

# INTRODUCTION

Channell's bundled technology solutions will ensure accelerated return on investment when building and deploying passive fiber to the home (FTTH) networks. Channell's diverse outside plant product offerings allow the network operator to bundle closure solutions with vaults and pedestals, allowing Channell's core competencies to deliver both freight and material cost savings.

Channell's FiberX FTTH family of products deliver realized cost savings while at the same time delivering the highest optical and environmental performing closure and drop connection systems.

The lowest installed cost network delivering high optical performance and plant network reliability is the only sustainable network approach. Channell's bundled FTTH solutions increase the speed of ROI and enable the operator to invest in FTTH networks.

Sustainable FTTX network topologies are network architectures which deliver the lowest installed cost. FiberX's Financially Sustainable Distributed Split Network Architecture delivers the lowest installed cost by reducing both installation and splicing labor. FiberX's Network Architecture does this by eliminating splitter cabinets, shrinking cables sizes, and reducing pedestal, vault, and closure sizes.

Channell's bundled FiberX network solutions will deliver the highest performing FTTX network solutions with the quickest return on investment.







#### Features

- Patented Anti-Slip Technology
- Anti-Trip Hazard Protection
- Superior Fatigues Resistance (EST<sup>™</sup>)
- Embedded Vertical Racking
- Reduced Installation Cost
- Highest Load Rating to Weight Ratio in the Industry

### **Testing Specifications**

- ANSI/SCTE 77 2016-TIER 22 Load Rating
- S3996 Class C
- EN 124 Class A15/B125
- EST<sup>™</sup> 3 Million Cycles
- Telcordia GR 902- CORE
- Western Underground Committee 3.6

Green Hornet is a product for the people and the network: It's versatile, craft-friendly, and offers unbeatable protection. Green Hornet is an environmentally sealed, butt splice configuration closure series. All GH closures are able to accommodate a wide range of cable diameters, drop densities, splice capacities, and splitter combinations. FX Product Packages offer Green Hornet in BULK for below grade applications and in Optimus pedestals for above grade applications.

#### Features

- Environmentally Sealed: Air/Water Tight
- Craft-Friendly Design
- Quick and Tool-less Installation
- Re-enterable and Re-useable

### **Testing Specifications**

 Meets Test Standards of GR771, IP68, and IEC 61300



In strength and integrity, Optimus has no equal, which is why it is known as the greatest and most robust free- breathing closure series. FX Product Packages offer the OP1212 with a mounted Green Hornet closure inside.

### **OP1212** Features

- Bracketry permits mounting of Green Hornet enclosure
- HDC cover designed for maximum heat dissipation
- Base provides stability without mounting stakes
- Features Channell's Self-Locking system

#### **Testing Specifications**

 Designed to meet Bellcore GR-13 specifications

# CENTRALIZED SPLIT

FDH, 1x32 Single Level Split, 8 Drops Per Terminal, 288 Homes Passed

## Assumptions For Centralized Split

- 288 Homes Passed
- 8 Drops Per Terminal
- Taper splices used instead of using high fiber count cable throughout network
- 24 feed and 288 distribution spliced at the FDH
- Splicing costs estimated at \$25/splice and \$75 set up charge. No other labor included
- FDH Mounted to the vault
- BOM is for buried plant network
- No drops included\*
- No cable costs included





Distribution Network Example 72 Homes Passed Portion of the Centralized Split Design

# FINANCIALLY SUSTAINABLE DISTRIBUTED SPLIT (GPON)

1x32 Multilevel Split, 288 Homes Passed, 8 Homes Per Terminal

### Assumptions For Distributed 1x32 Split

- 288 Homes Passed
- 8 Drops per Terminal
- 9 feed fibers spliced into the 24 fiber cable
- Splicing costs estimated at \$25/splice and
  \$75 set up charge. No other labor included
- BOM is for buried plant network
- No drops included\*
- No cable costs included



Network Example



Distribution Network Example 72 Homes Passed Portion of the 1x32 Multilevel Split Design

# FINANCIALLY SUSTAINABLE DISTRIBUTED SPLIT (GPON)

1x64 Multilevel Split, 320 Homes Passed, 8 Homes Per Terminal

### Assumptions For Distributed 1x64 Split

- 320 Homes Passed
- 8 Drops per Terminal
- 5 feed fibers spliced into the
   24 fiber cable
- Splicing costs estimated at \$25/ splice and \$75 set up charge. No other labor included
- BOM is for buried plant network
- No drops included\*
- No cable costs included



Network Example



Distribution Network Example 72 Homes Passed Portion of the 1x64 Multilevel Split Design

# FINANCIALLY SUSTAINABLE DISTRIBUTED SPLIT (EPON)

1x128 Multilevel Split, 512 Homes Per Terminal

### Assumptions For Multilevel 1x128 Split

- 512 Homes Passed
- 8 drops per terminal
- 4 feed fibers spliced into the 24 fiber cable
- Splicing costs estimated at \$25/splice and \$75
   set up charge. No other labor included
- BOM is for buried plant network
- No drops included\*
- No cable costs included



Network Example



Distribution Network Example 72 Homes Passed Portion of the 1x128 Multilevel Split Design

# BILL OF MATERIALS (BOM) FOR 288 HOMES PASSED

## Centralized Split

	Below Grade Application		
FX-OCFH2	88G994 OCFH288/BULK7 Combo	1 ea	
FX-B4SG6	G6/BULK4 Combo	2 ea	
FX-B2SG5	G5/BULK2 Combo	36 ea	
FX-B1SG4	G4/BULK1 Combo	6 ea	
1x32 Splitter	s in FDH	9 ea	

## Distributed Split (GPON) 1x32

Below Grade Application		
FX-B4SG6 G6/BULK4 Combo	1 ea	
FX-B1SG448 G4 1x4, 1x8/BULK1 Combo	9 ea	
FX-B1SG48 G4 1x8/BULK1 Combo	27 еа	

Above Grade Application	
FX-OCFH288G994 OCFH288/BULK7 Combo	1 ea
FX-126LXG6 G6/OP1212-6 Combo	2 ea
FX-123LXG5 G5/OP1212-3 Combo	36 ea
FX-123LXG4 G4/OP1212-3 Combo	6 ea
1x32 Splitters in FDH	9 ea

Above Grade Application	
FX-B4SG6 G6/BULK4 Combo	1 ea
FX-123LXG448 G4 1x4, 1x8/OP1212-3 Combo	9 ea
FX-123LXG48 G4 1x8/OP1212-3 Combo	27 еа

144F, 96F, 48F, 24F Cable Used Total splices = 936 Splices per homes passed = 3.25 Only 24F Flat Drop Cable Used Total splices = 81 Splices per homes passed = 0.281 COST PER HOMES PASSED = \$55

COST PER HOMES PASSED = \$167

## Distributed Split (GPON) 1x64

Below Grade Application	
FX-B4SG6 G6/BULK4 Combo	1 ea
<b>FX-B1SG488</b> G4 1x8, 1x8/BULK1 Combo	5 ea
FX-B1SG48 G4 1x8/BULK1 Combo	35 ea

## Distributed Split (EPON) 1x128

Below Grade Application		
FX-B4SG6 G6/BULK4 Combo	1 ea	
FX-B1SG4168 G4 1x16, 1x8/BULK1	4 ea	
FX-B1SG48 G4 1x8/BULK1 Combo	60 ea	

Above Grade Application		
FX-B4SG6 G6/BULK4 Combo	1 ea	
FX-123LXG488 G4 1x8, 1x8/OP1212-3 Combo	5 ea	
FX-123LXG48 G4 1x8/OP1212-3 Combo	35 ea	

	Above Grade Application		
<b>FX-B4SG6</b> G6/	BULK4 Combo	1 ea	
FX-123LXG4168	G4 1x16, 1x8/OP1212-3 Combo	4 ea	
FX-B123LXG48	G4 1x8/OP1212-3 Combo	60 ea	

Only 24F Flat Drop Cable Used Total splices = 85 Splices per homes passed = 0.266 COST PER HOMES PASSED = \$54 Only 24F Flat Drop Cable Used Total splices = 132 Splices per homes passed = 0.256 COST PER HOMES PASSED = \$53



# Offering the highest savings percentage in product and freight

Channell's bundled technology solutions will ensure accelerated return on investment by allowing the network operator to bundle closure solutions with vaults and pedestals, allowing Channell's core competencies to deliver both freight and material cost savings.





FX-B1SG4

BULK1 & G4

and a G4

PACKAGE PART #

DESCRIPTION



BULK 11"x 18"x 18", Shield, with Bolt Down,



FX-B1SG48

BULK1 & G4 with a splitter BULK 11"x 18"x 18", Shield, with Bolt Down, a G4, and a 1x8 splitter included



BULK1 & G4 with a two splitter combo BULK 11"x 18"x 18", Shield, with Bolt Down, a G4, a 1x4, and a 1x8 splitter included











DESCRIPTION BULK 24"x 36"x 24", Shield, with Bolt Down, and a G6

BULK 24"x 36"x 24", Shield, with Bolt Down, a G6, and a 1x8 splitter included BULK 24"x 36"x 24," Shield, with Bolt Down, a G6, a 1x4, and a 1x8 splitter included









![](_page_19_Picture_0.jpeg)

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