

# PowerGuide® TTH Cable



## An Ideal, Cost-Effective Solution for Fiber-to-the Premise (FTTx) 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 300 feet (91 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-Premise (FTTx), and short-span, self-supporting aerial drop applications.

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



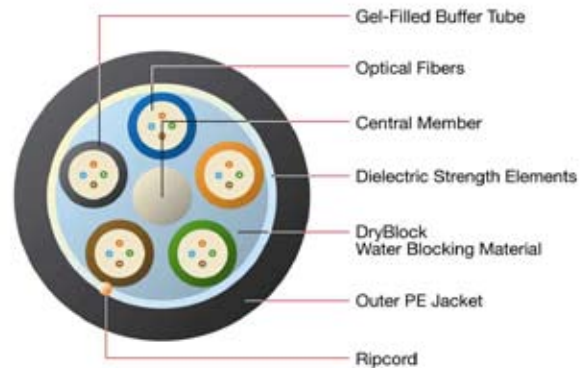
PowerGuide TTH Cable

### Why the PowerGuide TTH Cable?

The PowerGuide TTH Cable offers an outstanding, cost-effective cabling solution for short aerial cable spans and FTTx applications. 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, lightweight, and flexible, it is also highly durable and reliable. The specialized TTH cable design features integrated aramid yarn strength elements and a durable polyethylene outer jacket for superior cable strength and stability.

When you need a compact, cost-effective, and durable cabling solution for FTTx and short aerial span applications, look to the PowerGuide TTH Cable.



### Features and Benefits:

- Excellent, cost-effective alternative for short aerial cable spans and FTTx applications
- Lightweight and easy to handle and install for duct and aerial use
- Single, durable polyethylene jacket for fast and convenient cable preparation
- Fiber counts up to 20
- Small nominal cable diameter and bend radius for easy deployment in aerial-to-underground installations
- All-dielectric construction with a maximum of four fibers per buffer tube
- RDUP (formerly RUS) listed
- Available with AllWave® ZWP Single-Mode Fiber, TrueWave® LWP Single-Mode Fiber, and Multimode Fibers.

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

## Specifications

Fiber Count	2-20
Cable Outer Diameter in. (mm)	0.35 in. (9.01 mm)
Cable Weight lb/kft (kg/km)	40 lb/kft (59 kg/km)

## Performance Standard

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

## Handling

Minimum Bend Radius, With Load:	15 x OD*
Minimum Bend Radius, With No Load:	10 x OD
Minimum Bend Radius, Storage Coils:	10 x OD
Maximum Rated Cable Load (MRCL):	600 lbf (2700 N)
Maximum Long Term Load:	180 lbf (800 N)
Temperature:	Installation: -30°C to 60°C (-22°F to 140°F) Operation: -40°C to 70°C (-40°F to 158°F) Storage: -40°C to 75°C (-40°F to 167°F)

\* *Note:* OD = Outer Diameter of Cable

## PowerGuide TTH Cable Ordering Information

*Example:* AT – 3BE17S4-NNN<sup>1</sup>-CMCA

Part Number:	Fiber <sup>2</sup>	Sheath	Core	Fiber Count	Custom/Special*
AT -	<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>
<b>S1 = Fiber Selection</b>	<b>S3 = Central Member Construction</b>				
<b>3</b> = 1310/1550 nm (AllWave ZWP Single-Mode Fiber)	<b>1</b> = Dielectric Central Member				
<b>6</b> = 1550 nm (TrueWave RS LWP Single-Mode Fiber)	<b>(one polyethylene jacket)</b>				
<b>R</b> = 850/1300 nm (Multimode Fiber)					
<b>S2 = Fiber Transmission Performance</b>	<b>S4 = Tensile Load</b>				
<b>B</b> = 0.35/0.31/0.27/0.25/0.27 dB/km	<b>7</b> = PowerGuide				
(1310/1385/1490/1550/1625 nm AllWave ZWP)					
<b>2</b> = 0.25 dB/km (TrueWave RS LWP)	<b>S5 = Core Type</b>				
<b>U</b> = 3.4/1.0 dB/km and 200/500 MHz-km	<b>S</b> = DryBlock				
(850/1300 nm Multimode)					
<b>K</b> = 2.4/0.7 dB/km and 500/500 MHz-km	<b>S6 = Fibers Per Tube</b>				
(50 µm Multimode)	<b>2</b> = 2 fibers				
	<b>4</b> = 4 fibers				
<b>SF = Fiber Type</b>	<b>NNN = Fiber Count = 002 to 020</b>				
<b>E</b> = AllWave ZWP Single-Mode Fiber					
<b>6</b> = TrueWave RS LWP Single-Mode Fiber					
<b>9</b> = 62.5/125 µm Multimode Fiber					
<b>2</b> = 50/125 µm Multimode Fiber					

\* 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.

- 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 (PowerGuide TTH Cable):  
OFS OPTICAL CABLE AT-3BE17S4-NNN-CMCA [MM-YY] [HANDSET SYMBOL] [NNN] F [SERIAL #]
- Contact OFS Order Management for information on other cable variations, including fiber types, attenuation, and custom cable print.



For additional information please contact your sales representative. You can also visit our website at <http://www.ofsoptics.com> or call 1-888-fiberhelp.

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