice only configuration with 10 x SE-IR MKII trays and internal loop storage.

14 MDU - S5

The S5 offers the adaptability of a P2MP or P2P configuration. It is suitable for both internal and external applications. The enclosure can be supplied in a splice only configuration or as a connectorised version with the addition of connectorised PLC splitters or pigtails and adaptors. An angled connector plate fits 24 LC quad or 12 SC duplex adaptors.

Easy installation in Multi Dwelling Unit basements or comms cupboards.

Mounting brackets available. See page 20 for more information.

Colours available: ▪

Features and benefits
- Max. 96 customer connections
- Max. 432 fibre splice only
- 18 x SE-IR or 36 x SC-B trays
- Range of network and drop cable accessories
- IP54 and IK08 Rating
- Optional internal loop storage basket
- UL-94 V0 / UV Stable
- 568 x 375 x 165mm (HxWxD)

S5 shown with 24 x LC/APC QD adaptors.

HellermannTyton   Further information at **www.htdata.co.uk**

15 MDU - S1XS

This versatile internal enclosure can be used within a P2P or P2MP network with the addition of PLC splitters, connectorised or bare end, pigtails and adaptors. The S1XS manages up to 6 LC duplex / SC simplex adaptors on a hinged tray and has multiple splice capability of a maximum of 30 fibre splices, as well as mechanical fixing points for strain relief.

Easy installation to corridor walls, either above or below the ceiling level.

Mounting brackets available. See page 20 for more information.

Colours available:

Features and benefits
- Max. 12 customer connections
- 6 x Ø 8mm or 3 x Ø 10mm inbound / outbound ports
- Up to 30 x 3A or ANT splices
- Optional PLC splitter bridges (60mm x 7mm x 4mm)
- IP54 and IK07 Rating
- Tamper-proof
- Slim profile
- UL-94 V0 Rating
- 233 x 135 x 37mm (HxWxD)

S1XS shown with 6 x LC/APC DX adaptors.

15 MDU - S1

The S1 is an internal wall mountable enclosure that can be used within a P2P or P2MP network with the addition of PLC splitters, connectorised or bare end, pigtails and adaptors. The S1 manages up to 12 SC or LC simplex customer connection points.

Easy installation to corridor walls, either above or below the ceiling level.

Mounting brackets available. See page 20 for more information.

Colours available:

Features and benefits
- Max. 12 customer connections
- 4 inbound / 12 outbound ports
- Up to 12 x 3A or ANT splices
- PLC splitter accommodation (60mm x 7mm x 4mm)
- IP55 and IK08 Rating
- Tamper-proof
- Low profile
- UL-94 V0 Rating
- 241 x 154 x 72mm (HxWxD)

S1 shown with lowered drop management tray with 12 x LC/APC SX adaptors.

15 MDU - S2 and S2XL

The S2 and S2XL provide a solution for installing pre-terminated drop cables in P2P or P2MP network with the addition of connectorised PLC splitters or pigtails and adaptors.

The enclosure has been designed to physically separate the feeder cable 250µm fibres from the customer connection points. Designed for indoor use, the S2 delivers 24 and S2XL delivers up to 32 drop cable customer connections.

Easy installation to corridor walls, either above or below the ceiling level.

Mounting brackets available. See page 20 for more information.

Colours available:

Features and benefits
- Max. 32 customer connections
- 4 inbound / 24 outbound ports
- Max. of 48 x 3A or ANT splices
- PLC splitter accommodation (60mm x 7mm x 4mm)
- IP55 and IK08 rating
- Tamper-proof
- UL-94 V0 Rating
- 342 x 177 x 90mm (HxWxD)

S2 XL shown with 8 LC/APC QD adaptors.

14 15 MDU Wall / Façade Mounting Brackets

The rear mounting storage brackets have been designed to allow for effective MDU wall mounting at both low and high levels. The MDU is affixed to a back plate which then secures to the wall mounted storage bracket. It allows engineers to safely remove the MDU and bring it down to working level.

The back plate also features a hook system that allows engineers to hang the MDU off the storage bracket and offers flexibility in working methods and environments. The storage brackets have been designed to hold and store up to 4 metres of drop cable. A number of anchor points are located around the bracket to allow for multiple cable tie points, ensuring stability and security for the stored drop cable.

Features and benefits
- Small footprint
- Accessible loop storage
- Removable MDU rear mounting brackets for ease of installation

MDU rear mounting bracket shown with S1 or FFE.

Accessories

Nano Clips

Corridor cable clips (2 or 3mm) supplied in packs of 100.

Glue & Dispenser

30cc glue cartridge and glue dispenser for securing cables around skirtings, ceilings and door frames.

P-clips

White round cable clips with hardened steel nail for securing cables above the doorway in the event of fire.

Cable Management Kit

Corner bend managers provide safe routing around bends and hole plugs with caps to protect fibre through walls and cover drill holes.

Cable Scout Deluxe Set

This cable routing tool contains high quality rods and accessories in a storage bag and enables installers to easily route cables.

Rod End Caps

The cable rod end caps are designed to protect the LC connector whilst pushing it through walls and fit at the end of two types of cable rods.
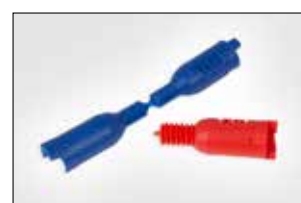
Duct Bend-Radius Limiter

Manages 14mm duct in horizontal and vertical direction changes.

Fusion Splicing Prep and Maintenance Kit

The Non-Flammable Kit contains the cleaning supplies necessary for splice preparation & maintenance.

FTTX Fibre Prep and Cleaning Kit 1

The Fibre Prep and Cleaning Kit for making a successful 1.25mm fibre optic connection.

FTTX Fibre Prep and Cleaning Kit 2

The Fibre Prep and Cleaning Kit for making a successful 1.25mm and 2.5mm fibre optic connection.

Design your own network
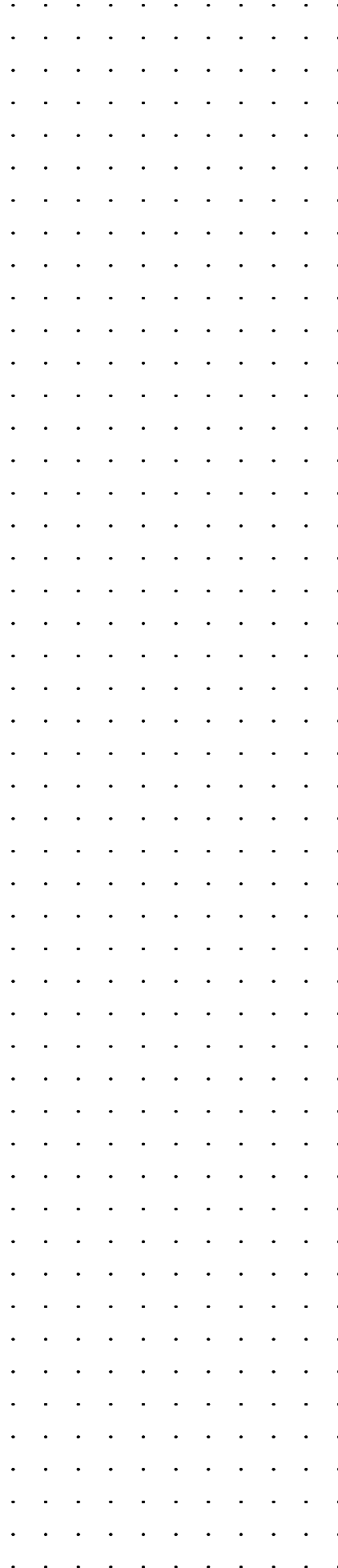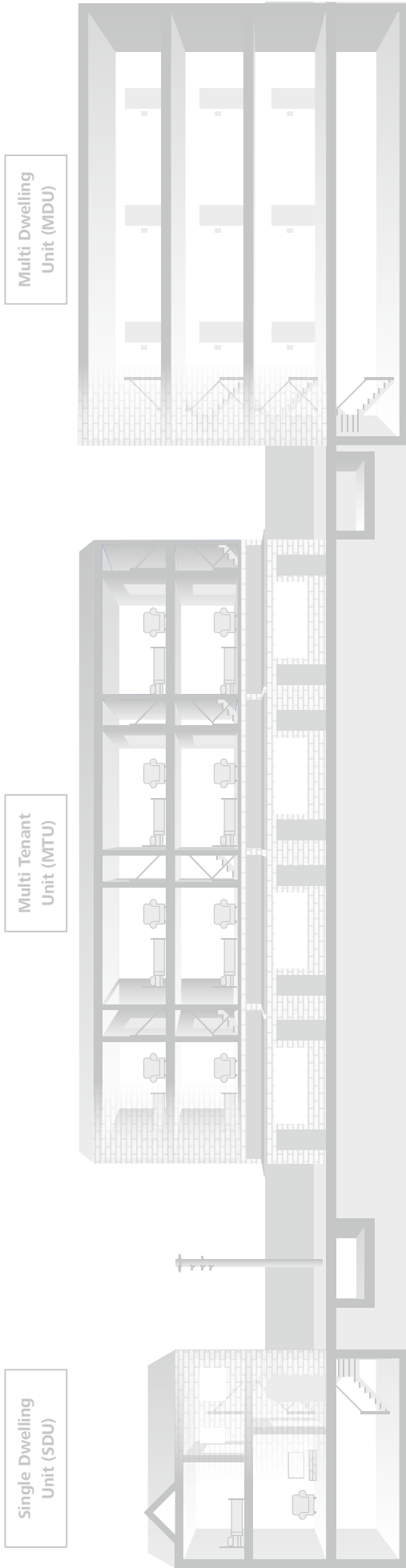
Multi Dwelling Unit (MDU)

Multi Tenant Unit (MTU)

Single Dwelling Unit (SDU)

Application Connectivity Guide

This table walks you through the related products in HellermannTyton's last mile solutions range, giving you an idea of which products go together in terms of fibre count and compatibility and where they could sit within your network application.

All products listed below offer a great deal of flexibility and could be installed in a variety of alternative applications.

		[14] S5	**[14]** S4	**[14]** S3	**[15]** S2	**[2]** AFN	**[15]** S1	**[2]** FFE	**[15]** S1XS	**[4]** MCCE
	INDOOR	✓	✓	✓	✓	✗	✓	✗	✓	✗
	OUTDOOR	✓	✓	✓	✗	✓	✗	✓	✗	✓
MDU 9 - 12F+	Max. no. of Connections	96	48	24 32 64	32		12		12	
	3A Splice Capacity	432	240	96	48 96		24		30	
	Accessories	[2] Wall Mounting Bracket	[2] Wall Mounting Bracket	[2] Wall Mounting Bracket [9] Internal Corridor / Ruggedised Cables	[2] Wall Mounting Bracket	[2] Pole Mounting Bracket	[2] Wall Mounting Bracket	[2] Pole Mounting Bracket	[2] Wall Mounting Bracket [1] Building Entry Point Accessories	
MTU 3 - 8F	Max. no. of Connections						12		12	
	3A Splice Capacity						24		12	
	Accessories						[2] Wall Mounting Bracket	[2] Pole Mounting Bracket	[2] Wall Mounting Bracket [1] Building Entry Point Accessories	
SDU 1 - 2F	Max. no. of Connections									
	3A Splice Capacity									
	Accessories									

NO. OF FIBRE CONNECTIONS

Find the right product

Our fibre connectivity solutions are compatible with almost any fibre network design. If you can't find the exact product to meet your needs, don't worry our extensive range will have the right solution for you.
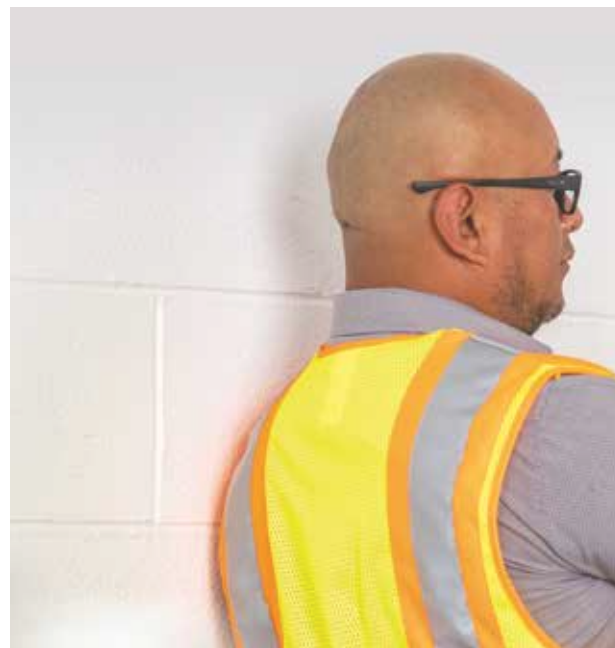
Scan for more applications online.

	[1] CCE	[8] CCP	[8] MCDN	[1] CWB	[1] CEP	[10] ICB	[11] FWO	[11] FFO		
INDOOR	✗	✗	✗	✓	✗	✓	✓	✓		
OUTDOOR	✓	✓	✓	✓	✓	✗	✗	✗		
Max. no. of Connections						4	4	1	MDU 9 - 12F+	NO. OF FIBRE CONNECTIONS
3A Splice Capacity						12	4	0		
Accessories						[9] Internal Corridor Cable — See other accessories on page 20	See accessories on page 20	See accessories on page 20		
Max. no. of Connections	4	4	4	4		4	4	1	MTU 3 - 8F	
3A Splice Capacity	4	4	4	4		12	4	0		
Accessories	[1] Building Entry Point Accessories	[3] TobyBox	[3] TobyBox	[1] Building Entry Point Accessories		[9] Internal Corridor Cable — See other accessories on page 20	See accessories on page 20	See accessories on page 20		
Max. no. of Connections	4	4	4	4	2		4	1	SDU 1 - 2F	
3A Splice Capacity	4	4	4	4	2		4	0		
Accessories	[1] Building Entry Point Accessories	[3] TobyBox	[3] TobyBox	[1] Building Entry Point Accessories	[3] TobyBox [1] Building Entry Point Accessories		See accessories on page 20	See accessories on page 20		

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