

PowerGuide® TTH Cable (To The Home)



An Ideal, Cost-Effective Solution for FTTH and Short-Span Aerial Applications

Product Description

The OFS PowerGuide® TTH All-Dielectric Self-Supporting (ADSS) Loose Tube Fiber Optic Cable offers an excellent choice for short aerial cable spans ranging up to 346 feet (105 meters)*. This cable's compact size, low-cost installation and specialized design make it an ideal, cost-effective cabling solution for duct, Fiber-to-the-Home (FTTH) and short-span, self-supporting aerial drop applications.

To construct this cable, one to six optical fibers are placed within color-coded, gel-filled buffer tubes to protect the fibers from mechanical and environmental forces. The buffer tubes are then stranded around a dielectric central member using the reverse oscillating lay (ROL) stranding method to enable fast, mid-span cable entry. Next, DryBlock® water-blocking material and dielectric strength elements are applied to the cable core. Finally, a durable polyethylene (PE) outer jacket completes the cable construction.

Why the PowerGuide TTH Cable?

When you need a small diameter and cost-effective, yet robust cabling solution for FTTH and short aerial span applications, look to the PowerGuide TTH Cable.

Featuring one of the world's smallest ADSS cable diameters, this cable is compact, lightweight and easy to handle and install, saving time and money on deployment. By eliminating the need for expensive cable shielding or grounding, the PowerGuide TTH Cable's all-dielectric construction saves even more money on installation.

While the PowerGuide TTH Cable is small and flexible, it is also highly durable and reliable. The specialized TTH cable design features integrated aramid yarn strength elements and a rugged PE outer jacket for superior cable strength and stability.

PowerGuide TTH Cable



PowerGuide TTH Cable
Cross-Section

Features and Benefits:

- Excellent, cost-effective alternative for short aerial cable spans and FTTH applications
- Lightweight and easy to handle and install for duct and aerial use
- Single, durable PE jacket for fast and convenient cable preparation
- Fiber counts up to 30
- Small nominal cable diameter and bend radius for easy deployment in aerial-to-underground installations
- All-dielectric construction with a maximum of six fibers per buffer tube
- RDUP (formerly RUS) listed
- Available with AllWave® ZWP and AllWave FLEX ZWP Single-Mode Fiber, TrueWave® RS LWP Single-Mode Fiber and Multimode Fibers.

* Exact span lengths depend on loading conditions, fiber counts and clearance requirements.

Specifications

Fiber Count	2-30
Cable Outer Diameter – in. (mm)	0.35 (9.0)
Cable Weight – lb/ft (kg/km)	40 (59)

Performance Standard (all cables)

Tested per Applicable Requirements of ANSI/ICEA S-87-640 and Telcordia GR-20 CORE

Handling (all cables)

Minimum Bend Radius, With Load*	15 x OD	Temperature: Installation: -22° F to 140° F (-30° C to 60° C) Operation: -40° F to 158° F (-40° C to 70° C) Storage: -40° F to 167° F (-40° C to 75° C)
Minimum Bend Radius, With No Load*	10 x OD	
Minimum Bend Radius, Storage Coils*	10 x OD	
Maximum Rated Cable Load (MRCL)	373 lbf (1659 N)	
Maximum Long Term Load	115 lbf (511 N)	

* OD = Outer Diameter of Cable

PowerGuide TTH Cable Ordering Information

Example: **AT-3BE17S6-NNN¹-CMCA**

Part Number: AT-		Fiber ²	Sheath	Core	Fiber Count	Custom/Special ³
		<u>S1</u> <u>S2</u> <u>SF</u>	<u>S3</u> <u>S4</u>	<u>S5</u> <u>S6</u>	- <u>NNN</u> -	<u>CMCA</u>
S1 = Fiber Selection		SF = Fiber Type²		S5 = Core Type		
3 = 1310/1550 nm (AllWave® ZWP Fiber)		E = AllWave ZWP/		S = DryBlock		
5 = 1310/1550 nm (AllWave FLEX ZWP Fiber)		AllWave FLEX ZWP				
6 = 1550 nm (TrueWave® RS LWP Fiber)		6 = TrueWave RS LWP		S6 = Fibers per Tube		
R = 850/1300 nm (Multimode Fiber)		9 = 62.5/125 µm Multimode		2 = 2 fibers		
		2 = 50/125 µm Multimode		4 = 4 fibers		
				6 = 6 fibers		
S2 = Fiber Transmission Performance		S3 = Sheath Construction		NNN = Fiber Count = 002 – 030		
B = 0.35/0.31/0.27/0.25/0.27 dB/km @		1 = Single Jacket All-Dielectric				
1310/1385/1490/1550/1625 nm (AllWave ZWP/						
AllWave FLEX ZWP)						
2 = 0.25 dB/km @ 1550 nm (TrueWave RS LWP)		S4 = Tensile Load				
U = 3.4/1.0 dB/km and 200/500 MHz-km @		7 = PowerGuide				
850/1300 nm (62.5 µm Multimode)						
K = 2.5/0.7 dB/km and 500/500 MHz-km @						
850/1300 nm (50 µm Multimode)						

¹ Part Number shown is for standard AllWave ZWP attenuation and standard cable print:
Maximum AllWave ZWP attenuation: 0.35/0.31/0.27/0.25/0.27 dB/km @ 1310/1385/1490/1550/1625 nm
Standard Print, example for PowerGuide TTH Cable:

OFS OPTICAL CABLE AT-3BE17S6-NNN-CMCA [MM-YY] [HANDSET SYMBOL] [NNN] F [SERIAL #]

² Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print.

³ Custom/Special: Consult with us regarding your application, span lengths, and loading conditions to complete the custom design and part number of your complete sheath strength system.

For additional information please contact your sales representative. You can also visit our website at <http://www.ofsoptics.com> or call 1-888-fiberhelp (1-888-342-3743) from inside the USA or 1-770-798-5555 from outside the USA.

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