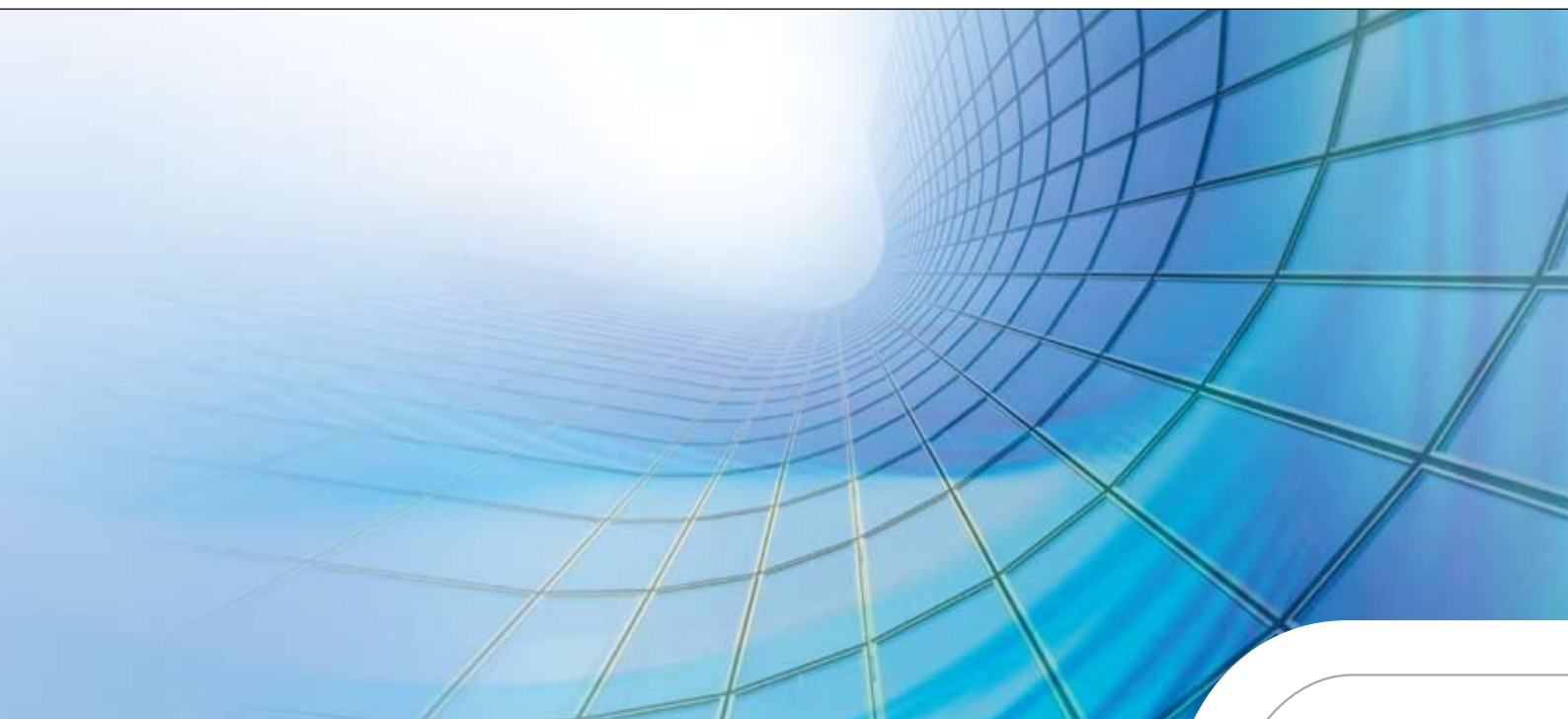


Next Gen

NETWORKS Capabilities Overview



Central Office - Outside Plant - Premises



Next Generation

Network Solutions

From the Central Office to the Premises

As optical fibre moves closer to customers, rapid changes are underway in both the central office (CO) and the outside plant (OSP) environment. There are more optical fibre terminations and new electronics to manage in the CO or headend, and additional active electronics are being deployed deeper into the network. As a result, new installation and maintenance techniques are being employed in the CO through the OSP to the customer premises.

With an optical fibre plant that extends its reach, service life, and bandwidth to serve more than a generation of customers, the expected return for Fibre-to-the-X (FTTX) projects is impressive. Yet margin and customer satisfaction can easily erode if the CO and the OSP are not reliable, are not appropriately scaled for growth, or if installation and maintenance costs escalate.

New networks require a new way of thinking. As a global communications network infrastructure provider for decades, ADC fibre and copper connectivity solutions assure smooth integration of new equipment and technologies for the CO and OSP, as well as long-term reliability and flexibility that are critical across the network.

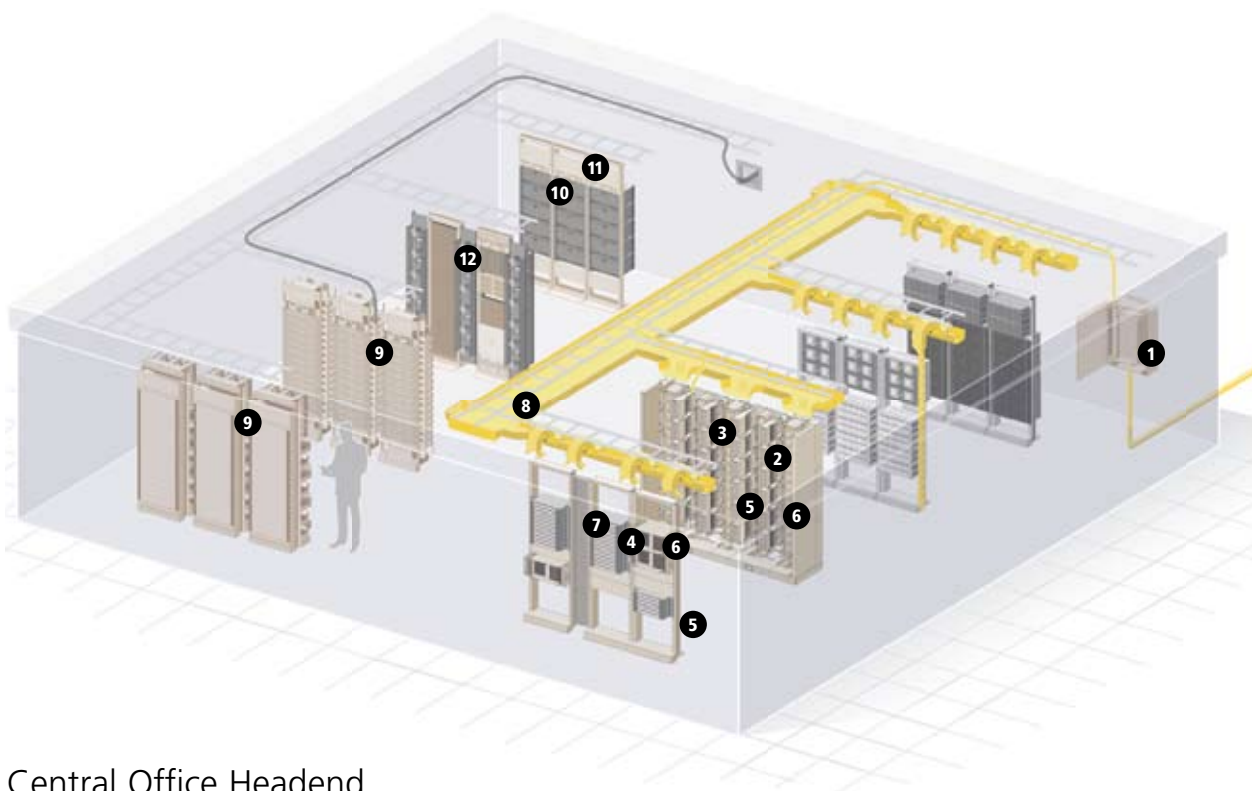
ADC offers a complete, end-to-end network infrastructure solution for FTTX networks. From the CO or headend to the customer premises, regional carriers, independent operators, municipalities, Multiple System Operators (MSOs), utilities, and developers worldwide have tapped the experience and innovation of ADC to build their FTTX networks.

Implementing FTTX affects the network core. It affects the outside plant access and distribution network. It also touches customers at the premises, whether for residential, business, or Multiple Dwelling Unit (MDU) applications. ADC's suite of end-to-end connectivity solutions is truly comprehensive and features the following, field-proven attributes that save time, save money, and help improve customer satisfaction:

- Indoor and outdoor environmental protection
- Advanced cable management
- Time-saving cross-connect options
- Field-proven performance and reliability
- Preterminated and plug-and-play options
- Rigorous quality standards



End-to-End Network Solutions



Central Office Headend

1 Splice Enclosure Products

ADC's **Fibre Entrance Cabinet** solutions allow for a flexible cable entrance approach and feature a variety of splice counts.

2 Optical Distribution Frames

The **Next Generation Frame** (NGF) provides a centralised point for termination, splicing, slack storage, and housing passive optical components such as splitters and Wavelength Division Multiplexers (WDMs). NGF blocks can be ordered in adapter-only configurations or pre-installed with intra-facility (IFC) cables, dramatically reducing installation time. The NGF features industry-leading density and fibre management, including easy connector access, bend radius protection, clear cable routing paths, and physical protection.

3 WDM, Splitter, and Test Access Modules

Value Added Modules (VAMs) add flexibility and functionality to the optical transport system by allowing non-intrusive test access to the fibre network or expanding bandwidth capacity.

4 Fibre Management Trays

Fibre Management Trays (FMTs) provide termination, splice and/or slack storage, and integrated cable management for easy access and high-density in a discrete panel solution.

5 Cable Assemblies and Connectors

Built to best-in-class specifications, ADC **cable assemblies and connectors** deliver worry-free deployment from the CO to the network edge—and everywhere in between.

6 Connector Identification System

TracerLight® saves time and money by improving system turn up speed and accuracy while dramatically minimizing the risk of taking the wrong fibre out of service.

7 On Demand Fibre Management

RiserGuide addresses changing network requirements with a flexible, modular fibre management solution.

8 Raceway

The high-capacity **FibreGuide**® system routes and manages fibre while maintaining a two-inch minimum bend radius throughout the system.

9 Digital Cross-Connect Products

ADC's **DSX-1** and **DSX-3** are proven performers that have set the industry standard, providing a centralised point for cross-connecting digital signals.

10 Splitters, Combiners, Couplers, and Amplifiers

The **RF Worx**® family of products outperforms competing offerings in insertion loss, return loss, port-to-port isolation, and noise contribution.

11 Power Distribution

PowerWorx® platforms distribute power to network equipment, while meeting the industry's most stringent standards, including NEBS Level 3.

12 Ethernet Distribution Frames

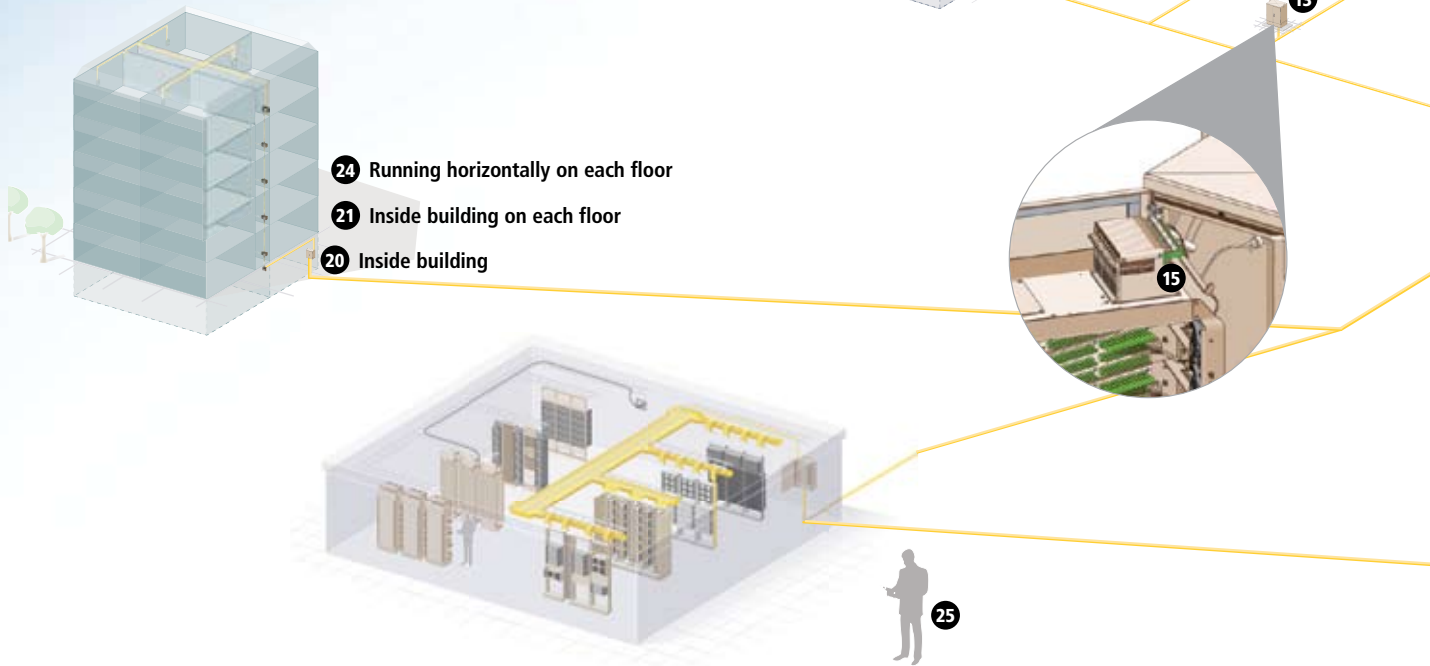
By forming a central patching location between active ethernet network elements, ADC's **Ethernet Distribution Frame** (EDF) creates common craft interface for adds, upgrades, and rearrangements on ethernet equipment that enables change without service disruptions.

Optical Fibre Cable

ADC has over 20 years of fibre cable manufacturing experience and offers a complete family of high performance cable and related products.



End-to-End Network Solutions



OmniReach® FTTX Distribution, Access, and Customer Premises

13 Fibre Distribution Hubs (FDHs)

The **FDH 3000** facilitates service connection and provides a primary convergence point for locating optical splitters in the feeder or distribution network. The flexible, modular, and craft-friendly FDH 3000 supports low and high density applications as well as different network system designs and diverse installation environments.

14 Sealed Fibre Distribution Closure

Designed for aerial or underground applications, the compact, flexible **Sealed Fibre Distribution Closure 3000** provides for connections between optical fibre cables and passive optical splitters in the outside plant.

15 Optical Splitters

FDH Optical Splitter Modules provide a plug-and-play solution for quickly integrating splitters into an FTTX network. These modular cassettes protect delicate optical splitter components from exposure to and damage from the harsh outside plant environments.

16 Multi-Port Service Terminals

ADC's **Multi-Port Service Terminals**, or MSTs, provide simplified subscriber connections from PON distribution cable to drop cable connecting to the ONT at homes. The MST incorporates rugged hardened connector technology and can be deployed in a variety of ways for up to 12-port configurations.

17 Access Terminals

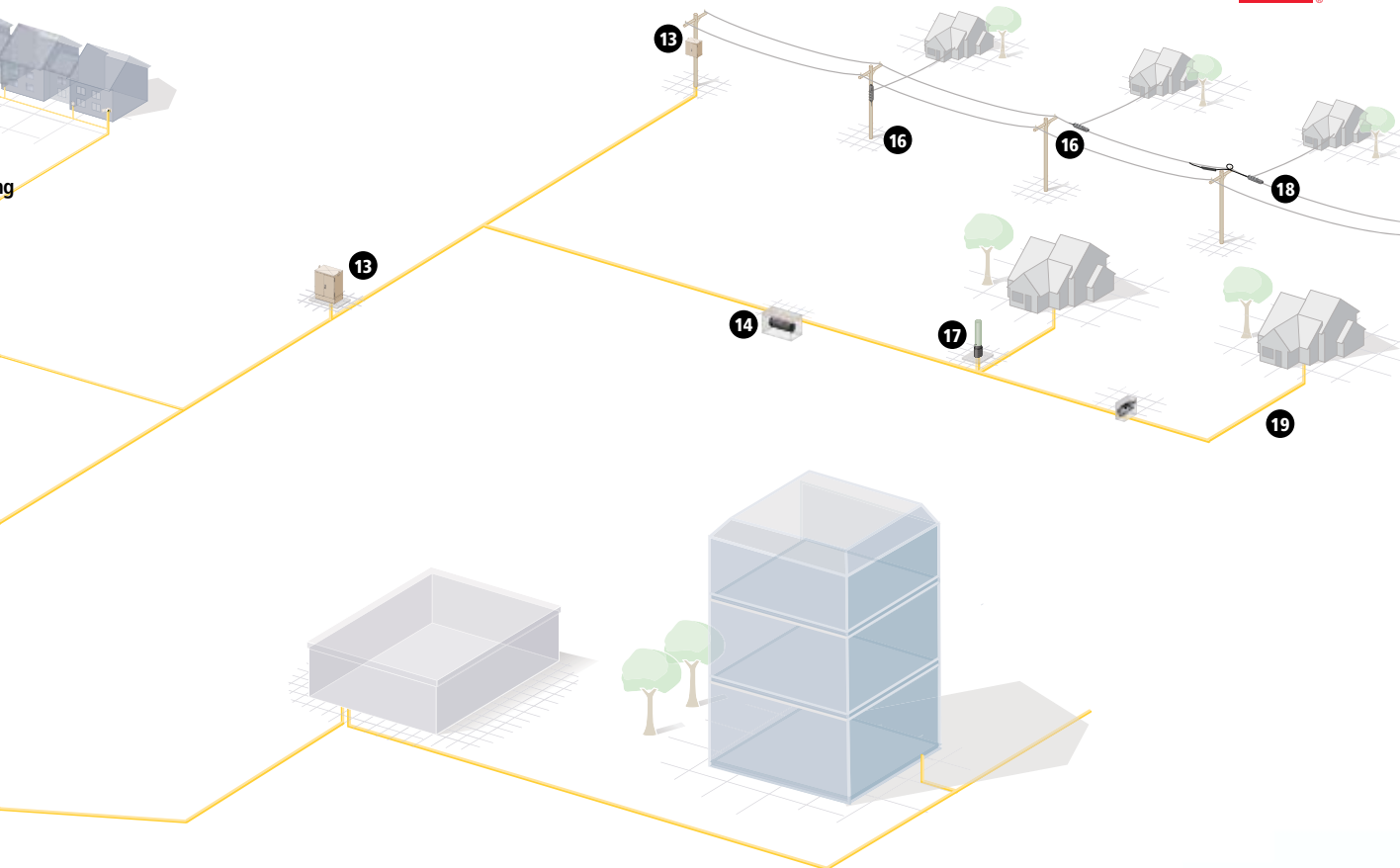
AT 300 Access Terminals provide a robust, user-friendly, and cost-effective platform for delivering optical fibre service drops. The AT 300 provides physical protection, long-term reliability, superior fibre management, and an aesthetically appealing solution for deploying fibre drops in rugged, below grade outside plant conditions.

18 Advanced Termination Systems

The cost-effective and efficient **Advanced Termination System (ATS)** provides ready-made cable instead of constructing access points in the field. ATS includes OSP distribution cables that are pre-cut, pre-measured, and pre-connectorized in the factory according to custom-engineered specifications.

19 Hardened Connectors and Outdoor Drop Cables

A reliable interface in the outside plant requires **hardened connectors and drop cables**. Hardened connectors dramatically reduce splicing labor requirements and protect against extreme temperatures, moisture, UV, chemical exposures, and other harsh conditions typically found in the outside plant.



20 Indoor Fibre Distribution Hubs

Both the **FDH 3000i** and **Rapid Indoor Fibre Distribution Hub** organise and administer optical fibre cables and passive optical splitters for inside plant applications typically found in MDUs. The enclosures support either splice or plug-and-play termination with cross-connect/interconnect interface that makes installation, changes, and maintenance faster and easier to perform.

21 Indoor Fibre Distribution Terminals

For connecting optical fibre cables at MDUs and within building environments, **Indoor Fibre Distribution Terminals (iFDTs)** and **Rapid Fibre Distribution Terminals** provide a compact, NEMA-12 rated solution. The double-hinged design improves security by isolating cable termination in the rear compartment from the jumper interconnection in the front compartment.

22 Outdoor Fibre Distribution Terminals

Outdoor Fibre Distribution Terminals (oFDTs) provide termination, splice, and interconnect for optical fibre cables in an outdoor environment. Terminals may be adapted to MDU applications by mounting the enclosures to the exterior surface of a dwelling and connecting between the distribution cable and drops routed to individual living units.

23 Fibre Splitter Boxes

Fibre splitter boxes (FSBs) provide a small footprint for splitting, splicing, and termination of optical fibre cables for multiple tenant unit and multiple dwelling unit applications.

24 RealFlex™ MDU Drop Cables

By allowing bend radius as small as 7.5 mm without changing attenuation characteristics of the cable, **RealFlex MDU Drops** improve insertion loss (IL) performance and offer quick and easy deployments with increased reliability which allow for fast service turn-up, improved network reach, and lower overall network operating and maintenance costs.

25 Professional Services

ADC offers a broad range of **professional services** that improve network design, reliability, scalability, and efficiency. ADC provides **professional services** to help network operators plan, deploy and maintain their networks. ADC KRONE's unique experience in multivendor, multitechnology, multiservice networks makes us the ideal choice for projects that require an in-depth, hands-on understanding of network planning and deployment.

Fibre-to-the-Node (FTTN)

ADC offers a comprehensive portfolio of FTTN solutions including passive service delivery cabinets, integrated service delivery frames for "all-in-one" active broadband cabinets, and small scalable FTTN solutions featuring a patented "intercept" application for reaching deeper into the network. ADC's OmniReach® FTTN solutions provide for reduced operating expenses, reduced capital expenditures, improved reliability, and increased speed to market and time to revenue.



Next Generation Network Solutions

A Global Leader in End-to-End Connectivity

ADC solutions for FTTX deployments are tailored to support all network segments, including the central office, outside plant, and customer premises. Innovative, high performance solutions help connect, protect, and manage networks quickly, economically, and with exceptional reliability.

- Craft friendly products reduce network operating costs
- High performance products improve network reach
- High product reliability reduces network maintenance costs
- Preterminated and plug-and-play solutions speed network installation and service turn-up
- Cost effective solutions are configured to meet the specific needs of FTTX networks

Our Vision

As a leading, global network infrastructure provider, our vision is to provide high quality solutions that enable customers to accelerate construction and deployment of fibre optic networks. Our connectivity products and solutions support a broad range of network applications to help our customers bring new and improved services to their customers.

Our Value Proposition

Experience

ADC has over 75 years of innovation and leadership experience in the fibre optics industry. We maintain a focus on delivering flexible, innovative, and economical fibre optic solutions to our customers.

Customer Focused Innovation

We are committed to understanding and meeting the needs of our customers. Our customers challenge us to develop new, innovative ways to install and connect networks faster and with greater reliability. Combining our technical competence with our customer's vision results in innovation that is right on target.

Profitable, Flexible FTTX Services

In any FTTX deployment, the goal of network planners is to build the most flexible and reliable system possible in the least amount of time and at the lowest possible cost. ADC continues to lead the way in making FTTX networks cost effective and user friendly while ensuring robustness, flexibility, and reliability.

Quality and Reliability

ADC product solutions are tested to the highest industry standards to withstand the test of time with certifications from such independent laboratories as Underwriters Laboratories, Telcordia Technologies, Curtis-Straus, and Met Laboratories. With ADC solutions, you can be confident that the network you install today has the high performance and proven reliability necessary to support tomorrow's applications.



Additional Resources

To learn more about ADC's complete, end-to-end network infrastructure solutions for Next Generation Networks, visit www.adc.com/in and download the following supporting materials.

Solutions	Literature Number
Central Office and Headend	
Optical Distribution Frames	104075AE
Value-Added Module (VAM) System	104755AE
Fibre Optic Panel	104074AE
Fibre Cable Assemblies and Connectors	104214AE
TracerLight Connector Identification System	104282AE
RiserGuide: On-Demand Cable Management	101573AE
FibreGuide System	104216AE
DSX-1: Digital Signal Cross Connect	103253AE
DSX-3: Digital Signal Cross-Connect	103866AE
RF Worx SignalOn Series: RF Signal Management	102721AE
PowerWorx Power Distribution Products	104156AE
Optical Fibre Cable	105239AE
OmniReach® FTTX - Distribution	
FDH 3000	102496AE
Sealed Fibre Distribution Closure 3000	103983AE
Fibre Cross Connect 3000	104002AE
Passive Optical Splitter Modules	102902AE
OmniReach FTTX – Access	
Multi-Port Service Terminal and Hardened Drop Cables	106021AE
AT 300 Access Terminals	103800AE
OmniReach FTTX – Premises and MDU	
Indoor FDH 3000	104470AE
Fibre Splitter Boxes	105947AE
Outdoor Fibre Distribution Terminals	103335AE, 103333AE
Indoor Fibre Distribution Terminals – MDU	103266AE
Indoor Fibre Distribution Terminals – CPE	103562AE
RealFlex™ MDU Drop Cables	105715AE
MDU Rapid Fibre System	105783AE
OmniReach FTTN	104838AE
Professional Services	1314747



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