CORNING

Entering the broadband space?

You have many cable options

We're Here to Help

If you're expanding your operations to bring cost-effective, reliable broadband to your community, you'll want to be sure you have the right cable for the job. There are several factors to assess when deciding which cable type is right for your application, including speed of connection for new customers, ease of changes and repairs, installer certification requirements, and the ability to expand the network over time.

Which Aerial Cable Is Right for You?

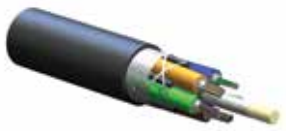
The power industry has traditionally defaulted to the tried-and-true method of deploying all-dielectric, self-supporting cable, also known as ADSS. However, the demands on the fiber infrastructure are changing. To meet growing FTTx opportunities, particularly in rural communities, utilities are deploying networks differently than they have in the past. As you look forward, be sure to consider the full range of aerial cable options available to optimize your OpEx and CapEx spends.

All-Dielectric-Self-Support vs. Traditional Outside Plant Cable (Strand and Lash)

ADSS	
Advantages	▪ No metal — no bonding or grounding required ▪ Self-supporting — no steel messenger required ▪ Utilizes existing pathways on pole runs and transmission towers ▪ Can be installed up to 2,000 feet before dead ending
Disadvantages	▪ Requires installation by technicians certified in the supply space, if that is where it's deployed ▪ Cost is generally 3 times higher or more than standard OSP aerial cable ▪ Must be dead ended at every pole that requires a terminal, closure, or slack loop, when used in point-to-multipoint applications ▪ Closures, terminals, and snowshoes and drop cables aren't supported along span ▪ Field changes or weather events that exceed expected parameters may cause service outages

Lashed OSP	
Advantages	▪ As these cables are placed in the communication space, installers are not required to have special certification ▪ Available with armor or all-dielectric ▪ Drops and cables can be overlashed to existing cables/messenger ▪ Messenger protects cable from branches ▪ Taut sheath or slack loop access compatible ▪ Terminals, standard closures, and snowshoes can be attached to messenger ▪ Continuous installation with slack access loops at poles allows mid-span access for terminal addition ▪ Available in much higher fiber counts (ribbon cables)
Disadvantages	▪ New messenger may be needed if overlashing is not possible ▪ Bonding and grounding required on messenger and armor cable

We Offer a Range of ADSS and Traditional OSP Cables to Fit Your Needs

Cable Type	ALTOS® Loose Tube	SST-Ribbon™	SST-UltraRibbon™	Corning® RocketRibbon™
				
Cable Placement Zone	Communication	Communication	Communication	Communication
Maximum Fiber Count	432 F	216 F	864 F	3456 F
Material Cost	$	$$	$$$	$$$$
Special Features	Stranded buffer tube design	Single-tube design	Single-tube design	Stranded buffer tube design
Steel Messenger Required	Yes	Yes	Yes	Yes
Installation	Lash to messenger	Lash to messenger	Lash to messenger	Lash to messenger
Special Hardware	Dead-end grip	Dead-end grip	Dead-end grip	Dead-end grip
Installation Time	Moderate	Moderate	Moderate	Moderate
Pole Spacing	N/A	N/A	N/A	N/A
Cable Construction	Gel-Free	Gel-Free	Gel-Free	Gel-Free

RPX®	ALTOS Figure-8	SOLO® ADSS	SOLO ADSS Medium-Span	SOLO ADSS Short-Span
				
Supply or comm	Supply or comm	Supply or comm	Supply or comm	Supply or comm
144 F	216 F	288 F	288 F	288 F
$$	$$$	$$$$	$$$	$$$
2 GRP strength members	Stranded buffer tube design with steel rod messenger	Dual Jacket with dielectric strength members. Also available with track resistant polyethylene	Single Jacket with dielectric strength members. Also available with track resistant polyethylene	Single Jacket with dielectric strength members. Also available with track-resistant polyethylene
No	No	No		
Self support	Self support	Self support	Self support	Self support
Wedge clamps	Dead-end grip	Dead-end grip	Dead-end grip	Dead-end grip
Fast	Fast	Fast	Fast	Fast
NESC Heavy: 300 F NESC Medium: 500 F	NESC Heavy: 300 F NESC Medium: 518 F	NESC Heavy: >1650 F	NESC Heavy: 450 F NESC Medium: 650 F	NESC Heavy: 300 F NESC Medium: 500 F
Gel-Free	Gel-Free	Gel-Filled	Gel-Filled	Gel-Filled

Bring Fiber to the People

Access to affordable and reliable high-speed broadband is vital to a community's economic development and competitiveness. Over the years, private sector investments have drastically expanded broadband access across the country, yet many communities remain underserved.

To fill the void, state and local governments, as well as rural electric cooperatives, have decided to develop their own networks, to enable middle- and last-mile connectivity — a task that has its own unique set of challenges and obstacles, including funding, planning, development, state preemption, and operations, to name a few.

When planning for your fiber optic network, don't go it alone — Corning is here to help. Our robust partner ecosystem offers a comprehensive set of solutions to get you over those critical hurdles.

Whatever your goals, Corning can help you determine the cable that best suits your network needs. To learn more, visit **corning.com/community-broadband**

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Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC 28216 USA
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm