FTTx Solutions

At Power & Tel, we work where you work.

Power & Tel's goal is to provide you a complete product solution for all your critical needs. On the following pages, you will find the products and manufacturer partners that represent our FTTx offering. From the CO/Headend all the way to the Customer Premise — we supply the solutions that will help you build and maintain your FTTx network. Featured are products from these categories:

- Central Office/Headend
- Management & Connectivity
- Distribution Hubs/Cabinets
- Splice Closures/Network Access Points
- Pedestals/Enclosures
- Drop Cables
- Hardened Gateways & CPE
- Splicing/Fusion Splicers
- Test Equipment
- Fiber Optic Cable

Our hope is that you will use this information as a beneficial guide in your FTTx ordering. More detailed information including availability, pricing and in-depth product specifications are available by contacting your Power & Tel representative or by emailing marketing@ptsupply.com.

Call 1-800-238-7514
www.ptsupply.com

MULTI-SERVICE ACCESS SOLUTIONS

get more **revenue** and **profit** from your access network with **unmatched scaling efficiency** and superior **service intelligence**

- FTTx
- GPON
- VDSL2
- Active Ethernet
- EFM
- Metro Wi-Fi
- POTS
- xDSL

only from ZHONE and Power & Tel

We work where you work.

For more information contact Zhone at (603) 422-0687 or Power & Tel at (800) 238-7514
www.zhone.com/solutions/fttx

Central Office/Headend

ADTRAN OPTI 6100

- OPTI-6100 is a high-density, compact, multi-service optical access and aggregation platform
- Perfectly suited for delivery of high density DS1s or E1s, Ethernet over SONET, Ethernet over PDH, TDM over Pseudowire, multiple DS3/E3 delivery, customer premises service delivery, and mobile backhaul. Interworking with both SONET and SDH optical networks is achieved through the use of industry standard protocols and extensive field testing
- Services are configured via plug-in units, which are provisioned according to the service needs of individual locations
- Flexibility of multiple plug-in units eliminates the need for separate network elements and minimizes CAPEX and OPEX by delivering multiple services from one system
- Numerous network topologies are supported and include terminal mode, hub, end-to-end OPTI-6100 (LMX, MX or SMX chassis) and rings

ADTRAN Total Access 5000/5006

- Carrier class multi-service access and aggregation platform that bridges the gap between the existing and the next generation networks
- With a pure Ethernet core, supports both legacy and emerging service interfaces over both copper and fiber, easily scaling to support even the most bandwidth intensive applications
- System functions as a highly capable GPON OLT and flexible access platform capable of meeting a variety of legacy and merging service requirements
- TDM transport through a GPON is provided with Pseudowire Emulation (PWE3), which terminates on the PWE3 gateway in the Total Access 5000 and on an ONT
- Video options with the Total Access 5000 GPON OLT include both IPTV and RF video

- IPTV functions in the Total Access 5000 and the GPON OLT Access Module provide IGMP signaling and multicast replication functions. RF Video Overlay at 54-870 Mhz is supported on a GPON as a third wavelength at 1550 nm using outboard amplifiers and wavelength combiners

Motorola AXS1800 OLT / AXS2200 OLT

Voice:

- TDM voice with Integrated
- GR303/TR008 Gateway OLT card
- SIP VoIP

Video:

- IPTV and IGMP multicast
- 870Mhz RF overlay with Integrated MOTorola Return Path Demodulator (MOT-RPD)

Data:

- 200Gbps switch capacity OLT
- Non-blocking 10Gbps per OLT slot
- 1GbE and 10GbE WAN OLT interfaces

Zhone MXK – ITAC

- Zhone's new Intelligent Terabit Access Concentrator. The next generation MSAP platform for high bandwidth residential and business services such as:
- Multiple High-Definition Television, Video on Demand, Video Conferencing, Voice and High Speed Internet Access
- Non-blocking architecture designed with interfaces and functionality to seamlessly connect to Metro networks.
- 400 Gbps pure packet switching in conjunction with 10 Gbps redundant links to each slot card.
- MXK provides Carrier-Class High Availability with redundant controllers, uplink ports and hitless software upgrade capability
- MXK options for FTTx solution:
- Supports Active Ethernet and GPON line cards and interoperates with indoor and outdoor ONTs.
- Active Ethernet and GPON solution on the same MXK chassis gives the service provider the flexibility to layout their network in the most efficient manner, using combination of GPON splitters and dedicated fiber connections.

Management & Connectivity

ADC LSX-288

- Available preterminated with intra-facility (IFC) or outside plant (OSP) cables or in termination and splice configurations
- Integrated cable management
- Angled bulkhead panel offers additional protection from bends that can increase attenuation and loss
- Vertical cable guides effectively segregate cables, aiding in easy-to-follow routing paths
- Available in SC and LC connector styles and multiple fiber cable styles
- 288 terminations using either SC or LC connectors

ADC FL2000

The FL2000 System is a flexible, modular and economical series of fiber products for current and evolving communications and data networks.

- Preconfigured panels with customer specified features simplifies the ordering process and saves installation time
- Modular design satisfies both current needs and future growth requirements
- Full line of options and accessories ensures compatibility with existing optical equipment
- Hinged on left-hand side to allow easy access to rear of front plate and interior of panel
- Designed for 19-inch (48.26 cm) racks or cabinets, but mounting kits are available for 23-inch (58.42 cm) rack-mounting or wall-mounting

ADC Next Generation Frames

- Part of ADC's Optical Distribution Frame family
- Provide a centralized point for termination, splicing, slack storage and housing passive optical components like splitters and WDM's
- Features industry-leading density and fiber management
- Easy connector access
- Bend radius protection
- Clear cable routing paths
- Physical protection

ADC FiberGuide® Optical Raceway System

- **Speed of Installation:** The FiberGuide System features a wide variety of products that allow for quick and easy installation.
- **Speed of Deployment:** The Express Exit system enables new drops to be added or removed quickly and easily.
- **Raceway Flexibility:** FiberGuide features 38 support structures, over 75 fittings, multiple drop options and several other components to suit any application.
- **Fiber Protection:** FiberGuide ensures that a 2 minimum bend radius is maintained throughout the system.
- **Strength and Durability:** 100% raceway reliability - stands up to any challenge.

ADC Connector Identification System

TracerLight® Power Source

- Used in conjunction with TracerLight® patch cords, the TracerLight® power source allows users to easily locate and distinguish specific connectors
- Dramatically minimizes the risk of taking the wrong fiber out of service
- Improves system turnup speed and accuracy
- TracerLight patch cords meet all performance criteria of standard ADC patch cords
- Ideally suited for SAN (Storage Area Network) and cross-connect patching
- 72% reduction in jumper turn-up times and 13% reduction in accidental down-time.

TracerLight® Patch Cords

- ADC's innovative TracerLight™ Connector Identification System offers a quick and accurate method of identifying the termination point of optical patch cords
- Each end of a TracerLight patch cord features a flashing light source allowing technicians to visually trace individual patch cords from one end to the other without pulling or affecting the patch cord
- Dramatically minimizes the risk of taking the incorrect fiber out of service
- Improves system turnup speed and accuracy
- TracerLight patch cords meet all performance criteria of standard ADC patch cords
- Components do not affect optical performance of the patch cord
- TracerLight power source produces a flashing LED on each end of the patch cord

AFL LightLink™ Poli-MOD

Pigtailed Optical LightLink Interconnect Module

- Up to 24-port confi gurations
- Single-slot and double-slot
- LGX® 118 compatible
- Available in SC, ST and LC (additional confi gurations available upon request)
- Compatible with all LanSystemTM Patch Panels
- Includes module, cover, adapters, pigtails, splice sleeves, and all required hardware for installation
- Available in white or black, and single-mode or multimode
- Organized fi ber routing
- Fixed solution, no moving parts
- Ease of splice identification
- Front and rear access

- Telecommunications Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offi ces
- Hub Sites
- Cabinets
- Remote Terminals

AFL LightLink™ LANSystem™

1RU Fiber Termination Patch/Splice Panel

- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Most common connector styles and types available
- Compatible with industry standard equipment frames
- Modular design
- Slide-out tray with relief cut-outs for simplified connector access
- Optional splice tray kit for on site conversion to patch and splice panel
- Optional front door key lock for heightened protection of internal components
- Telecommunications closets
- Data Centers
- Customer Premise
- LAN / WAN Networks
- Central Offices / Headends

- Hubs / Cabinets / Remote Terminals
- FTTH / FTTB Networks
- Aluminum Construction per ASTMB209
- Durable textured powder coat finish available in black or white
- Universal 19/23" EIA/TIA rack compatibility
- Standard Density: Up to 18 Fiber, High Density: Up to 36 Fiber
- LGX 118 Compatible
- Standard cable stub location is right rear exiting upward

AFL Xpress Fiber Management™

- Aluminum construction
- Textured black powder coat finish
- Universal WECO/TIA 19"/23" rack compatibility
- (12) LGX 118 adapter plate / module mounting positions
- Mounting depth adjustable from flush to 8" in 1" increments
- Data Centers
- Enterprise Networks
- Telecommunications Closets
- Central Offices / Headends

Management & Connectivity

Corning Enhanced Management Frame (EMF)

- Designed for FTTx, cross-connect and interconnect applications
- Staggered side-mounted routing guides allows for superior fiber management and control
- Modules extend and retract independently for minimal adjacent connector disturbance
- User-friendly features including single jumper length, in-bay jumper storage, transparent modules and multiple inter-bay routing options
- On-frame splicing maintains the maximum 1728-fiber terminations
- Full minimum radius control throughout the frame with top and rear strain-relief

Clearfield FDS Frame and Interbay

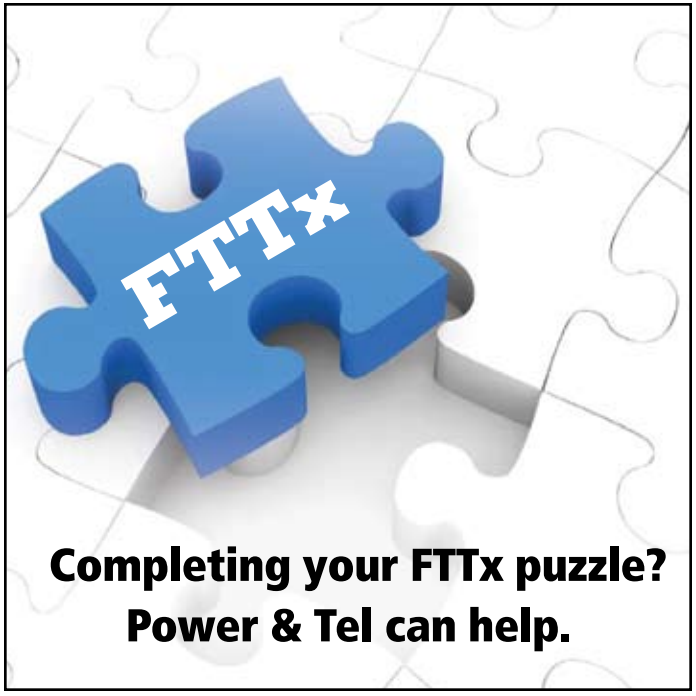
- Frames are used for mounting equipment in a central office or data center application. In addition to incremental slack take-up, the interbay provides a route path between frames.
- FieldSmart Fiber Distribution System (FDS) Frames are available in 7′, 8′, or 9′ heights and in 19″ and 23″ widths. These seismic frames come with an unequal flange, and when used with FieldSmart FDS Patch Panels, provide the highest port density in the industry; up to 1728 ports in a 7′ frame.
- Interbay cable management panels are ordered to match the height of the frame. They are available in 7, 8 and 9 foot versions. End guards are available for the end of a line up to minimize potential damage to jumpers.
- Frames have 500 pound weight capacity
- Uprights are high-strength, low alloy steel
- Front and rear of upright tapped for 12-24 screws
- Frames can be ordered loaded with panels and cable management as a "rack and stack" solution
- Weco 1" hole spacing
- 3" radius spools protect bend radius
- End guards are optional

Corning Eclipse® Hardware Product

- Accommodates variety of fiber terminations
- Complete FTTx 864-fiber solution, including splitters located in a standard 7 foot rack
- Efficient utilization of space for high-density applications and systems
- Splitters fully compatible with the Corning Cable Systems OptiTect® Local Convergence Cabinet, Gen III Series family
- Empty connector housings can easily be outfitted with optical splitters and WDM modules
- Innovative jumper routing and management
- Wall-mountable solution set provides interconnect or cross connect capabilities
- Gen III FTTx splitter module configuration provides a simple, quick and incremental growth capability
- RDUP Listed

Clearfield FDS Optical Component Chassis

- The FieldSmart FDS Optical Component Chassis is used for housing Optical Component Modules. It is available in Clearfield horizontally mounted versions and an LGX vertically mounted version.
- RUS listed
- Compliant to Telcordia GR-449
- Supports all industry standard single mode/multimode connectors
- Ruggedized hinged and removable front cover
- Ruggedized cable clamp protects against twisting and pistoning at the assembly breakout point
- Front access with removable adapter plates for testing, cleaning and maintenance
- Front and rear access to panel
- Horizontal mounting versions of the FieldSmart FDS Optical Component Chassis are available in four sizes to accommodate any size project
- Chassis can be ordered in either 19" or 23" mounting versions without losing any capacity
- Chassis incorporate the superior fiber management systems of the FieldSmart FDS Panel line which are available in these sizes: 1.75" (1 RU), 3.5" (2 RU), 6" and 11".
- Four sizes of FieldSmart Optical Component Chassis allow for a "grow-as-you-go" design that allows you to reserve rack space for future growth.



Clearfield FDS Patch Panel

- Provides an interconnect or cross-connect environment for up to 24, 72, 144, or 288 ports of high-density fiber in central office / headend environments.
- RUS listed
- Front access to pre-terminated assemblies with removable adapter plates for testing, cleaning and maintenance
- Front and rear access to panel
- On- or off-frame splicing configurations support cable constructions up to 144-fiber
- Compliant to Telcordia GR-449, GR-20 and GR-409, and Telcordia 326 compliant terminations. Optical component configurations use GR 1221/1209 compliant devices
- Supports all industry standard single mode/multimode connectors
- Ruggedized hinged and removable front cover
- Individual radius fingers provide organized and intuitively managed fiber jumpers and minimize pile-up
- Utilizes Clearfield's Clearview Cassette, which houses critical circuits by 12-fiber sub-units or buffer tubes and is completely removable for hot-swap changes
- Ruggedized cable clamp protects against twisting and pistoning at the assembly breakout point
- Pre-terminated OSP buffer tubes are protected with bend-limited tubing and slack stored inside panel for protection against environmental and human damage
- Optional interbay management panels enhance fiber jumper routing and excess cable storage capacity

Tyco FOSC OC XC

The course wavelength division multiplexing (CWDM) technique combines (or multiplexes) two or more signals with different wavelengths in one common fiber. The same components can also be used to separate the wavelengths (de-multiplexing) at the remote location.

- These devices are integrated into the range of Tyco Electronics' FOSC fiber-optic splicing closure trays allowing for easy integration in enclosures, wall-mount boxes, or ODF's.
- Consistent performance
- Low optical loss
- Low polarization sensitivity
- Excellent mechanical and environmental characteristics
- Fast installation and commissioning
- CWDM upgrades in metro networks
- Increase the capacity between the central office and the headend in HFC networks
- CWDM overlay in PON architectures
- LAN

Distribution Hubs/Cabinets

ADC OmniReach® FDH3000

- Unique Design to Meet Diverse Customer Requirements: "Engineering Friendly" to support both low and high-density applications, different network system designs, and diverse installation environments
- Flexible and Modular: Standardized splitter modules and accessories for all FDH 3000 cabinets
- Unique "swing-out frame" design allows all fiber management to swing outside of the cabinet, allowing access to the back of the modules for repairs and maintenance.

AFL Future Access™ FDH-700

- Modular distribution platform allows for incremental deployment costs and immediate cost savings
- Small Size is unobtrusive in residential deployments
- Enhanced fiber management provides simplified routing and termination of fiber pigtails
- Dual-door entry allows easy access to distribution and fiber management fields
- Flexible pad and pole mounting options for deployment in the most convenient location

ADC Hub in a Pedestal

- Modeled after ADC's industry leading FDH 3000, the Hub in a Pedestal incorporates many of the same patented design features widely recognized and accepted by technicians including plug-and-play (PNP) splitter modules, parking lot storage and a swing frame to name a few

- Right sized to match up with phased fiber deployment in smaller or rural communities
- Pedestals offer more flexibility for installation locations compared to metal cabinets
- Field friendly design, craft Interface is similar to existing cabinet style offerings
- Reduced inventory by using same splitter module as larger FDH designs
- Offers full size trays for splicing incoming feeder and outgoing distribution cables
- Option of adding hardened drop connections directly from the pedestal, further supporting lower cost business models

AFL LightLink™ LL-400b FDH

- Independent cable strain relief system
- Cable entry/exit grommet seals
- Compact size less obstructive in residential deployments
- Installed in outdoor pedestal or indoor building entrances
- Preterminated fiber cable for distribution and feeder
- Direct buried application

ADC Splitter Modules

- Qualified to GR-1209 and GR-1221
- Surrounded by superior cable management, technicians need less time to route fiber in the cabinet, saving operating costs
- Industry-leading low loss
- Terminated with GR-326 certified connectors
- Rugged package protects delicate splitters from installer handling
- Variety of package styles allows adaptation to many applications
- Wideband performance allows operation from 1260nm to 1650nm
- Available in configurations from 1x4 up to 1x32, the modules can be ordered in adapter port or pigtailed versions

ADTRAN Total Access Retrofit Kits

- With the demand for higher-bandwidth services growing at a phenomenal rate, it is more important than ever to be able to leverage existing infrastructure in the delivery of new services
- Retrofitting provides a complete solution for next-generation deployment, while eliminating the costs associated with new cabinet fees, cabinet installation, powering, and right-of-way negotiation
- Retrofitting minimizes capital expenditures and speeds service deployment

Charles CFDP Interconnect Pedestals

- Provide pre-connectorized "interconnect panel" fiber drops to multiple broadband service customers at a fraction of the cost of Light Guide Cross-Connect (LGX) solutions
- Ideal for multi-tenant cell site, campus or strip mall environments where the customer requires high-capacity fiber bandwidth for wireless backhaul, private networks or data and video broadband services
- Weather-tight "enclosure within an enclosure" architecture designed to provide flood protection and exceed Telcordia GR-771-CORE environmental protection standards
- Available in 6", 8", 10" and 12" diameters with respective 8, 12, 18 and 24 bulkhead connector capacities

Charles Fiber Flexibility Pedestals (CFFP)

- Scalable, low cost alternative to placing centralized split points (also known as fiber distribution hubs—FDH) in the outside plant
- Compact size compared to large cabinets makes them easier to install and ideally suited to small communities and neighborhoods
- Available in four sizes with up to 72, 96, 144 and 288 fiber counts
- Sizes are configurable with smaller fiber counts to economically optimize fiber hub size with neighborhood
- One splitter module fits alls CFFP sizes for ordering and stocking ease

Clearfield FieldSmart Fiber Scalability Center

- Provides an interconnect environment from the feeder network through the optical passive splitter to the distribution network in an FTTH PON OSP cabinet or a cross-connect environment of up to 864 ports.
- 100% tested GR-326 compliant terminations and GR-20, GR-409, GR-487, GR-1221 and GR-1209 compliant
- 12-fiber Clearview Cassette houses each 12-fiber increment of patch only or patch & splice, protecting fiber from the environment and human factors and allows for quick visual troubleshooting without opening cassette
- Rugged cable clamps protect against twisting and pistoning of the critical breakout or buffer tube access point of the OSP cable
- Patch only buffer tubes fully protected with ruggedized bend limiting tubing
- Snakeskin sleeving provides additional buffer tube slack storage protection and manageability for patch & splice configurations
- Small splitter package for minimal space requirements, ruggedized jacketing on input/output legs and bend insensitive fiber

- Ground/locate box optional
- Front access to pre-terminated assemblies with Clearview removable adapter plate
- Easy two captive fasteners for quick removal of individual cassettes for trouble shooting, splicing, or hot swappability
- Front and rear access
- Patch & splice configurations eliminate costs associated with jacketed IFC cabling, hand holes, and splice cases

Distribution Hubs/Cabinets

Corning OptiTect® Gen III Series

- Industry leading cabinet size
- Fully factory stubbed
- Connectorized feeder and distribution fibers to coupler/splitter modules
- Splitter modules interchangeable throughout the Gen III Series as well as the Eclipse Hardware Family
- User-friendly design and intuitive fiber management minimize field training, installation time and overall labor costs
- Increased speed of deployment
- Pad or pole mount options with up to 432 fiber capacity
- Clear dust caps designed for easy installation/removal and provide visual fault locating
- RDUP Listed

Corning OptiTect® Indoor MDU Cabinet

- Features intuitive fiber management and internal layout to minimize training and optimize installer productivity
- Factory pre-connectorization and installation of feeder and riser cable(s), or splice capability ensure a quick and reliable installation in the field
- 432 Fiber capacity
- Splitter modules interchangeable throughout the Gen III Series as well as the Eclipse Hardware Family
- Features a swing out panel for rear connector access
- Integrated storage door for parking unused splitter module output connectors
- Accommodates 1x4, 1x8 and 1x32 splitter configurations as well as dual 1x4, dual 1x8 and dual 1x16

- Clear dust caps designed for easy installation/removal and provide visual fault locating

Corning OptiTect® LS Series

- Quick, easy fiber management simplifies installation and subscriber connections
- Distribution fiber counts of 144, 288, 432, 576 and 864
- Small-form, connectorized splitter modules with simple, one-step parking – accommodating dual 1x8, dual 1x16, 1x32 and 1x64 configurations
- Multiple pad and pole mount configurations provide operator with maximum deployment flexibility
- Unique grounding system provides a single point outside the cabinet to isolate and tone cables in the cabinet
- Provides multiple distribution and feeder cable entries
- Pass-through panels enable feeder fibers to bypass splitters for commercial services or high-bandwidth applications

Distribution Hubs/Cabinets

Emerson NetSpan FDH Compact Series

- Provides connections for fiber optic cables and passive optical splitters in FTTx applications
- Ideal as a Local Convergence Point (LCP) for aggregation in a centralized splitting Passive Optical Network (PON) FTTx architecture\
- FDH closure allows for flexible mounting options: pedestal (flood proof), pad, pole, vault or wall (indoor or outdoor)
- Lower deployment cost by not having a separate closure/cabinet to splice the FDH cables
- Accommodates high-density, high performance 1x32, 1x16, 1x8, 2x32 & 2x16 modular optical GR1221-1209 PLC splitters
- Splitter modules have pre-parked jumpers
- Available in 72, 96 & 144 fiber distribution configurations
- Complete fiber management with radius limiting spools
- GR326 compliant termination

Emerson NetSpan FDH Hub Series

- Series of corrosion-resistant enclosures that provides connections for fiber optic cables and passive optical splitters in FTTx applications

- Designed to Telcordia GR-3125-CORE specifications, the enclosures also provide environmental and mechanical protection for cables and optical components
- Ideal as a Local Convergence Point (LCP) for aggregation in a centralized splitting Passive Optical Network (PON) FTTx architecture
  - Heavy-gauge aluminum welded construction with powder coat finish
  - Accommodates high-density, high performance 1x32 modular optical splitters
  - Splitter modules have pre-parked pigtails
  - Available in 144, 288, 432 & 576 fiber distribution configurations
- Complete fiber management with radius limiting spools
- Pre-terminated fiber stub or in-cabinet splicing configuration
- FDH cabinet configured empty or preloaded with splitter modules

Preformed Line Products COYOTE® Axcess Solutions™

- Available Sizes: rack and wall mount designs supporting up to 144 connections
- Higher capacity designs available upon request
- Designed for interior use
- Powder coated metal construction is built for demanding environments
- Color-coded pigtails in unique sleeve provide easy fiber identification, fiber adjustment and storage
- Wide range of connector types available

Tyco CSX-3

Centralized Splitter and Cross-Connect Cabinets

- CSX-3 cabinets are designed for maximum application flexibility by combining the features of a centralized splitter cabinet with those of a fiber cross-connect cabinet.
- Cabinets are available in a range of sizes and configurations. 432 and 864 cabinets can be ordered partially loaded with distribution panels.
- Modular stubbed shelf assemblies are easily added in the field to expand for future network growth capacity.
- The optional fiber splice basket allows for splicing of all fibers in the cabinet.
- Pass-through modules may be placed alongside splitter modules and allow for an organized method of connecting feeder to distribution ports and bypassing splitters.
- Splitter modules incorporate one pigtail length and fit all cabinet sizes.
- Splitter pigtail routing is simple, intuitive, and consistent across all three cabinet sizes.
- Cabinet outer shells and kick-plates are field replaceable.

Splice Closures / Network Access Points

3M™ Fiber Optic Splice Closure 2178-XSB

- Constructed of a highly chemical-resistant material. Can be deployed in underground and aerial environments.
- Gasket seal for easy re-entry and reusable seal.
- Unique strength member clamp assembly designed to prevent cable sheath movement with temperature changes.
- Compact size easily fits into most pedestals and handholes.
- Spacious fiber management area in bottom half of the closure provides separate area for routing, protecting, and "expressing" buffer tubes and ribbon fibers.
- Flexible drop or cable addition. Multiport grommet provides entry for up to 6 drops or small diameter cables
- No special tools required. Easy installation and re-entry.
- Pressurization valve provides ability to flash test.
- Available in flame retardant material that can be deployed in vault and building applications.

3M™ Fiber Dome Terminal Closures

- Compact size fits into small pedestals and handholes.
- Constructed of highly chemical-resistant material and can be deployed in all environments: buried, underground, and aerial.
- No special tools required. Simple installation and re-entry.
- Fixed O-ring seal for easy, error-free closure sealing and re-entry.
- Innovative latching mechanism provides simple re-entry into closure by lifting the dome lid away from the base.

3M Fiber Optic Splice Closure 2178

- One-piece construction for easy installation and permits access to the cable splice without removing the terminal closure body.
- Separate splice and drop termination chambers allows easy and secure access for service connections and drop maintenance without having to enter the splice chamber.
- Craft-friendly drop entry system permits quick and easy plug and play drop installation with minimal training.
- Optional lightweight, easy to install splicing workstation provides a stable work surface that secures the fusion splicer and cleaver. This helps to simplify the installation and splicing process when splicing on the strand or lift truck.
- Double-walled molded construction provides durable protection from bending and cracking in the most extreme environments.
- Limited number of components needed to install the terminal closure, thus decreasing the installation time.
- Accommodates in-line, butt, and taut-sheath applications. Allows for up to 96 single fusion or 288 mass fusion branch splicing.
- Slack storage basket provides separate area for routing, protecting, and "expressing" buffer tubes and ribbon fibers.
- No special tools required. Easy installation and re-entry.
- Interlocking ends permit the closure chamber to be extended to protect damaged sheath or accommodate larger openings for taut sheath applications.

3M SLiC™

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Splice Closures / Network Access Points

ADC OmniReach AT 300 Access Terminal

- Intelligent Design—smart cable management system maximizes performance, prevents damage and allows for future growth.
- Practical—Matches optical node terminal deployment to service request.
- Future-Proof—Supports efficient service deployment, management and technology upgrades.
- Flexible—provides for a wide number of service applications

ADC Multiport Service Terminal (MST)

- Robust environmental performance: Withstands extremes in temperature and conditions
- Technician-friendly features: Intuitive design for ease of use
- Decreased installation and incremental maintenance hours: Significant savings
- Protection: Self-contained unit features hardened connectors for superior durability and reliability in the drop segment of the network
- Factory-terminated and environmentally sealed for use in drop cable deployments in optical access networks
- Compatibility: Interoperability with industry standard hardened connectors

AFL Fiber Storage Unit

- Small profile and a side facing channel to minimize ice load
- All aluminum construction with welded cross members
- Baked acrylic enamel finish/chromate pre-finish per MIL-C-5541-B
- Contains 2% carbon black as a UV inhibitor (dielectric version)
- Basic hardware (bolts, nuts and washers) and strand mount support brackets included
- Tie-wrap slots for securing cable from sliding
- Strand mount support brackets meet Telcordia specification and are REA accepted
- Galvanized strand clamping devices accommodate 1/4" to 7/16" strand Reserve Cable Storage

AFL Aerial Weathertight

The AFL Telecommunications' family of Aerial Weathertight Splice Closures is designed to provide a cost-effective solution for your aerial splicing needs. Quality engineering reduces the installation time, training and complexity associated with fiber splicing in the field. The closures have all been designed to be installed without the need for special tools, heat, adhesives, drills, or any powered equipment. Durable and easy to install, these closures will improve productivity, reduce labor expenses and last the life of the plant.

- Individual, patented, self-sizing cable grommets and strength member tie downs provide for cable additions without disturbing those previously installed
- Unique tongue-in-groove closure seal and back-to-back grommet design provides for a weathertight and insect seal
- Closures are re-enterable without the need for any re-entry kits, special tools or sealants
- Designed and tested to TelcordiaTM GR-771 aerial weathertight closure requirements
- Rural Utilities Service (RUS) Listed

AFL Sealed Splice Closures

The AFL Telecommunications' family of Sealed Fiber Optic Splice Closures is designed to simplify splice management. Quality engineering reduces the installation time, training and complexity associated with fiber splicing in the field. No heat, adhesives, drills or powered equipment for installation or re-entry are required. These durable, easy to install closures will increase productivity, reduce labor expenses and last the life of your plant.

- Supports stranded loose tube, Uniflex® or ribbon fiber cables in either armored or dielectric configurations
- Installation and re-entry using common hand tools
- Fully sealed to protect fiber and splices ensuring longevity
- Fully kitted with all parts to install cables
- Designed and tested to TelcordiaTM GR-771 requirements
- Rural Utilities Service (RUS) Listed

Splice Closures / Network Access Points

Corning OptiSheath® MultiPort Terminal

- Reliability and flexibility make it the ideal choice for NAP terminals in FTTH deployments

- OptiTap® drop cable assembly connector ports for faster customer connections
- 4 and 12 port designs supplied with universal mounting bracket
- 6 and 8 port designs with integrated mounting capability
- Ultrasonically welded housing – eliminates water ingress potential
- 4, 6 and 8 port configurations compatible with 8 in stand height pedestal
- Dimensions optimized to fit in a variety of commercially-available handholes
- Factory directly-terminated polished connectors
- Stubbed terminal provides the ability to consolidate cable access points by routing several terminal stubs to a single splice location
- RDUP listed

Corning OptiSheath® Aerial Terminal

- Low-cost solution optimized for optical access architectures
- Innovative terminals provide environmental protection and quick incremental connection of subscribers' drop cable
- Provides strain relief, sealing of all cables and quick-release clamps for easy terminal re-entry
- Cable sealing and reusable gel seals for environmental protection
- Terminals provide an excellent option for emergency restoration
- RDUP listed

Corning FlexNAP™ Terminal Distribution

- Significantly faster deployments than traditional field installations
- Cable and network access points are tested and shipped as a complete distribution cable/terminal system
- Compatible with both aerial and below-ground outside plant distribution applications
- Factory terminated and tested with factory installed sealed access points
- Patented, flexible, preterminated access point terminal allows the complete cable system to conform to drum size of most standard cable reels
- Rental capabilities offered as well as engineering services available to plan, design order and supervise installation
- Up to two tethers available per tap point (24 fibers)

3M · ADC · ADTRAN · AFL Telecommunications · CLEARFIELD Ingenuity in Passive Connectivity · Charles · CORNING · EMERSON Network Power · EXFO Expertise Reaching Out · JDSU · PLP Preformed Line Products · SUMITOMO ELECTRIC LIGHTWAVE · ReadyLinks · SUPERIOR ESSEX · Tyco Electronics Our commitment. Your advantage. · ZHONE

Preformed Line Products
COYOTE® Dome Closures

- Available Sizes:
  - » 9.5" x 28" (240mm x 711mm)
  - » 6.5" x 22" (165mm x 559mm)
  - » 6.5" x 17" (165mm x 432mm)
- Designed for below grade, aerial or direct buried applications
- Patented segmented end plate design allows independent access to each cable port
- 9.5" End plate contains 7 ports each accepting 1.25" max cable diameter (31.7mm)
- 6.5" End plate contains 4 ports each
- accepting 1.25" max cable diameter (31.7mm)
- End plate system can support multiple express loops
- Features the latest easy to use grommet sealing technology
- Collar system provides quick reentry.
- No special tools required
- Independently tested to the Telcordia GR-771 CORE specification
- Segmented end plate system can also function within closure shells to create inline designs
- Full line of pole, wall, strand and below grade mounting brackets available
- Consult detailed product literature for splice capacities

Preformed Line Products
COYOTE® Classic In-Line RUNT Closures

- Dimensions: 17.5" x 10" x 3.5" (440mm x 250mm x 90mm)
- Designed for below grade, aerial or direct buried applications
- Can support splice capacities up to: 80 (single fusion) or 288 (mass fusion)
- Cable entrance port quantity - 4, each accepting max cable diameter of 1.25" (31.7mm)
- Features the latest easy to use grommet sealing technology
- No special tools or torque wrenches required for assembly
- Flame retardant designs also available
- Compact size and flat base permit installation in small areas
- Full line of pole, wall, strand and below grade mounting brackets available
- Accepts a full line of splice trays including the LITE-GRIP® Splice Tray system
- Independently tested to the Telcordia GR-771 CORE specification
- Consult detailed product literature for splice capacities

Preformed Line Products
COYOTE® MPC (Multi-Purpose Closure)

- Available Sizes:
  - » Standard - 16" L x 14" W x 4" D (406mm x 360mm x 100mm)
  - » Deep - 16" L x 14" W x 7" D (406mm x 360mm x 178mm)
- Designed for above grade exterior or interior use
- Eight cable entrance ports around closure exterior
- Cable entrance ports accept PLP grommet system or commercial fittings
- Single hole and multi-hole grommets available
- Constructed from flame retardant UV resistant polymers
- Interior grid hole pattern allows custom organization to address your specific needs

- Designs available with internal bulkheads to support splice/patch applications
- Integrated rubber seal provides NEMA 4 performance against water and dust entry
- Full line of accessories to organize interior
- Custom plaques available to identify your company logo
- Consult detailed product literature for splice capacities

Preformed Line Products
COYOTE® LCC Closures

- Compact Size: 17" x 7" x 2.5" (432mm x 178mm x 64mm)
- Designed for below grade, aerial or direct buried applications
- Cable entrance port quantity – 2, each accepting max cable diameter of 1.25" (31.7mm)
- Can support splice capacities up to: 24 single fusion, 72 mass fusion
- Features the latest easy to use grommet sealing technology
- No special tools or torque wrenches required for assembly
- Features a LITE-GRIP® Splice Platform that can support mechanical connectors, PLC splitter modules, single fusion or mass fusion splices
- Compact size and flat base permit installation in small areas
- Full line of pole, wall, strand and below grade mounting brackets available
- Independently tested to Bellcore specifications

Splice Closures / Network Access Points

Tyco FOSC 450 Fiber Optic Gel Splice Closures

FOSC 450 fiber optic splice closures are a family of butt-style closures designed for use most anywhere there are fiber splicing and storage needs. These closures are available in five sizes (450 A, B, B Short, C, D), each featuring:

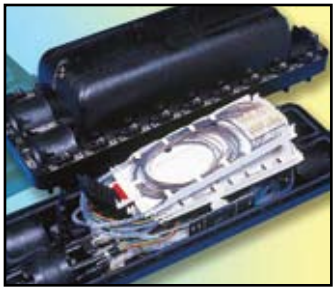
- Re-usable compressed gel cable sealing components that accommodate a wide range of cable sizes.
- Hinging splicing trays that provide controlled access to splices and slack storage.
- Splice and storage compartments accessible via a removable dome-clamp system.
- Thermoplastic outer materials that withstand temperature and contaminate extremes.
- Slack storage baskets of various sizes that provide different slack storage scenarios.
- A range of accessories for a variety of outside plant needs.
- Many shared components between closure sizes.

Tyco FOSC 500 AA Slim In-Line Closure

FOSC 500 AA in-line closures are environmentally sealed enclosures for aerial, underground, or direct buried applications in the outside plant network where space is limited

- Compact in-line design
- Easy re-entry and re-closure mechanism with hinge and latches
- Two cable ports at each end of the closure implement cold-applied gel cable sealing system
- Integrated cable jacket gripping devices
- Compatible with most existing cable constructions
- Superior fiber management

Tyco FOSC 600 Fiber Optic Splice Closure



The FOSC 600 C and D closures are more than just fiber optic splice closures. They are rugged and versatile platforms that can be deployed anywhere in the outside plant for a multitude of functions including the splicing of most any type and size of cable, the housing of connectorized distribution and demarcation points, and the deployment of optical passives. The sealing system for FOSC 600 closures builds on the proven reliability of FOSC 400 and FOSC 450 closures and features the versatile and popular gel-sealing technology for terminating cables, and a unique latching system for quickly opening and closing the body.

- Up to 16 separate cable ports
- Sized for cables up to 35mm in diameter and 1728 fibers
- Field configurable for butt or in-line splicing
- All internal parts can be removed for reconfiguration
- Both C and D closures use Tyco Electronics' "D" size splice trays
- Storage basket included with all closures can be extended in length or repositioned vertically depending on application
- Slack ribbon storage on the same tray as mass fusion splices is possible with the use of a ribbon tray
- Backed by Tyco Electronics' extensive network of technical field support specialists

AFL LightLink™ LL-400b

- LL-400b Fiber Optic Splicing and Distribution Enclosure provides for organizing, splicing, and interconnecting fibers in FTTx, broadband, distribution, and building entrance applications
- Features a scratch resistant powder coated aluminum base and a fully gasketed cover

- Unique self-sizing grommet design allows for express and preterminated cable installation
- Equipped with 6 independent cable entry/exit grommets, used for outdoor pedestal or indoor building entrance and riser splicing applications
- Independent cable strain relief system
- Cable entry/exit grommet seals
- Fiber routing system
- Splice tray support system
- Supports optional interconnect modules
- 240 single fusion splices
- 288 mass fusion splices

AFL LightLink™ LL-500-DS

- Tested to Telcordia GR-771
- NEMA 3 rated enclosure
- Independent cable strain-relief for flat drop cables as well as 2mm and 3mm drops
- Unique self-sealing grommet entry system
- Self-contained inner chassis frame with separable outer housing
- Dual telco can-wrench locking fasteners
- Hinged cover securable with standard padlock
- Included splice tray, (4) SC/APC adapters, (4) SC/APC 2mm pigtails

Clearfield FieldSmart (FDP) Splice Only

- The FieldSmart FDP Splice Only Pedestal Inserts provides splice or interconnect connectivity at the access point for the last mile drop.
- RUS listed
- Strength, rigidity and security all in a high-performance thermo-plastic material designed to Telcordia GR-13 Core and RUS PE-91 specifications
- Single point self-locking and removable cover provides secure pedestal locking and eased craft access
- Open architecture and flood-proof models
- "Stake-less" self-supporting base eliminates the need for supplemental mounting stakes
- Split/rehab base allows for easier placement over existing cable or pedestal expansion
- Easy lift-off dome for 360° access permits complete access to all wire work and equipment
- Up to 16 splice trays with Clearfield regular Drop Cable Assembly or industry-standard HFOC
- Pre-configured/pre-loaded factory terminated assemblies
- Patch only or patch & splice configurations supported
- Integrates distribution splices, splitters and slack cable for a cost-effective flexible option or any FTTP deployment
- Can wrench fasteners

Clearfield FieldSmart (FDP) 96-Port PON

- The FieldSmart Fiber Delivery Point (FDP) 96-Port PON Pedestal Insert Kit provides splice or interconnect connectivity at the access point for the last mile drop.

- RUS listed
- Strength, rigidity and security all in a high-performance thermo-plastic material designed to Telcordia GR-13 Core and RUS PE-91 specifications
- Removable metal cover
- Low cost entry with RUS listed pedestals
- 1-8 splice trays with Clearfield regular Drop Cable Assembly or industry-standard HFOC
- Pre-configured/pre-loaded factory terminated assemblies
- Patch only or patch & splice configurations supported
- Integrates distribution splices, splitters and slack cable for a cost-effective flexible option or any FTTP deployment
- This insert will work in all three of these pedestals: Proform 12, Channell, BD7
- Utilizes cost effective

Pedestals / Enclosures

Charles Fiber Distribution Pedestals

- Closed architecture fiber distribution pedestals with two-stage "enclosure within an enclosure design" that exceeds Telcordia GR-771-CORE specifications
- Inner sealed splicing compartment is accessible through either a lift-off dome or double door enclosure
- Accommodate loop-through and stub-out distribution cable, ribbon and loose buffer tube type cable, branch and drop splices, and fiber slack storage
- Non-metallic construction and locking dome provide superior, flood-proof environmental protection
- Available in 4", 6", 8", 10" and 12" pedestal diameters

Clearfield FieldSmart (FDP) Outdoor/Indoor

- Available applications: Fiber demarcation, entrance facilities, security systems (CCTV), MDU (Multi-dwelling Units) applications
- Pre-configured/pre-loaded factory terminated assemblies
- Patch only or patch & splice configurations supported
- Panel can be configured as a tie panel and later converted to a patch only or a patch & splice panel, utilizing Clearfield's Clearview Cassette
- Removable doors and non-angled connectors enable fast, easy fiber jumper routing, reducing the risk of fiber damage when cleaning or patching fibers
- The product is shipped and loaded with the industry standard adapter of your choice
- Supports all industry standard single mode and multimode connectors
- 100% performance tested for Insertion Loss, Return Loss and mechanical inspect
- 100% tested GR-326 compliant terminations, and GR-20 and GR-409 compliant
- Radius protected storage for up to three meters (for outdoor) or five meters (for indoor models) of jacketed fiber or patch cord slack is provided (patch side)
- Integrated fiber management protects fiber from micro-bend and macro-bend damage
- Accessible using a standard can wrench

Charles Buried Distribution Optical Pedestals

- Open architecture fiber distribution pedestals for both Greenfield and Brownfield fiber deployments
- Provide easy access to branch and drop splice while protecting and storing loose buffer tube cables
- Exclusive BDO bracket allows technicians to mount splice trays and splitters securely with ample access to perform in-field splicing
- Non-metallic construction and locking dome provide superior, flood-proof environmental protection
- Available in 6", 8", and 10" diameters

Charles Universal Broadband Enclosures

- Compact, lightweight metal cabinets for housing a variety of electronics in OSP placements
- Applications include cellsite backhaul, MDU PON ONTs, and remote DSLAMs
- Pre-wired to meet your power, protection, and physical interface requirements
- Swing out door or rack mount configurations for mounting optical multiplexers and other electronic equipment
- Available in many customized sizes and configurations

Emerson ProFORM FTTP FDP MI Series

- Provides fiber distribution on a center mounted metal insert
- Designed for slack storage, fiber splicing and drops in buried distribution FTTH applications
- Metal fiber mounting plate accommodates slack storage on one side and splicing on the other
- Radius limiting spools improve fiber management and reduce chance of signal loss
- Accommodates up to 12 feet of 144 loose tube fiber and up to 6 splice trays (12″H x 4.5″W)
- Pro8, Pro10 and Pro12 sizes available
- Lift-off dome for 360° access permits complete access to all wirework and equipment
- Meets or exceeds Telcordia GR-13 CORE and RDUP PE-91 specifications
- Accepted by the Rural Development Utilities Program (RDUP)

Emerson ProFORM FTTP Vault Series

- Mounts to the top of a pre-cast vault
- Three mounting bracket options are available: the Universal Rear-mounting Bracket (URB) is used for optical terminal block mounting; the fiber distribution mounting plate (FDP MI) is designed for slack storage, splicing and drops; and the plastic center mounting plate is used for copper distribution and wire management similar to the standard ProFORM series
- Easily bolts to the top of a pre-cast vault with the approved cutout
- Universal Rear-mounting Bracket (URB) accommodates is used for optical terminal block mounting
- FDP MI mounting plate is designed for slack storage, splicing and drops
- A plastic center mounting plate is used for copper distribution and wire management

- Seamless integral flood protection
- Meets or exceeds Telcordia GR-13 CORE and RDUP PE-91 specifications
- Accepted by the Rural Development Utilities Program (RDUP)

Emerson NetSpan FDP Series

- This series of optical splice enclosures permits fiber splicing, improves cable organization and houses environmentally hardened drop connections in FTTP applications
- Combines Optical Splice and Environmentally Hardened Drop Closures
- Unique internal back-to-back dual closure configuration enables craft separation; fiber splice and drops in separate closures
- Eliminates need for hand hole/vault for drop splices
- Single part number for Integrated Distribution Terminal and ProFORM® pedestal solution
- Designed to fit in ProFORM® 8 & 10 pedestals

Drop Cable

ADC Hardened Connectors and Drop Cables

- Single-fiber, single-mode hardened connector SC/APC drop cable assemblies
- Available with one or both ends connectorized
- Standard lengths available - from 60 to 2500 ft increments (longer assemblies available upon request)
- Environmentally sealed connector
- Easy connection to hardened adapters on terminals or closures
- Arrow on hardened connector shell ensures precise alignments of connector into optical port
- Connector can be pulled through 1.25-inch conduit
- Pulling eye on connector cap is designed for 100 lb. maximum pulling tension
- Drop cable fully tested to GR-20 and designed to GR-3120

3M™ (ECAM) FD Factory Terminated Drop

- GR-20 certified dielectric, single fiber flat drop cable with dual strength member.
- For locating purposes, a tonable drop cable is available.
- Available with other types of connectors (LC, ST, FC).
- Available with SC/APC or GR-326 connectors.
- One end or both ends of the drop cable is factory prepared.
- Available in lengths from 50' (15 m) to 1000' (305 m).
- Minimum conduit diameter: 3.175 cm (1.25 in.).

AFL Bend-Insensitive MDU

- Ceramic ferrule utilized for precision fiber alignment
- Ribbed boot design on SC insures protected cable bending
- Meets connector interface specifications of EIA.TIA-455 (FOCIS)
- All component materials are compliant to UL94 V-0
- Tested in accordance with Telcordia GR-326, issue 3 specifications
- Fujikura fiber enables tight bend radius control and low loss
- Cable constructions are RoHS compliant
- Cable constructions meet or exceed Telcordia GR-409
- Color-coded Ivory cable jacket identifies enhanced performance

ADC DLX™ Fiber Optic Connector

- Used to speed residential connection in Fiber-To-The-Premises (FTTP) cabling networks Smaller adapter enables smaller closure and smaller multiport terminal, takes up less space on poles, in hand holes and in an ONT.
- Smaller connector drops fit in smaller conduit, requires smaller hole in dwelling, less intrusive entry into the residence, easier and more secure connection.
- ADC's full sized hardened adapter converter is backward compatible with the OptiTap® connector system, using DLX connnector to full sized hardened adapter converter.

- SC/APC converter is backward compatible with SC connectors and adapters, using DLX connector to SC adapter converter. Allows flexibility in MDU cabling, reduces time and cost for connecting residential fiber.
- Variety of cable options allow cabling choice to be optimized for outdoor aerial or underground applications, or for indoor/outdoor applications

AFL Aerial Drop Cable

- Designed for use with inexpensive attachment hardware
- Compatible with standard splice closures
- Self-supporting - no messenger needed
- Small cross section for maximum density in closures and conduit
- Ideally suited for self-supporting drop-type installations as well as in lashed or conduit builds
- 6 and 12 fiber designs

AFL Future Access™

- Future Access™ 4-Fiber HFOC Drop Cable is used in MDU application where FTTP services are to be provisioned using indoor single family unit (SFU) ONT
- Allows quick and easy installation from the preinstalled HFOC terminal usually residing on a pole, pedestal or hand-hole run to the side of the MDU building
- Four environmentally sealed SC/APC connectors
- Each connector marked for fiber identification and equipped with protective cap
- Fully sealed transition fan-out into individual 48" long single fiber HFOC tethers

- Tested to Telcordia GR-3120 and GR-771 requirements
- Available in dielectric or toneable flat drop cable
- Available in 200 or 500 foot lengths

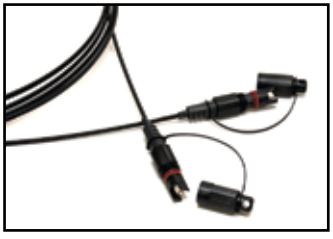
ADC RealFlex™ MDU Drop Cables

- Quick and easy deployments with increased reliability allow for fast service turn-up, improved network reach and lower overall network operating and maintenance costs
- Bend radius as small as 7.5 mm without changing cable characteristics allows stapling around tight corners without compromising insertion loss performance
- Greatly reduces risk to bend induced insertion loss created during installation
- Indoor/Outdoor, Plenum and Riser cable options available
- Rugged 3 mm cable jacket construction
- G.657 Table A and B compliant
- Two cable configurations available: connectors on both ends or connector on one end
- Spooling options: end with connector pulled first or end without connector pulled first
- Ivory cable color helps distinguish cable in the field

Corning OptiTap®

- Unique design reduces the total installed cost of drop cable deployment
- Single-fiber, single-mode SC APC or SC UPC drop cable assemblies
- Available with one or both ends connectorized
- SST-Drop™ cable available in both dielectric or toneable configurations
- Cable design for aerial, direct-buried or duct installation
- Standard lengths available in 15 ft increments from 90 to 180 ft and in 50 ft increments above 200 ft
- Robust design keeps connector intact during installation
- Can be pulled through 1.25 in conduit
- RDUP listed

Corning ROC™



- Innovative tubeless cable design minimizes both size and weight
- Available in both dielectric and toneable variations
- Retains industry standard hardware compatibility such as wedge clamps
- Improves ease of handling and installation
- Reduces transportation and storage costs
- Available in preconnectorized assemblies
- Optimized for both field and factory termination processes

Sumitomo PureFit™

All-Purpose FTTx Drop Cable
- Flat design and small diameter; All-dielectric
- Easy seal in closures
- Ideal for both aerial and buried applications
- Maximum flexibility for factory termination and plug-n-play systems
- Eliminates cost and need of special tools
- Easy cable entry

All Purpose Locatable FTTx Drop Cable
- Elimination of grounding process
- Copper strand for locatable function
- Zip cord design for easy hand-peeling of metallic locator
- Facilitates both increased savings and improved efficiency when used as a low fiber count distribution cable and as final drop to the premises
- Ideal for aerial applications when entire locator is removed
- All-dielectric core

Armored Drop
- Low Cost
- Corrugated steel armor for added protection
- High flexibility due to absence of strength rods
- Small diameter maximizes duct space for more fiber density
- Easy access design eliminates need and cost for special tools

Ribbon Drop
- First FTTx ribbon drop cable in the industry
- Sumitomo's Easy-Peel™ (Hand-Peelable Ribbon Technology)
- Fast installation, Mass Splicing
- Clean, Gel-free, Dry Design
- Compatible with hardened, multi-fiber connections (MFCs)
- Ideal for terminal tether and both aerial and buried applications
- Small diameter maximizes duct space
- Available in standard ribbon or 3x4 modular ribbon configuration that facilitates quick deployment and mass splicing of 4-fiber branching topologies
- Compliments Type-25eM mass splicer for faster, lower cost, and more efficient FTTx deployments

Superior Essex ADP FTTP Series 57

- Adds a standard fiber component to a proven self support aerial drop product offering combinations up to 12 fibers and 2-22 AWG twisted pairs
- Offers the flexibility of twisted pair copper for communications or power with the future proofing capabilities of optical fiber
- Completely water-blocked using dry technology to reduce weight and increase user friendliness
- Uses standard off the shelf self support hardware and well-known industry accepted installation practices

Hardened Gateways & CPE

ADC OmniReach® Rapid Distribution Terminal

- Serves as the final distribution point between the IFDH and living unit
- Eliminates the need for splice cases and separate cable assemblies
- Reduces overall lead-time and installation process
- Innovative RapidReel™ technology enables quick payoff of up to 500 feet of MT stubbed 12 or 24 count optical fiber cable from a single 6"x 9" wall box
- Provides flexibility in deployment with various size terminals, cable types and standard cable lengths
- Use of factory terminated and tested MT connectors instead of splicing provide a plug and play environment that reduces labor costs and speeds project completion
- Utilizes Reduced Bend Radius Fiber
- Miniaturized cable requires less space for slack storage of excess fiber cable
- Simplifies ordering and inventory

AFL LightLink™ Optical Demarcation Closure

The OptiNID OPN-500 is an optical demarcation closure designed for use in either indoor or outdoor environments. Smaller to suit FTTH demarcation applications and versatile to suit Cat5 or coax connections, the closure is capable of housing up to six bulkhead adapters in one 118 LGX® compatible adapter plate. Equipped with an integrated splice tray, which holds up to six single fusion splices, the OPN-500 can be either wall or pole-mounted for ease of use and accessibility.

- Weather-resistant thermoplastic alloy
- Self-latching, hinged cover design allows easy access without loose parts
- Self-sealing individual entrance ports prevent water and insects from entering
- Capacity for one 118 LGX compatible adapter plate
- Keystone adapter plate available
- Provider override for customer lock
- 1/2" or 3/4" NPT conduit fitting, compression cable fittings or grommeted entry ports
- Locations available on front cover for custom logos

ADC OmniReach FDH 3000i series cabinets

- Designed to organize and administer fiber optic cables and passive optical splitters in an inside plant environment typically found at the MDU
- Provides a vital cross-connect interface for optical transmission signals at the MDU
- Integrated splice tray offers flexible splice management for individual or mass splicing
- Sealed cabinets protect fibers from dust, water spray, insects and other contaminants
- Accommodates high-density pre-terminated configurations, typically 72, 144, 288, or 432 fibers
- Accommodates high-density modular splitter options, 1x16, 1x32, dual 1x8, dual 1x4
- Traditional swing frame design allows for superior rear access
- Tested to NEMA-12 and GR-3123
- Complete fiber management allows for flexible re-arrangement
- Cable management and routing limits bend radius and adds strain relief
- Rack, wall or pad mountable
- Bend insensitive fiber on splitter outputs
- True plug-and-play splitter technology
- 216-Tool (can wrench), key lock or padlock offers flexible security options

AFL LightLink™ Customer Premise System

- Fits comfortably into new and existing interconnect, cross-connect and co-location environments
- Optional splice tray and holder (ordered separately)
- Available empty, with adapters, or with adapters, splice trays and pigtails preinstalled
- Various connector styles and types available
- LGX® compatible (LGX® 118)
- Modular design
- Provides maximum protection of sensitive components
- Dual doors with separate locking options for flexibility and security
- Optional 5-position Keystone® adapter panel for use with copper interconnects
- Co-Location/Customer Premise
- Remote Terminals
- Hubs/OTN sites
- Telecommunication Closets
- Solid steel construction
- Central office white or black powder coat
- Top or bottom cable entry with dust resistant grommets
- Physical dimensions: 9.4"H x 15.0"W x 3.3"D CPS012 shown in white

3M™ Cable Transition Box FTB-M (CTB)

- Compact size, discrete design respects building aesthetics, works well in tight spaces.
- Rubber gasket along interior edge and at drop cable entry ports keeps moisture from penetrating enclosure.
- Well organized fiber coiling area maintains appropriate fiber bend radius.
- Terminates up to four fibers with 3M™ No Polish Connectors (or standard SC connectors), also accommodates four 3M™ Fibrlok™ Splice Sleeve Holders. Suitable for customers interested in operational efficiencies and lower labor costs of mechanical splicing and field terminations, as well as those who opt for use of preterminated drop cables.
- Cable anchoring device ensures appropriate fiber bend radius as cables transition from enclosure through building wall.

3M™ Compact Fiber Distribution Box PBO T1

- Cover with hinge that opens 120 degrees and can be fixed in position allows easy splicing of connections while box is mounted.
- Splice tray holder with hinged trays gives ability to reach each splice without disturbing other fibers.
- Anchoring devices for distribution and drop cables helps ensure cables remain secure in box.
- No bolts used to seal enclosure for faster, easier installation and access than traditional OSP closures.
- Closed by latch with an optional security device for added security to avoid tampering with fiber network.

3M™ Cable Transition Box BTI

- Compact size respects building aesthetics, works well in confined spaces.
- Slots for 3M™ Fibrlok™ 250 µm Fiber Splice 2540G or fusion splice sleeves. Suitable for customers interested in the operational efficiencies and lower labor costs of mechanical splicing, as well as those who opt for traditional fusion splicing.
- Well organized fiber coiling area maintains appropriate fiber bend radius to maximize network performance.
- Strain relief for both distribution and drop cables ensures secure network connections.
- Suitable for round or flat cable with up to a 4 mm diameter (.16 in.). Compatible with a variety of drop cable types to accommodate customer preferences.

ADTRAN Total Access 1100 Series

- Total Access 1100 Series broadband access systems represent an innovative approach to the successful deployment of universal broadband and fiber to the node (FTTN) architectures
- Standalone, weatherproof broadband access systems to eliminate the need for expensive cabinet enclosures, heat exchangers and site construction, which account for a large portion of the total cost of deployment
- Depending on the density, 1100 Series solutions can deliver services for 50 to 75 percent less than traditional cabinet-based DSLAMs, while dramatically reducing the initial circuit costs
- Total Access 1100F is an environmentally-hardened Ethernet aggregation unit that serves up to four Total Access 1148 OSP DSLAMs or Total Access 1248 Mini-DSLAMs, logically combining them into a single, high-bandwidth Ethernet/IP DSLAM
- Provides the high bandwidth uplinks, Ethernet aggregation functions, fiber and copper system interconnects, and video enabling functions like Internet Group Management Protocol (IGMP) proxy for multicast replication

Motorola GPON ONT

Voice:

- TDM voice with Integrated GR303/TR008
- SIP VoIP

Video:

- IPTV and IGMP multicast
- 870Mhz RF overlay with Integrated MOTorola Return Path Demodulator (MOT-RPD)

Data:

- 10/100/1000bT interfaces
- VDSL2, HPNA options

Hardened Gateways & CPE

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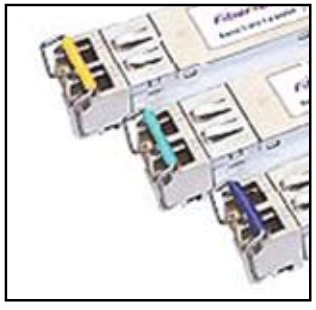
- 10/100/1000bT interfaces
- VDSL2, HPNA options

Readylinks RHINO OSG™

- Provides scalable Gigabit Ethernet FTTH terminations for IP triple-play services
- Hardened outdoor version and indoor version with mounting options
- Multiple network topologies - Direct, Chain and Ring
- Cost Effective VoIP, Internet, IPTV and HPNA implementations
- Lower optical transceiver costs - supports the complete distance range of single mode and multi-mode ReadyLinks SFP laser packs
- Compatible with all major Ethernet Switch and Router Vendors making it truly a plug and play Ethernet termination solution

Readylinks RHINO SFPs



- Global Standard SFP form factor
- Ranges from 1km to 80km
- Temperature Hardened -40C to +80C
- Plug and Play in any RHINO and IPcoax unit
- Can be used in switches such as Force10
- Come in single fiber or dual fiber single mode, dual fiber multi-mode, or copper Ethernet

Readylinks RHINO ONT™

- Provides direct 100Mbps or 1Gbps Ethernet FTTH terminations for IP-based triple-play services
- 100Mbps Ethernet transport ensures bandwidth will be available now for demanding Video, Data and Voice services with an upgrade path to 1Gbps if needed in the future
- HPNA 3 option built-in for existing home wiring

Zhone Znid ONT

- Intelligent FTTx terminations with integrated home networking and management
- Triple Play Services - RF Video or IP Video, VoIP, High Speed Internet Access
- No New Home Wiring - HPNAv3 supported simultaneously on Coax and Phone Line and power over Phone Line eliminates the need to run new wires.
- Two Step Easy Installation - Install fiber enclosure without the need for electronics. Electronics can be installed after services are ordered.
- Supports Multiple Languages
- Broadband Remote Access - Allows consumer to VPN into the zNID and access home computers
- Remote Management - TR-069, SNMP, and Web GUI.
- Full range of outdoor residental and business choices

Zhone HPNA Bridge

- Zhone's HPNA bridge products are designed to work with the zNID product line, allowing customers to use their home's existing wiring as an Ethernet network
- Supports HomePNA3.0
- Data rate up to 112Mbps
- Plug & Play
- Uses existing coaxial TV cable or existing phone line cable to build a home network
- 2 Standard 10/100Base T Fast Ethernet ports for connecting to PC or STB
- MDI/MDIX Auto Crossover support
- QoS Priority Mapping Support

AFL FSM-18S

- Rugged construction providing shock, dust and moisture resistance
- Dual monitor position with automatic image orientation
- Automatic arc calibration
- User-selectable fiber clamping method – sheath clamp or fiber holders
- Auto-start tube heater
- Color LCD display and anti-reflective coating for excellent visibility in bright sunlight
- Simultaneous battery charge and splicer operation
- Long life battery (up to 150 splice/heat cycles per charge)
- Detachable work table incorporated into the transit case
- Data and video download software and splicer upgrade software included; software upgrades through PC application via the internet
- Green friendly – RoHS & WEEE compliant

AFL FSM-60S

Features:

- Rugged construction providing shock, dust and moisture resistance
- Dual monitor position with automatic image orientation
- Automatic arc calibration and fiber identification
- User-selectable fiber clamping method – sheath clamp or fiber holders
- Auto-start tube heater feature
- Color LCD display with anti-reflective coating for excellent visibility in bright sunlight
- Simultaneous battery charge and splicer operation
- Long life battery (up to 160 splice/heat cycles per charge)
- Detachable work table incorporated into the transit case
- Data and video download software and splicer upgrade software included; software upgrades through PC application via the internet
- Green friendly – RoHS & WEEE compliant

AFL SpliceMate™ FSM-11R & FSM-11S

- Highly portable
- Dual camera inspection
- 3.5" dual direction monitor
- Single or 4-fi ber versions available• 40 second tube heater
- Auto arc calibration
- 30 mph wind protector
- SpliceMate shown with kit

AFL FAST™ Connectors

- Premise environments
- Connections at the desk for LAN environments
- Patch panels
- Direct equipment termination
- Fiber to the Subscriber (FTTx) applications
- Repair/replacement requirements
  - » Equipment test leads
- Pre-stubbed, factory-polished ferrule
- No epoxy required
- Precision mechanical alignment insures low loss
- Fiber can be reseated
- 3.0mm, 2.0mm, and 900µm boot provided with each connector
- VFI can be used to confirm fiber is installed properly
- Meets TIA/EIA 568A performance requirements
- Meets TIA/EIA 604 (FoCIS) connector interface requirements

Splicing / Fusion Splicers

3M™ Crimplok™ Connectors

- Installation in less than two minutes.
- Meets EIA/TIA568Aspecifications.
- Non-adhesive design for clean and simple terminations.
- Intermateability with standard connectors provides convenience; quick restoration of existing systems.
- No setup required saves time and money.
- Minimal tools required.
- No electricity required for installation anywhere.
- Pre-radiused PC zirconia ceramic ferrule provides assured contact of fibers; stability through temperature change; quality performance.

3M™ Fibrlok™ II 2529

- Keyed, angle cleave splice. Low reflection for excellent analog video performance.
- Simple assembly tools for fast, easy installation.
- Separate cleaver and assembly tool. Same cleaver used for Fibrlok splice and 3M™ No Polish Connector.
- Long-term reliability with stable optical performance across temperature extremes.

3M™ No Polish Connectors, SC/LC

- Always right cable length with no cable slack to store.
- One piece, pre-assembled design. No small, loose parts.
- Simple assembly tool for fast, easy installation.
- 900µm buffer strain relief for excellent pull out strength.
- Fiber holder for assembly designed to eliminate the need to touch bare fiber.
- Factory-polished fiber stub in ferrule so no on-site polish or adhesives required.
- Bell-shaped boot helps prevent fiber from bending below minimum bend radius.

Sumitomo Fusion Splicers

All Sumitomo splicers are ROHS compliant, have a full 2 year warranty, and are serviced with 24-Hour Technical Support.

The Type-39 FastCat Core Alignment splicer

- Only splicer on the market to feature a Dual-Automatic Heater System with Auto Start Heater and Auto Start Splice functions, making it the fastest splicer available today.
- The light weight unit also features automatic fiber profiling detection, easy to load fiber holder unit, long life battery, user friendly menu selection system, 5.6" adjustable monitor, and a splice cycle of only 9 seconds.
- Typical splice loss is 0.02dB for SMF and 0.01dB for MMF
- Compatible with Sumitomo's new Lynx CustomFit™ Splice-On Connector.

The Type-66 TuffCat™ Mass Dual-Heater Mass Fusion Splicer

- Can be used for all types of ribbon and single splicing with ease of use in trunk, aerial, or taut-sheath applications.
- Featuring Dual Independent Splice Protection Sleeve Heaters and Automatic Splice Start and Automatic Heater Start functions
- Features an effortless fiber holder system, extended life battery, user friendly menu selection system, 5.6" adjustable monitor, Spanish language option, fiber alignment vibration clamps, and a typical splice time of only 20 seconds.
- Typical splice loss is 0.04dB for SMF and 0.03dB for MMF
- Compatible with Sumitomo's new Lynx CustomFit™ Splice-On Connector.
- Fiber holders are compatible with Sumitomo's TomCat handheld splicers, as well as other splicers, reducing the customer's inventory cost

The TomCat Type-25e

- Offer three versatile choices of an economically priced single camera unit, a single fiber unit with dual camera and splice loss estimation, and a 4 ct. mass unit that also includes the dual camera with splice loss estimation
- Typical splice time is 11 seconds
- Feature an Automatic Arc Test function, multiple language options, built-in battery, AC adapter incorporated within the unit, Lynx Splice-On Connector compatibility, and much more.

AFL M700 Compact Single-mode OTDR

- 38 / 36 dB dynamic range @ 1310 / 1550 nm
- Integrated Optical Power Meter (OPM) and Visual Fault Locator
- (VFL, 650 nm)
- LSA Measurements and manual events in Expert mode
- Pass/Fail Event and Link Thresholds settings
- OTDR results saved as industry standard (GR-196) .SOR files
- OPM stores results and displays up to three wavelengths simultaneously
- Large, high bright, sunlight readable, transflective touchscreen
- Tool-free, switchable adapters (SC/FC/LC)
- Integrated fiber launch ring holder
- 2 USB host ports
- USB drive and Windows® compatible software included

AFL OFL280 Handheld FTTx OTDR

- Handheld, 0.8 kg (1.7 lb)
- 1.3 m event dead zone
- 30 dB (28 dB @ 1625 nm) dynamic range
- FTTx construction model (OFL280-102) includes:
  - » 1310/1490/1550 nm
- FTTx installation model (OFL280-103) includes:
  - » 1310/1550/1625 nm
  - » PON power meter
  - » Live fiber filter at 1625 nm
- OPM, OLS, and VFL (650 nm)
- Internal memory (> 1,000 trace files)
- 3.5-inch, indoor/outdoor LCD display
- 12-hour, rechargeable Li-Ion battery
- USB port for PC connection

AFL OFI-FTTx Active ONT Detector

- Rugged, handheld, lightweight
- In-service detection of upstream (1310 nm) activity on FTTx networks
- Determines which unparked splitter pigtails are connected to ONTs
- Does not require travel to customer (ONT) site
- Does not require disconnect of splitter pigtails
- Visual and audible indicators
- Battery operated
- Low battery indication

JDSU T-BERD® 4000

The T-BERD 4000 is a small, compact and handheld test platform designed for all phases of the network lifecycle, from the installation to the maintenance of Access/FTTx networks and triple-play services. Modular in design, the T-BERD® 4000 offers field service technicians the highest performance and superior levels of scalability and upgradeability

- Large 7-inch indoor/outdoor color display
- Cost-effective, compact and hand-held platform
- Multi-layer network solution from physical to services layer
- Highly scalable with up to 2 field-replaceable modules
- Connection checker with VFL, power meter and video inspection scope options
- Flexible connectivity for fast data transfer: 2xUSB 2.0, up to 1 Gb/s Ethernet Applications

JDSU HP3-60

Fiber Inspection and Test System with Integrated Power Meter

The industry's only handheld solution for inspecting and testing fiber networks with one device.

The new JDSU HP3-60 display system combines fiber inspection and optical power measurement into a single seamless handheld device. The result is a significant increase in workflow efficiency and a decrease in total inspection and testing time. Also available is the HP3-60-P4 that features an integrated patch cord microscope for dedicated patch cord inspection.

- Promotes best practices in fiber handling by combining inspection and testing into one device
- Integrated functions & feature improve workflow by eliminating need to switch from one device to another
- Significantly reduce total inspection and test time for superior workflow efficiency

- Reduces the number of tools and accessories you carry and manage
- Inspect the bulkhead with the probe and the patch cord with the integrated PCM (with HP3-60-P4)

Test Equipment

JDSU HST-3000

Handheld Services Tester

Portable test set addressing the needs of Layer 1 thru Layer 7 testing with IPv6 Capability

Handheld, modular platform for copper and multi-service testing

- Support for Electrical and Optical Ethernet testing in a single module.
- IPv6 option to enable installation and troubleshooting of IPv6 networks.
- Modular hardware and software architecture is flexible and easily upgraded in the field. Allows testing of multiple services.
- Supports Triple Play and FTTX testing, as well as TDM network testing.
- Future-proof solution for circuit-switch to packet-switch migration.
- Fully configurable - buy only what you need now, easily upgrade as needs change.
- Rugged, hand-held platform ideal for field use.

EXFO Handheld OTDR Series - AXS-100

Powerful handheld units combining OTDR and power meter functionalities, optimized for FTTx PON certification and troubleshooting, as well as for premises network testing.

- LAN/WAN network characterization
- Access network installation and troubleshooting
- Four models: the AXS-100 Access OTDR, the AXS-110 Singlemode OTDR, the AXS-110 Multimode OTDR and the AXS-110 All-Fiber OTDR
- Event dead zone as low as 0.8 m, for easy location and characterization of all events
- Multiple options, including power meter, visual fault locator (VFL), fiber inspection probe, printer and IP testing
- Fault Finder mode, for quick identification/location of fiber breaks
- Smart software option providing pass/fail status at all wavelengths, as well as span loss, ORL, fiber length and macrobend locations in a single window

EXFO PON/MDU OTDR—FTB-7300E

Designed to meet the testing requirements brought by FTTH networks in general, and PONs/MDUs in particular, enabling testing at 1310, 1490, 1550 and 1625/1650 nm.

- FTTx network testing, optimized for PON/MDU's challenges
- Access network testing
- Test through high-port-count splitters of up to 1x64
- Dynamic range of up to 39 dB
- Single mode live testing port for in-service testing
- Locates closely spaced events with 0.8 m dead zones
- Deploys faster with short acquisition time
- Reduces training time with an easy-to-use GUI

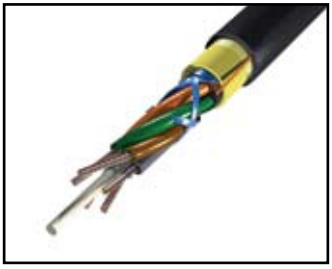
EXFO PON Power Meter - PPM-350C

Enables fast deployment, through quick reporting and workflow management.

- BPON, EPON and GPON configurations
- Service activation and troubleshooting
- Data storage and reporting capabilities
- Simultaneous measurement of all PON signals, anywhere on the network
- Innovative workflow management, for boosted test routine efficiency
- Enhanced rugged and weather-proof design
- Protected data format, for guaranteed test result authenticity

Fiber Optic Cable

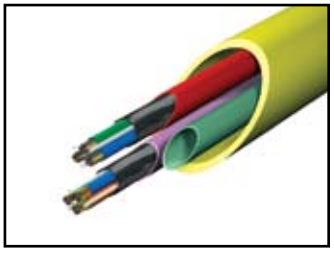
AFL Standard ADSS



- Gel-filled buffer tubes are S-Z stranded for easy mid-span access
- Cable is water-blocked using dry core technology, therefore no messy flooding compounds
- Design details listed below for span lengths up to 1500ft (457m) and fiber counts up to 432
- Custom designs available for larger span lengths or other fiber counts

- Suitable for use on distribution and high voltage transmission lines
- Track-resistant outer jacket available for installations on high voltage lines where space potentials reach up to 25kV

AFL MicroCore®



- No EMI or earth bonding limitations
- Fibre arranged in buffer tubes with some designs suitable for 12-fibre management
- Suitable for microducts supplied by all manufacturers
- Installation speeds of up to 120m/min. vand over 2.5km lengths at a time
- Robust for handling in the field
- High level bend capacity
- Low friction jacket design
- Easy access and breakout of fibres

- Scalable deployment
- Rapid cost effective installation
- Fibre counts up to 144
- Range of cable designs and sizes to suit a variety of duct sizes

The cables featured in this section are just a sampling of what we have to offer you. We distribute Fiber Optic Cables for AFL, Corning, Draka, General Cable, OFS, Prysmian, Sumitomo and Superior Essex. Contact your Power & Tel representative for pricing and availability.

Sumitomo Electric Lightwave

- Central tube provides easy midspan access
- 12 and 24 patented peelable optical fiber ribbons
- Available up to 432 fibers
- Industry standard MDPE sheath
- Complies with EIA/TIA, Telcordia, RUS, ICEA, and IEC requirements

PureRibbon DriTube® Armorlux® (Armored)

- Industry's First 100% Gel-free OSP Ribbon Cable
- Features Sumitomo's Easy-Peel™ technology
- Ideal for duct, direct buried, and lashed aerial installations
- Eliminates the cleaning and blocking preparation steps to speed overall installation, termination, and splicing while reducing labor and material costs
- Lighter weight allows for easier cable handling and longer installation pulls, especially for midspan and cable-end entry applications
- Steel armored sheath construction produces rugged, rodent resistant cable

Introducing NEW PureDri™ Loose Tube Single Armor/Single Jacket

- Dry water blocking elements
- Composed of a corrugated steel armor layer with a single outer MDPE jacket
- Reverse oscillating lay of the buffer tubes facilitates midspan access
- Cleaner and faster cable preparation and installation, decreasing cost of deployment
- Lighter weight facilitates easier cable handling
- Eliminates messy gel from tools and work station
- Corrugated steel armor for added strength
- Up to 288 fibers
- Complies with EIA/TIA, Telecordia, RUS, ICEA and IEC Requirements

Superior Essex Loose Tube Single Jacket

- Applications: Underground Ducts & Lashed Aerial; Trunk, Distribution and Feeder Cable; Local Loop, Metro and Long-Haul; Broadband Networks
- Available with up to 288 fibers
- Single mode, Multimode, RWP SMF, NZDS and hybrid
- Central strength members available in metallic or dielectric
- Dry (SAP) core standard
- Standard tube size for all fiber counts
- Improved operating temperature range
- PFM™ gel - non sticky gel allows for easier and faster cleanup
- Core is constructed by stranding the buffer tubes around a central member using a reverse oscillated lay
- Core is wrapped with flexible strength members covered with a water blocking tape, then encased with a black polyethylene jacket

FTTH Solutions Provider

Products

AFL Telecommunications is a world leader in fiber optic products in all marketing from Cable to Active Electronics.

Services

AFL also provides a complete service organization to support engineering and installation.

Training

The Light Brigade is the #1 resource for fiber optic training for technicians, installers, engineers, and supervisors.

Proud distribution partner of Power & Tel

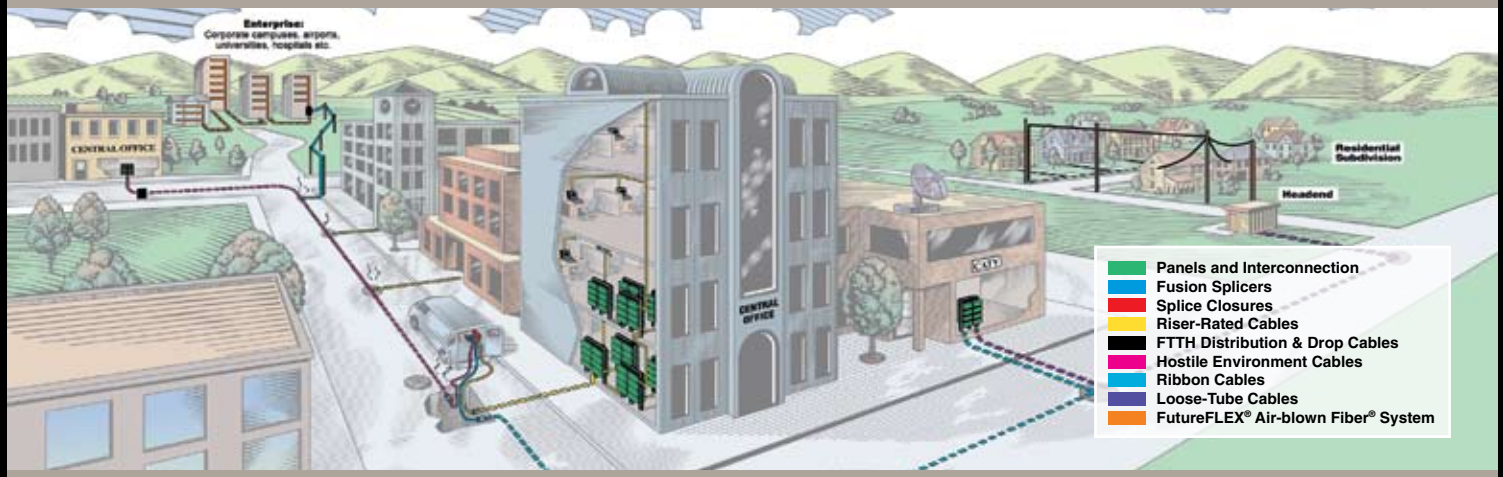
www.AFLtele.com
1.800.235.3423

AFL Telecommunications
A Fujikura Business

Sumitomo

SUMITOMO ELECTRIC LIGHTWAVE

Bringing Fiber Where & When You Need It



At Sumitomo, we're committed to tailoring your fiber optic network by providing new and cost effective solutions that offer the highest quality and most reliable products to drive fiber closer to the end-user. For decades, we've provided the most advanced fiber types, cables, splitters, fusion splicing equipment & accessories, and termination solutions to fit your particular topology and network vision.

Highest Quality Dry Cables

Broad range of loose-tube and ribbon distribution cables, including Dri-Tube® 100% gel-free cable and our new dry ribbon drop cable. Ribbon cables feature Sumitomo's leading Easy-Peel™ technology.

Introducing New 100% Gel-Free Loose Tube Cables

The latest additions to the Sumitomo loose tube product line are new All-Dielectric and Single Armor/Single Jacket cables that are completely dry and 100% Gel-Free for cleaner, lighter, and faster preparation.

We've Got You Covered...with the Industry's Best Fusion Splicers and Accessories

The industry's only dual-heater FastCat™ Single and TuffCat™ Mass Fusion Splicers, which improve splicing efficiency by over 80%, join the TomCat™ family…the world's most popular FTTx handheld splicers.

Sumitomo is your 1 stop source for all of your fusion splicing, cleaving, and accessory & consumable needs. The Only Thing More Reliable than Our Splicers is Our Service.

Introducing the Lynx CustomFit™ Splice-on Connector

Customized field terminations are now made possible with the Lynx Splice-on Connector. Eliminates need for maintaining inventory of varying lengths of preterminated jumpers for quick and accurate permanent connectorizations without gels or adhesives.

THINK RIBBON...THINK SUMITOMO

Visit **www.sumitomoelectric.com.** Call your Power & Tel Representative at **800-238-7514** today!

NetSpan™ Integrated FTTx Solutions from Emerson

fast, flexible fiber deployment to the home

Emerson Network Power's comprehensive range of FDH and pedestal solutions deliver voice, data and video with improved service turn-up time and enhanced subscriber take rate. With NetSpan's integrated solution you gain backward compatibility while providing an economical forward migration route that shortens your time to market.

NetSpan™ FDP Series

Fiber Distribution Pedestal Solution

These optical splice and distribution products permit fiber splicing and improve cable organization.

NetSpan™ FDH Compact Series

Fiber Distribution Hub Solution

This line of enclosures provides connections between fiber optic cables and passive optical splitters.

To you, seamless fiber deployment means accelerated turn-up time.

To your customers, it means around-the-clock convenience.

Emerson Network Power's NetSpan™ Solutions speed up results. That's because we have the network planning and engineering services needed to create a complete turnkey solution. NetSpan Integrated Fiber Enclosures not only speed deployment, but help cut your infrastructure costs – no matter what topology you use. Fast and flexible. NetSpan Solutions make it easy to deliver the next generation network and still beat the clock.

Get up to speed by visiting us online at: EmersonNetworkPower.com/NetSpan or at the 2009 FTTH Conference & Expo - Sept 28-30, booth #200.

NetSpan™ FDH Series

NetSpan™ integrated FTTx solutions.
Just another reason why Emerson Network Power is the global leader in enabling *Business-Critical Continuity™*.

EmersonNetworkPower.com/EnergySystems

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