

Selection of Aerial Self-Supporting Optical Cables



Overview

This guide explains how to choose the appropriate ADSS cable model based on span length, voltage level, climate conditions, and mechanical load requirements, with practical recommendations for commonly used models such as ADSS-12J, ADSS-24, and ADSS-48F. Span Length. ADSS now represents 18% of all aerial fiber deployments globally, with annual demand exceeding 200,000 km (EJL Wireless Research 2023). AN Type ($\leq 35\text{kV}$) vs AT Type (35kV–500kV) — jacket material selection per IEEE 1222 is the #1 factor determining cable lifespan on high-voltage lines. It requires no messenger wire, withstands high electric fields up to 220 kV, and supports spans from 50 m to over 1,500 m — making it. Self-supporting aerial fiber optic cables integrate a tensile strength member directly into their structure, allowing them to be mounted directly on poles or towers without an external messenger wire. This design simplifies installation, improves reliability, and reduces overall project costs. Among the most prominent are high and varying tensions due to the weight of the cable itself plus ice and wind loads; long-term exposure to UV light from the sun; high and low temperature extremes; and. ADSS (All-Dielectric Self-Supporting), or ADSS - All-Dielectric Self-Supporting fiber optic cables, are employed to create light woven structure for transmission and distribution networks overhead because of many benefits such as ease of installation, lightweight structure, propriety installation. Aerial cables are suspended from poles or pylons or mounted on buildings. Some are self-supporting, requiring no separate messenger wire between poles to support the cable's weight. Already Know What You Are Looking For?

Already have your cable in mind?...

Article Content

Jul 28, 2025

SOLO All-Dielectric Self-Supporting Cables 2-288 Fibers

SOLO® ADSS Cable, 72-Fibers Corning SOLO® cables are all-dielectric, self-supporting (ADSS) cables designed for

Sep 16, 2025

Aerial MASS Fiber Cable – PPC Broadband | Product Catalog

PPC's self-supporting and ultra-light weight aerial cable has a loose tube or bundle design that is substantially lighter than traditional

Feb 16, 2026

Aerial Fiber Optic Cable

The types of self-supporting aerial cables include all-dielectric self-supporting (ADSS) cables and figure-8 cables. Catenary wire

Jan 10, 2026

What is Aerial Fiber Optic Cable and Types

Types of Fiber Optic Aerial Cable Based on the installation position of the cables, aerial fiber optic cables can be

Jan 07, 2026

Aerial Cables

Aerial cables hang from poles, pylons, or buildings, with some being self-supporting, eliminating the need

Oct 12, 2025

Which Aerial Cable is Right for You?

Which aerial cable is right for you? Review the advantages and disadvantages of ADSS and Strand and Lash cables.

Aug 04, 2025

Aerial Fiber Optic Cable Types, Self Supporting Outside Aerial Cable ...

Aerial fiber optic cable is typically used when installing outside the pole, designed to protect against natural damage or man-made

Apr 29, 2026

ADSS Fiber Optic Cable: Complete Guide To Aerial Self

This guide covers everything you need to know about ADSS cable: structures, jacket types, installation,

Nov 18, 2025

Aerial Fiber Optic Cable – Types & Installation Tips

Discover aerial fiber optic cables including ADSS, Figure-8, and OPGW types. Learn key advantages and expert

Apr 06, 2026

Metallic Aerial Self-Supporting (MASS) Cable

AFL's MASS (Metallic Aerial Self-Supporting) cable delivers rugged, all-metal construction and integrated

Jun 16, 2026

Aerial Cable

YOA Cable offers a comprehensive range of aerial self-support cables. These are used in aerial pole drop applications for last mile

Aug 01, 2025

All You Need to Know About the Game-Changing Aerial Cables

Figure-8 Aerial Cable Self Supporting Aerial Cable is also known as All Dielectric Self-Supporting or ADSS cable.

Apr 17, 2026

ADSS Fiber Cable: All-Dielectric Self-Supporting Aerial

Introduction The global all-dielectric self-supporting (ADSS) fiber cable market reached a

Sep 19, 2025

Which Aerial Cable is Right for You?

Which Aerial Cable is Right for You? Which Aerial Cable is Right for You? The power industry has traditionally defaulted to the tried

Apr 19, 2026

Installation of Corning Optical Communications Self-Supporting

The combination of strand and optical fiber into a single cable allows rapid one-step installation and results in a more durable aerial

Apr 16, 2026

Aerial Cable | Outdoor Cable Technology| Corning

These cables can be installed in short spans between aerial poles without a separate messenger upon

Sep 25, 2025

Your Ultimate Guide to All Dielectric Self-supporting Aerial Cable (ADSS)

All Dielectric Self-supporting Aerial Cable (ADSS) is a reliable and cost-effective fiber optic cable solution for aerial installations. In

Nov 20, 2025

ADSS Fiber Optic Cable | All-Dielectric Self-Supporting

AFL-ADSS ® (All-Dielectric Self-Supporting) fiber optic cable is designed for outside plant aerial

Nov 26, 2025

Self-Supporting Vs. Externally Supported Aerial Fiber Optic Cable

Choosing the right aerial fiber optic cable starts here. This blog breaks down self-supporting and externally supported cable designs

Feb 05, 2026

AERIAL SELF-SUPPORT CABLE RANGE

YOA Cable aerial self-support cable is available in both multi-mode (OM2 and OM3) and single mode (ITU-T G652D, 657A1 and

May 15, 2026

Aerial Cable | Outdoor Cable Technology| Corning

Aerial outdoor cables are suspended from poles or pylons or mounted on buildings. Some are self-supporting, requiring no separate

Aug 07, 2025

Aerial cable | Telecommunication Systems Business Unit

ADSS-W-WTC™ is an all-dielectric, self-supporting fiber optic cable designed for aerial installation along

Feb 02, 2026

ADSS vs Figure-8 Aerial Fiber Cable: The Definitive Pole-Line Route ...

ADSS or Figure-8 aerial fiber cable? Weunion's 2026 selection guide compares support logic, span, sag, messenger,

Sep 08, 2025

Cable Installation Guides

Discover Incab's Cable Installation Guides. Find out about optical cable specification and services for self-supporting aerial fiber optic

Sep 01, 2025

Aerial Fiber Optic Cable

All types of aerial fiber optic cable with competitive prices and fast delivery. Self-Supporting, metallic/non-metallic, lightweight, easy

Apr 28, 2026

ADSS Fiber Optic Cable | All-Dielectric Self-Supporting Aerial Cable ...

AFL-ADSS® (All-Dielectric Self-Supporting) fiber optic cable is a non-metallic cable which supports its own weight without the use of

Jun 05, 2026

Aerial Self-support FlexNAP™ System SST-Drop™ Dielectric Cable

HPA-0235 Figure 1 1.2 FlexNAP System SST-Drop dielectric aerial self-supporting cables provide the most cost-effective method of

Dec 15, 2025

Metallic Aerial SelfSupporting MASS Cable | AFL EMEA

Metallic Aerial Self-Supporting (MASS) Cable is an alternative solution used for installing optical cable on medium and high voltage

Jul 09, 2026

Aerial Drop Cable Selection and Testing

Aerial drop cables typically span short distances (□ 150 feet), contain up to 12 fibers, and are designed to support tensile loads up to

Oct 08, 2025

How to Select the Right ADSS Cable for Your Project | ADSS Fiber

Learn how to select the right ADSS fiber optic cable based on span length, voltage level, and weather conditions. This

Feb 03, 2026

What Is Aerial Fiber Optic Cable? Types, Features & Applications

Self-supporting aerial fiber optic cables integrate a tensile strength member directly into their structure, allowing them

Sep 12, 2025

Section VII Engineering Instruction OPTCL

Department Of Telecommunication has already introduced self-supporting metal free aerial optical Fiber cable for local junctions and

Nov 05, 2025

All-dielectric self-supporting cable

All-dielectric self-supporting (ADSS) cable is a type of optical fiber cable that is strong enough to support itself between structures

Nov 17, 2025

Aerial Fiber Optic Cable Overview and Installation Guide

This article introduces and discusses aerial fiber optic cable types, classifications, pre- and post-installation, and installation using a

Dec 27, 2025

ADSS (All-dielectric Self-supporting) optical fibre cable is a type of ...

ADSS (All-dielectric Self-supporting) optical fibre cable is a type of self-supporting aerial fiber optic cable designed for aerial

May 06, 2026

Metallic Aerial Self-Supporting (MASS) Cable | AFL EMEA

Metallic Aerial Self-Supporting (MASS) Cable delivers high-performance engineering, reliability and simplified deployment for critical

Jun 01, 2026

ADSS Fiber Cable: All-Dielectric Self-Supporting Aerial

According to IEC 60794-4, ADSS is the dominant aerial cable choice for utility-owned fiber

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://ntmmgroup.co.za>

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town,
7441, South Africa

This document is for informational purposes only. Specifications subject to
change without notice.

