

# ADSS Aerial Self-Supporting Fiber Optic Cable

All-Dielectric Self-Supporting | No Messenger Wire Required | Utility Overhead Line Fiber

## PRODUCT OVERVIEW

Mirabel Energy USA ADSS (All-Dielectric Self-Supporting) aerial fiber cable is engineered specifically for attachment to utility transmission and distribution structures — including wood poles, steel lattice towers, and concrete structures — without requiring a separate messenger wire or grounding considerations. The all-dielectric construction eliminates induced voltage risk on transmission line corridors, making ADSS the preferred fiber solution for electric utilities deploying protection relay fiber, SCADA communications, and grid modernization networks alongside energized conductors. Span lengths from 100m to 800m+ are supported through engineered tensile strength member selection, with AT and AP jacket grades available for low and high electrical stress environments.

<b>Up to 800m+</b> Max Span	<b>Up to 500kV ROW</b> Voltage Class	<b>All-Dielectric</b> Construction	<b>OS2 / SM</b> Fiber Type
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## APPLICATIONS

- Transmission and distribution line protection relay fiber (OPGW alternative)
- SCADA, EMS, and grid automation communications on utility ROW
- Inter-substation fiber backbone on transmission corridors
- Rural electric cooperative communications network deployment
- Wind and solar farm site fiber on distribution infrastructure
- Municipal utility and public power fiber backbone

## KEY SPECIFICATIONS

- All-dielectric — no induced voltage, no grounding required on HV corridors
- AT jacket (low electrical stress) and AP jacket (high electrical stress) grades
- Span ratings from 100m to 800m+ depending on tensile member selection
- Rated for installation on corridors up to 500kV (high-stress AP jacket)
- OS2 9/125µm single-mode — 12 to 144 fiber count options
- Dry-block or water-blocking tape construction — no gel cleanup
- Designed for stringing under live-line conditions (live-line compatible tools)
- UV-resistant black PE jacket | Operating temp: -40°C to 70°C

## TECHNICAL SPECIFICATIONS

Parameter	AT Jacket (Low Stress)	AP Jacket (High Stress)
Application Zone	Low E-field	High E-field (HV lines)
Max Span (light ice)	Up to 300m	Up to 800m+
Max Voltage ROW	Up to 115kV	Up to 500kV
RTS (Max Rated Load)	Per span design	Per span design
Fiber Type	OS2 9/125µm	OS2 9/125µm
Fiber Counts	12–144	12–144
Jacket Color	Black (UV-rated)	Black (UV-rated)

<b>PART / ORDER INFO</b> 12 · 24 · 48 · 96 · 144 strand counts   AT and AP jacket grades   Span engineering available	<b>STOCKING LOCATIONS</b> Reno, NV · Houston, TX Project-phased delivery available	<b>OEM REPRESENTATIVE</b> GCP Energy LLC — Salt Lake City, UT portal.gcpenergy.us
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