

AERIAL FIBER OPTIC CABLE

Optical Ground Wire | Loose Tube | AFL-ADSS[®] | SkyWrap[®]

Optical Ground Wire (OPGW)

AFL has supplied over 415,000 kilometers across the world and is the global leader in OPGW capacity and product diversity. AFL also manufactures a complete line of attachment hardware for the installation of OPGW, including dead ends, suspensions, splice enclosures and comealongs. AlumaCore, CentraCore and HexaCore comprise AFL's broad OPGW product line. Installed OPGW runs between high-voltage transmission towers and optical fibers within the cable are used to transmit data for the purposes of protection, control and/or voice communication.



AlumaCore OPGW

AlumaCore Optical Ground Wire is preferred for its central aluminum pipe and color-coded fiber optic buffer tubes which simplify the splicing process while providing optimum fiber protection as well as long term product reliability for fiber counts up to 144. The durability of the design makes it ideal for typical applications to those requiring high tensions or needing long span capability.



CentraCore OPGW

CentraCore Optical Ground Wire is preferred for its compact size and ability to house up to 96 fibers in a diameter starting at only 12 mm. Its small profile offers an exceptional solution to the diameter and weight concerns on many of today's overloaded transmission towers where an existing shield wire needs to be replaced with an OPGW cable.



HexaCore OPGW

HexaCore Optical Ground Wire designs utilize fiber-bearing stainless steel tubes stranded alongside aluminum clad steel and/or aluminum alloy wires to create a multi-layer cable design suitable for a variety of environmental and geographical conditions. This family of designs incorporating stranded stainless steel tubes was developed in response to the demand for higher fiber counts, specifically those greater than 96.

All-Dielectric Self-Supporting Cable (ADSS)

AFL-ADSS[®] (All-Dielectric Self-Supporting) cable is ideal for installation in distribution as well as transmission environments, even when liveline installations are required. As its name indicates, there is no support or messenger wire required, so installation is achieved in a single pass, making ADSS an economical and simple means of building a fiber optic network. AFL manufactures its own line of attachment hardware which simplifies the network design phase of a project while ensuring compatibility between the cable and related components.



ADSS Standard Design Cable

Standard Design ADSS cables include both an inner and outer polyethylene jacket surrounding the buffer tubes and strength elements. This construction is required for stringent design conditions such as strict clearances, tighter tensions, higher line voltage environments, etc. AFL has pre-engineered a range of typical cable designs based on span lengths up to 1,500 ft. (457 m) and fiber counts up to 432. Gel-Free Buffer Tube options are available up to 216 fibers. Custom designs suitable to any application are also available.







Flex-Span® ADSS Fiber Optic Cable

Flex-Span ADSS expands on AFL's single jacket ADSS portfolio. Flex-Span designs are optimized for a broader combination of fiber counts and span lengths, providing ADSS system designers more flexiblity in their product selection. As its name indicates, there is no support or messenger wire required, so installation is achieved in a single pass.

Flex-Span ADSS Gel-Filled Tubes includes fiber counts up to 288 optical fibers and any type or combination of single-mode or multimode fibers within the cable. Pole-to-pole span lengths range from 50 ft. to over 1,000 ft. Gel-Free Buffer Tube options are also available with up to 216 fibers.



Flex-Span ADSS Fiber Optic Cable

Gel-Filled Tubes are reverse-oscillated to allow slack for mid-span access – up to 288 fibers in cable Gel-Free Buffer Tube options available – up to 216 fibers Max. Span Length @ NESC: Light - 1,100 / Medium - 875 / Heavy - 600

Fiber Optic Cable Hardware



ADSS Cable Hardware

Our AFL product line consists of fiber optic cable, optical connectivity, fusion splicers, and test equipment, as well as fiber management systems, closures, and accessories. Included in accessories are different types of hardware for the installation and efficiency of your cable system. Here at AFL we provide years of experience and excellent solutions for your hardware needs in both ADSS (All-Dielectric Self Supporting) and OPGW (Optical Ground Wire) cables.



OPGW Cable Hardware

To find out more about AFL's full line of ADSS and OPGW hardware, please visit www.AFLglobal.com/Hardware

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Loose Tube Cables



Non-Armored Loose Tube Cables

Non-Armored Loose Tube is outside plant cable suitable for use in duct or aerial-lashed applications. Available in single or double jacket versions, these stranded loose tube cables provide a solid backbone in fiber counts up to 432.



Armored Loose Tube Cables

Armored Loose Tube is an outside plant cable suitable for use in duct, lashed, or direct burial applications. Available in fiber counts up to 216 in Gel-Free, single jacket configurations, it provides a versatile solution with added mechanical protection.



Indoor/Outdoor Loose Tube Cables

Indoor/Outdoor Loose Tube Cable is an OFNR (UL 1666) riser-rated cable which is used in both duct and aerial-lashed applications. It combines the robust mechanical and environmental characteristics of an outside plant cable with the versatility of an inside plant riser cable. Available in fiber counts up to 144.



Low Smoke Zero Halogen OFN-LS Listed Loose Tube Cable

Low Smoke Zero Halogen (LSZH) Loose Tube cable is designed for use in outdoor lashed aerial and indoor duct applications including subways and tunnels with requirements for limited smoke and zero halogen. It is specially engineered for applications that require UL/NEC-compliant cables intended for inside-building applications and must meet minimum flame and smoke generation guidelines.



LMHD-Series OSP MicroCore® Cable

These cables can be jetted or pulled into standard HDPE ducts and, because of their small diameters, can be jetted into popular bundled micro-duct pathways. When the application requires a transition from underground to aerial, the LMHD-Series cables can be lashed to aerial messenger wires using standard OSP cable lashing equipment and techniques.

Specialty Applications



SkyWrap®

Successfully installed worldwide since 1982, SkyWrap is a fiber optic cable helically applied on ground wires or phase conductors. A specially designed spinning machine is used to wrap the cable under controlled conditions. This system offers a complete communication link designed and engineered for high-voltage environments at low cost.

SkyWrap is the ideal solution when access to the overhead line is problematic. The installation equipment is lightweight and easy to handle. And, with SkyWrap, there's no need to de-energize the line. The cable can be wrapped on the ground wire under live-line conditions.

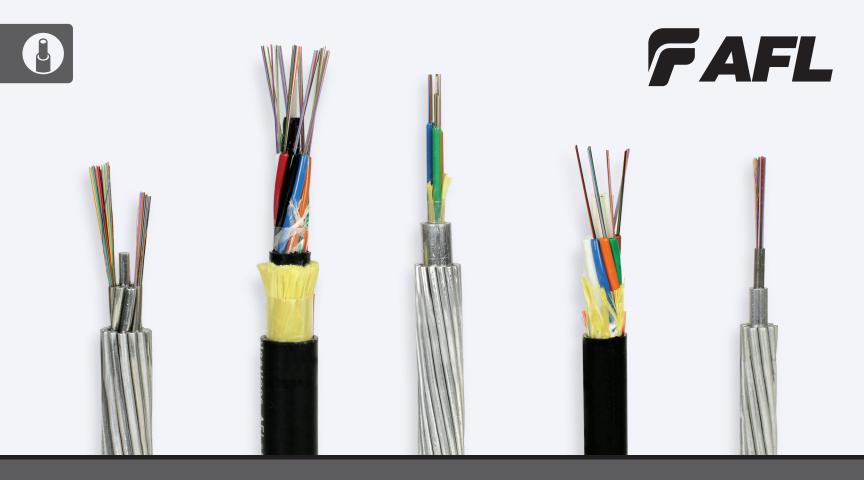


AccessWrap[™]

AccessWrap provides a quick, cost effective and sustainable solution to taking fiber optic connections the 'last mile' on distribution power lines.

Based on proven SkyWrap technology, cable is wrapped around the existing overhead powerline infrastructure with minimal disruption to service and no modification requirements to structures. The cable can be wrapped on phase conductors up to 50 kV and is designed to withstand the aggressive environments of aerial applications in any climate.

AFL provides a complete solution from line surveys, installation planning to supply of cable, installation equipment and project management. AFL can also offer after sales service support packages to suit specific requirements.



www.AFLglobal.com or (800) 235-3423

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