



# FIBER-TO-THE-BUSINESS ORDERING GUIDE

V-Linx<sup>®</sup> Solutions



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### OFS FTTB Solution

The OFS Fiber-to-the-Business (FTTB) Solution can help to reduce initial investment costs and future operating expenses for network fiber deployment while effectively meeting the needs of business subscribers. The solution is scalable and optimized to fit different building structures. OFS offers the V-Linx Spool and Play Solution to help speed installation by saving on labor intensive and time-consuming tasks including field termination. In this way, the OFS FTTB Solution can reliably connect business customers faster and easier, while requiring less space than other deployment approaches.

The V-Linx Spool-and-Play Solution and its various components are described in detail throughout this guide, including examples presented here:

#### Smallest Networks: Small Buildings or Buildings where Few Subscribers are Expected

The customer drop assemblies quickly connect the Electronic Multiplexer (EMUX) or building entry (BE) enclosure directly to the Customer Premises Electronics (CPE). These 4-fiber SC-UPC or LC-UPC factory terminated and tested assemblies are available in 25 ft. increments, with lengths from 25 to 500 feet and are used to reach subscribers at a variety of locations in the building. If longer lengths are required, contact your local OFS representative.

#### Low Rise Buildings: Up to Five Floors

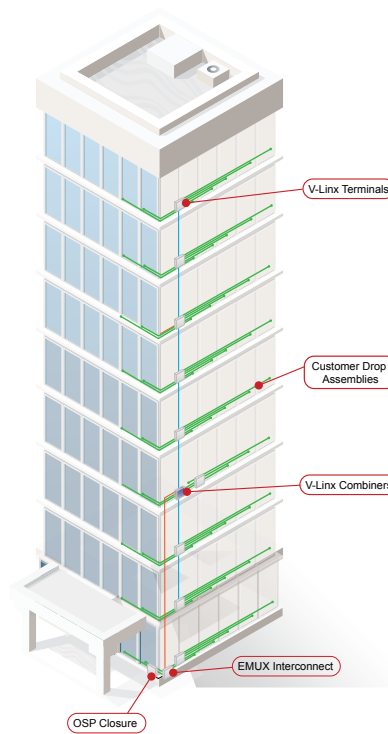
For low rise buildings, a typical installation may require only the installation of customer drop assemblies between the EMUX and customer location. However, if higher customer density or congested conduit exists, a V-Linx terminal may be used to reduce the number of cables run between floors.

#### Low to Mid Rise Buildings: Up to X Floors

The V-Linx solution option consists of an EMUX Interconnect mounted near the EMUX, and a V-Linx Terminal on the floor with its MTP/MPO terminated riser cable unspooled and plugged into the EMUX Interconnect. The customer drop assemblies are then plugged into the V-Linx Terminal on the floor, and are then routed to and plugged into the CPE.

#### Mid to High Rise Buildings

The V-Linx solution option uses the same components needed for Low to Mid Rise Buildings, with a V-Linx Combiner added to aggregate the MTP/MPO cables from multiple terminals. For example, in a 10-floor building, the addition of the V-Linx Combiner can reduce the length of the riser cable needed from 550 feet to 230 feet (an approximately 50% reduction).



### Performance and Quality: Embodied in the FTTB OFS V-Linx Solution

#### Connectors

While our factory terminated connectors are qualified to GR-326 and GR-20 standards, they offer performance beyond these requirements.

#### Cable Management

OFS AllWave® FLEX+ Bend-Insensitive Optical Fiber allows for a tight 7.5 mm bend radius to protect service reliability and provide high network performance in the building. OFS cable is designed to provide robust protection of the optical fiber while also preventing overcrowding of the riser space. In addition, OFS enclosures help protect the cable plant, while offering easy access, cable storage and routing.

Connector Performance			
Connector Type	Insertion Loss (db)		Reflectance
	Typical	Max	Max
MPO-A	0.16	0.35	-55
SC-U	0.14	0.30	-55
LC-U	0.12	0.25	-55

## V-LINX® SOLUTION OVERVIEW

*The V-Linx Solution is a simple, reliable and cost effective optical cabling system for FTTB service delivery in buildings.*

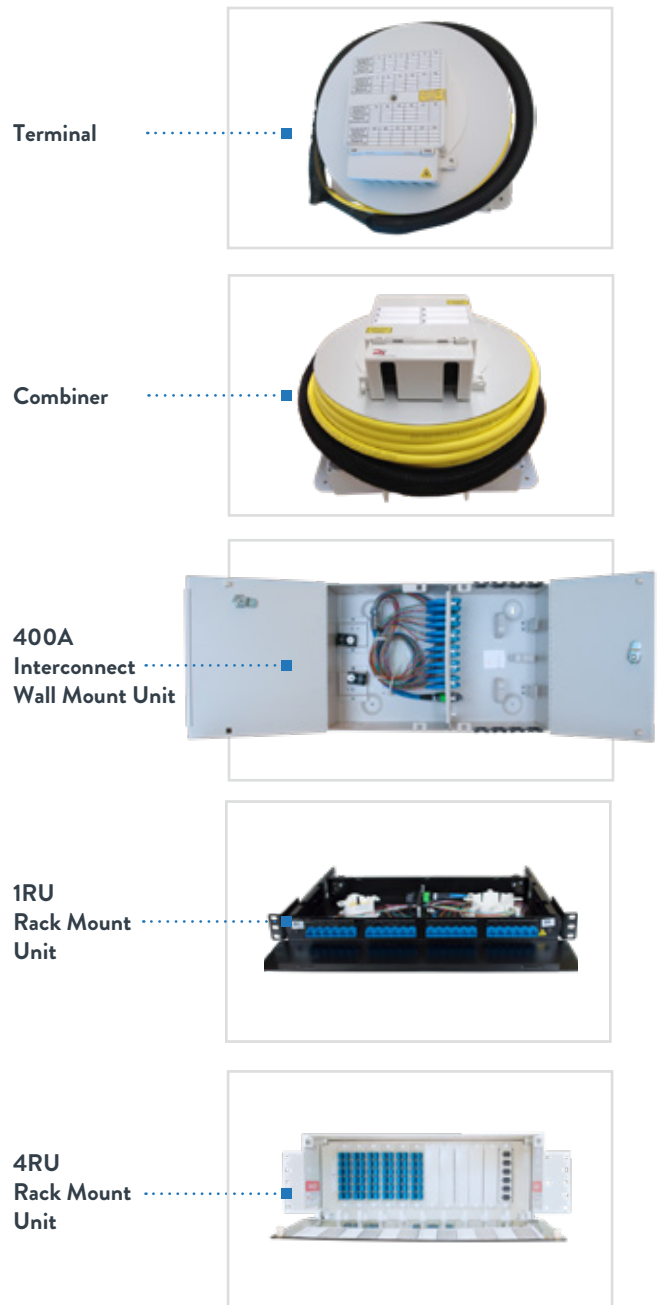
### BENEFITS

- **Faster Installation:** Fully plug-and-play solution helps save on labor with no field termination required. When compared with other conventional approaches, up to 50% less riser cable is needed for a 10-floor buildings, and up to 72% less cable is required for a 30-floor building
- **Flexibility:** Solution can be easily adapted to a variety of building structures to meet business subscriber needs
- **Compact:** Innovative component, fiber and cable design helps to optimize the use of available space in various building types
- **Capital Cost Reduction:** Helps save on initial costs by eliminating the need for field termination equipment and training/certification for technicians
- **Reliable Optical Performance:** Robust cable featuring AllWave FLEX+ Bend Insensitive Optical Fiber combines with factory terminated and tested assemblies for reliable performance

The illustration to the right shows how the V-Linx components are used to deliver service to a customer.

The EMUX Interconnect is installed and connected to the cable(s) from the Ciena 3930 directly or from the V-Linx Terminal, Rack Mount Terminal or V-Linx Combiner.

For low to mid rise buildings, only V-Linx terminals, as an option, a V-Linx Combiner may be located on the third floor and then on every sixth floor thereafter. The AccuFlex® MTP/MPO terminated cables would be unspooled from the Combiner and the MTP/MPO connectors would be plugged into the EMUX Interconnect. The location of the Combiner should be based upon duct space availability, customer density per floor and terminal requirements. In that scenario, a V-Linx Terminal could be placed on every floor or every other floor. The MTP/MPO terminated AccuPack® Cable would be unspooled, pulled to and then plugged into the Combiner.



# V-LINX® SOLUTION PRODUCT DESCRIPTIONS

## V-LINX WALL MOUNTED TERMINAL



### PRODUCT DESCRIPTION

The V-Linx Terminal integrates plenum cable, slack storage and drop terminal functionality into one compact package. Typically wall-mounted in a telecom closet, the V-linx Terminal accepts 12 or 24 simplex connectors from the customer drop assemblies to support 6 or 12 duplex connections to businesses. It is shipped with up to 500 feet of AccuPack Plenum Cable stored on the hub of the terminal, and is terminated with 12-fiber enhanced MTP/MPO low loss connectors on the outside end. It is available with SC or LC factory terminated and tested connectors on the back side of the subscriber-facing patch panel. The outside end of the cable can be connected to a V-Linx Combiner or EMUX Interconnect.

**NOTE:** Products with other lengths may be ordered, but are subject to availability, pricing differential and lead time.

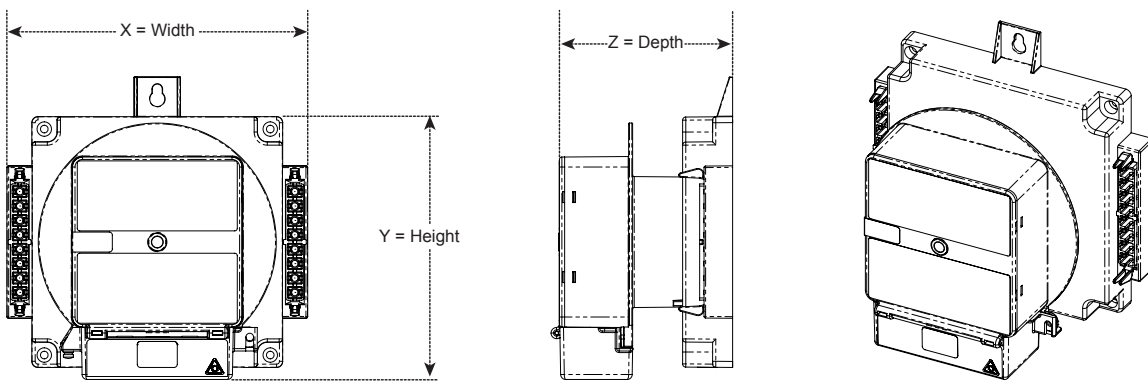
### FEATURES

- Capacity of 12 or 24 fiber terminations supporting up to 6 or 12 duplex business subscriber connections
- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Optical Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- Choice of SC-UPC or LC-UPC connectors
- RoHS compliant
- Available as 12- or 24-fiber terminals that are terminated with 1 or 2 low loss 12-fiber enhanced MTP/MPO connectors
- The enhanced MPO allows for pin removal to support connection to various MTP trunks and jumper configurations



V-Linx Wall Mounted Terminal  
12 Count LC or SC  
24-Count LC Only

Performance Specifications for Connectorized Assemblies	
Parameter	Value
Insertion Loss (dB), maximum	0.3 dB
Return Loss (dB), minimum	-65 dB for APC; -55 dB for UPC
Mating Durability	100 Reconnects
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C



Specifications for V-Linx Wall Mounted Terminals (Example)		
Characteristic	Value	
Weight	1.2 lb. (550 g)	
Cable Weight	15.9 lb/kft (12 fi ber), 21.3 lb/kft (24 fi ber)	
Shipping Weight	1.65 lbs (750 g) (does not include cable weight)	
Number of Terminations	12	
Wall Mountable	All surfaces	
Color	Central office white	
AccuPack Plenum Cable Specifications		
Fiber Count	12	24
Cable Outer Diameter	0.18" (4.5 mm)	0.21" (5.4 mm)
Cable Weight - lb/kft (kg/km)	15.9" (23.6)	21.3" (31.7 mm)

Designed for:	
Fire Rating of Plastics	UL-94, rated V-0
In-Use Temperature Rating	23 °F to 122 °F (-5 °C to 50 °C)
Storage Temperature Rating	-4 °F to 158 °F (-20 °C to +70 °C)
Water Rating (NEMA/IP Ratings)	NEMA 12/IP 62
Optical Performance	
Insertion Loss (Max)	0.7 dB
Return Loss	-55 dB (Nominal)

Ordering Information for V-Linx 12-Fiber Wall Mounted Terminal			
LC Connectors			
JAM Code	Material Description	Comcode	Product Code
N/A	Terminal Vlinx 12-Fiber MTP/LC 50' Plenum	301088621	V-Linx-TERM-STD-W-LCUMTM-ATBP-12-050F-PE
N/A	Terminal Vlinx 12-Fiber MTP/LC 100' Plenum	301088464	V-Linx-TERM-STD-W-LCUMTM-ATBP-12-100F-PE
N/A	Terminal Vlinx 12-Fiber MTP/LC 200' Plenum	301088647	V-Linx-TERM-STD-W-LCUMTM-ATBP-12-200F-PE
N/A	Terminal Vlinx 12-Fiber MTP/LC 300' Plenum	301088662	V-Linx-TERM-STD-W-LCUMTM-ATBP-12-300F-PE
N/A	Terminal Vlinx 12-Fiber MTP/LC 400' Plenum	301105888	V-Linx-TERM-LRG-W-LCUMTM-ATBP-12-400F-PE
N/A	Terminal Vlinx 12-Fiber MTP/LC 500' Plenum	301105896	V-Linx-TERM-LRG-W-LCUMTM-ATBP-12-500F-PE
SC Connectors			
N/A	Terminal Vlinx 12-Fiber MTP/SC 50' Plenum	301088670	V-Linx-TERM-STD-W-SCUMTM-ATBP-12-050F-PE
N/A	Terminal Vlinx 12-Fiber MTP/SC 100' Plenum	301088472	V-Linx-TERM-STD-W-SCUMTM-ATBP-12-100F-PE
N/A	Terminal Vlinx 12-Fiber MTP/SC 200' Plenum	301088696	V-Linx-TERM-STD-W-SCUMTM-ATBP-12-200F-PE
N/A	Terminal Vlinx 12-Fiber MTP/SC 300' Plenum	301088712	V-Linx-TERM-STD-W-SCUMTM-ATBP-12-300F-PE
N/A	Terminal Vlinx 12-Fiber MTP/SC 400' Plenum	301105904	V-Linx-TERM-LRG-W-SCUMTM-ATBP-12-400F-PE
N/A	Terminal Vlinx 12-Fiber MTP/SC 500' Plenum	301105912	V-Linx-TERM-LRG-W-SCUMTM-ATBP-12-500F-PE

Ordering Information for V-Linx 24-Fiber Wall Mounted Terminal			
LC Connectors			
JAM Code	Material Description	Comcode	Product Code
N/A	Terminal Vlinx 24-Fiber MTP/LC 50' Plenum	301088571	V-Linx-TERM-STD-W-LCUMTM-ATBP-24-050F-PE
N/A	Terminal Vlinx 24-Fiber MTP/LC 100' Plenum	301088456	V-Linx-TERM-STD-W-LCUMTM-ATBP-24-100F-PE
N/A	Terminal Vlinx 24-Fiber MTP/LC 200' Plenum	301088597	V-Linx-TERM-STD-W-LCUMTM-ATBP-24-200F-PE
N/A	Terminal Vlinx 24-Fiber MTP/LC 300' Plenum	301088613	V-Linx-TERM-STD-W-LCUMTM-ATBP-24-300F-PE
N/A	Terminal Vlinx 24-Fiber MTP/LC 400' Plenum	301105920	V-Linx-TERM-LRG-W-LCUMTM-ATBP-24-400F-PE
N/A	Terminal Vlinx 24-Fiber MTP/LC 500' Plenum	301105938	V-Linx-TERM-LRG-W-LCUMTM-ATBP-24-500F-PE

Standard Form Factor Sizing					
	Max Cable Length on Terminal	Spool Type	X (Width)	Y (Height)	Z (Depth)
12-Fiber LC/SC Version	125 ft	Sheet metal (not disposable)	10"	10"	6"
12-Fiber LC/SC Version	125 ft	Plastic corrugated (disposable)	10"	10"	6"
24-Fiber LC Version	100 ft	Sheet metal (not disposable)	10"	10"	6"
24-Fiber LC Version	100 ft	Plastic corrugated (disposable)	10"	10"	6"
Terminal Spool	500 ft		16"	5.5"	-

# V-LINX® SOLUTION PRODUCT DESCRIPTIONS

## 24-FIBER WALL MOUNTED TERMINAL



### PRODUCT DESCRIPTION

The 24-Fiber SC Terminal is an indoor fiber termination point (FTP) connectivity interface with 24 SC channel capacity for deployment in a high-density building that requires a large number of connections per floor. This terminal substitutes the V-Linx Terminal for 24-Fiber SC connections only. The standard configuration of the terminal is designed to interface directly with V-Linx Spool-and-Play Solution.

The 24-Fiber SC Terminal integrates high-performance plenum cable, slack storage and drop terminal functionality into one compact package. Usually wall mounted in a telecom closet, this terminal accepts 24 simplex connectors from the customer drop assemblies, supporting 12 duplex connections to businesses. It is shipped with up to 500 feet of AccuPack Plenum Cable, with 100 feet stored on the hub of the terminal, and is terminated with 24-fiber enhanced MTP/MPO low loss connectors. It is only available with SC factory terminated and tested connectors on the back side of the subscriber-facing patch panel. The outside end of the cable can be connected to a V-Linx Combiner or EMUX Interconnect.

**NOTE:** Products with other lengths may be ordered, but are subject to availability, pricing differential and lead time.



### FEATURES

- Capacity of 24 fiber terminations supporting up to 12 duplex business subscriber connections
- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Optical Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- Choice of SC-UPC or LC-UPC connectors
- RoHS compliant
- Available as 24-fiber terminal that is terminated with 2 low loss 12-fiber MTP/MPO connectors
- The enhanced MPO allows for pin removal to support connection to various MTP trunks and jumper configurations

Optical Performance	
Parameter	Value
Insertion Loss (Maximum)	0.7 dB
Return Loss (Nominal)	-55 dB

Ordering Information for 24-Fiber Wall Mounted Terminal			
SC Connectors			
JAM Code	Material Description	Comcode	Product Code
N/A	Terminal Vlinx 24-Fiber MTP/SC 50' Plenum	301105946	V-Linx-TERM-STD-W-SCUMTM-ATBP-24-050F-PE
N/A	Terminal Vlinx 24-Fiber MTP/SC 100' Plenum	301088472	V-Linx-TERM-STD-W-SCUMTM-ATBP-24-100F-PE
N/A	Terminal Vlinx 24-Fiber MTP/SC 200' Plenum	301105953	V-Linx-TERM-STD-W-SCUMTM-ATBP-24-200F-PE
N/A	Terminal Vlinx 24-Fiber MTP/SC 300' Plenum	301105961	V-Linx-TERM-STD-W-SCUMTM-ATBP-24-300F-PE
N/A	Terminal Vlinx 24-Fiber MTP/SC 400' Plenum	301105979	V-Linx-TERM-LRG-W-SCUMTM-ATBP-24-400F-PE
N/A	Terminal Vlinx 24-Fiber MTP/SC 500' Plenum	301105987	V-Linx-TERM-LRG-W-SCUMTM-ATBP-24-500F-PE

Standard Form Factor Sizing					
	Max Cable Length on Terminal	Spool Type	X (Width)	Y (Height)	Z (Depth)
24-Fiber SC Version	100 ft	Sheet metal (not disposable)	10.4"	10"	6"
24-Fiber SC Version	100 ft	Plastic corrugated (disposable)	10.4"	10"	6"
Terminal Spool	500 ft		16"	5.5"	-

## PRODUCT DESCRIPTION

The Rack Mounted Pre-terminated Shelf may be used in a high rise building instead of a wall mount terminal when relay rack frameworks are available on multiple floors serving a variety of subscribers. It is available with SC or LC Adapters (24-fiber count only), and the enclosure can be mounted in a 19" or 23" framework.

The Panel is pre-terminated with a 24-fiber AccuPack Plenum Cable which is held in place with grommets. The far end of the cable is terminated with two 12-fiber MTP/MPO low loss connectors and will be pulled and connected to the EMUX Interconnect.

## FEATURES

- Capacity of 24 fiber terminations with 12 duplex business subscriber connections
- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Optical Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- Can be equipped with SC-UPC or LC-UPC adapters on faceplate
- 4 Cable entry ports with grommets in the rear of the unit
- Dimensions: 1.72" Height x 17" Width x 8" Depth
- RoHS Compliant



Optical Performance	
Parameter	Value
Insertion Loss (Maximum)	0.7 dB
Return Loss (Nominal)	-55 dB

### Ordering Information for 24-Fiber Rack Mounted Terminal Shelf

#### LC Connectors

JAM Code	Material Description	Comcode	Product Code
N/A	Panel Vlinx 24-Fiber MTP/SC 50' Plenum	301106027	LPS5-W-SCUMTM-ATBP-12/12-1S-050F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/SC 100' Plenum	301106035	LPS5-W-SCUMTM-ATBP-12/12-1S-100F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/SC 200' Plenum	301106043	LPS5-W-SCUMTM-ATBP-12/12-1S-200F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/SC 300' Plenum	301106050	LPS5-W-SCUMTM-ATBP-12/12-1S-300F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/SC 400' Plenum	301106068	LPS5-W-SCUMTM-ATBP-12/12-1S-400F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/SC 500' Plenum	301106076	LPS5-W-SCUMTM-ATBP-12/12-1S-500F-36/39PE

#### SC Connectors

N/A	Panel Vlinx 24-Fiber MTP/LC 50' Plenum	301106464	LPS5-W-LCUMTM-ATBP-12/12-1S-050F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/LC 100' Plenum	301106472	LPS5-W-LCUMTM-ATBP-12/12-1S-100F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/LC 200' Plenum	301106480	LPS5-W-LCUMTM-ATBP-12/12-1S-200F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/LC 300' Plenum	301106498	LPS5-W-LCUMTM-ATBP-12/12-1S-300F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/LC 400' Plenum	301106506	LPS5-W-LCUMTM-ATBP-12/12-1S-400F-36/39PE
N/A	Panel Vlinx 24-Fiber MTP/LC 500' Plenum	301106514	LPS5-W-LCUMTM-ATBP-12/12-1S-500F-36/39PE



# V-LINX® SOLUTION PRODUCT DESCRIPTIONS

## V-LINX INSTALLATION TOOL



### PRODUCT DESCRIPTION

The V-Linx Installation Tool (also known as V-Linx Spool Tool) helps enable fast and easy installation of the V-Linx Wall Mounted Terminal and the V-Linx Combiner.

**NOTE:** The V-Linx Installation Tool is compatible with all versions of the V-Linx Terminal. The V-Linx Installation Tool may require a locking pin with variable length depending upon the size of the spool.

Standard Form Factor Sizing			
	Material Type	X (Width)	Y (Height)
V-Linx Installation Tool	Sheet Metal	10"	10"



Ordering Information for V-Linx Installation Tool			
JAM Code	Material Description	Comcode	Product Code
N/A	Tool Vlinx Installation	301001244	VLINX-SPOOL-TOOL

## PRODUCT DESCRIPTION

The V-Linx Combiner accepts six MTP/MPO connectorized 12-fiber ends from a V-Linx Terminal and can support up to 36 duplex subscriber connections. The distribution cable is a 72-fiber AccuFlex+ IFC Ribbon Cable that is factory connectorized and available in lengths up to 500 feet. If longer lengths are required, contact your local OFS Representative. The cable stub end will be factory terminated with six low loss MTP/MPO Connectors with connection to the EMUX Interconnect.

The combiner will ship with 50 feet of cable as a permanent unit. For cable lengths between 50 feet and 200 feet, the combiner will ship on a plastic corrugated spool, which is removed after the cable is installed. For lengths greater than 200 feet, the combiner will ship with a wooden (or particle board) reel. The dimensions for the combiner, spool and reel are shown in the table below.

**NOTE:** Products with other lengths may be ordered but are subject to availability, pricing differential, and lead time.

## FEATURES

- Capacity of 72 fiber terminations supporting up to 36 duplex business subscriber connections
- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- Male end on cable stub ends
- RoHS compliant



### Performance Specifications for Connectorized Assemblies

Parameter	Value
Insertion Loss (Maximum)	0.3 dB
Return Loss (Minimum)	-65 dB for APC; -55 dB for UPC
Mating Durability	100 Reconnects
Operating Temperature	-40 ° to +85 °C
Storage Temperature	-40 ° to +85 °C

### Optical Performance

Parameter	Value
Insertion Loss (Maximum)	0.7 dB
Return Loss (Nominal)	-55 dB

### Ordering Information for V-Linx Combiner

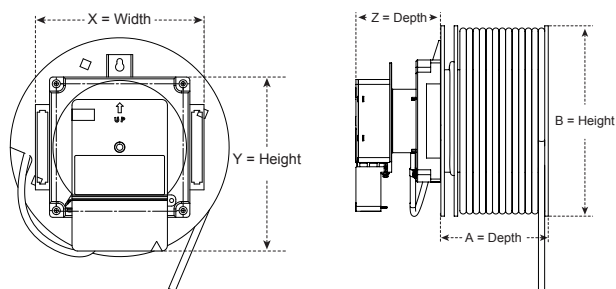
JAM Code	Material Description	Comcode	Product Code
N/A	Terminal Vlinx Combiner 72-Fiber MTP 50' Plenum	301105995	V-Linx-COMB-W-MTFMTM-RRCP-72-050F-PE
N/A	Terminal Vlinx Combiner 72-Fiber MTP 100' Plenum	301088761	V-Linx-COMB-W-MTFMTM-RRCP-72-100F-PE
N/A	Terminal Vlinx Combiner 72-Fiber MTP 200' Plenum	301088779	V-Linx-COMB-W-MTFMTM-RRCP-72-200F-PE
N/A	Terminal Vlinx Combiner 72-Fiber MTP 300' Plenum	301088795	V-Linx-COMB-W-MTFMTM-RRCP-72-300F-PE
N/A	Terminal Vlinx Combiner 72-Fiber MTP 400' Plenum	301106001	V-Linx-COMB-W-MTFMTM-RRCP-72-400F-PE
N/A	Terminal Vlinx Combiner 72-Fiber MTP 500' Plenum	301106019	V-Linx-COMB-W-MTFMTM-RRCP-72-500F-PE

# V-LINX® SOLUTION PRODUCT DESCRIPTIONS

## V-LINX COMBINER



Specifications for V-Linx Combiner	
Characteristic	Value
Number of Terminations (Common)	6 MTP/MPO Connectors (12 Fibers per Connector)
Wall Mountable	All Surfaces
Color	Central Office White
Designed for:	
Fire Rating of Plastics	UL-94, Rated V-0
In-Use Temperature Rating	23 °F to 122 °F (-5 °C to 50 °C)
Storage Temperature Rating	-4 °F to 158 °F (-20 °C to +70 °C)
Water Rating (NEMA/IP Ratings)	NEMA 12/IP 52



Standard Form Factor Sizing							
	Max Cable Length on Terminal	Spool Type	X (Width)	Y (Height)	Z (Depth)	A (Depth)	B (Height)
Combiner	50 ft	Sheet metal (not disposable)	7.5"	7.5"	7.0"		
Combiner Spool	300 ft	Plastic corrugated (disposable)				5.5"	16"
Combiner Pre-Terminated Reel	> 300 ≤ 500 ft	Wood (disposable)				18"	30"

**EMUX INTERCONNECT OPTIONS: READY TO PLUG-AND-PLAY**

The EMUX interconnect provides an optical interconnect between the EMUX and the building cable system. It is compatible and plug-and-play ready with all V-Linx options and requires no field termination.

**1RU INTERCONNECT SHELF**

**PRODUCT DESCRIPTION**

The 1RU Rack Mount EMUX Interconnect Shelf is a rack mounted shelf that accepts 24 fibers from the V-Linx Terminal(s). The shelf can be mounted in a 19” or 23” framework. The patch panel on the front is equipped with SC-UPC adapters.

**NOTE:** The 1RU Shelf can support 2x12 or 1x24 count Terminals.

**FEATURES**

- Capacity of 24 fiber terminations supporting up to 12 duplex business subscriber connections
- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Optical Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- Panel is equipped with two 12-fiber MTP/MPO to SC adapter low loss fanouts
- 4 cable entry ports with grommets in the rear of the unit
- Dimensions - 1.72” Height x 17” Width x 8” Depth
- Compact and mountable on standard 19” or 23” racks
- RoHS compliant



*24-Fiber Rack Mount EMUX Interconnect Enclosure Picture shown does not include pre-connectorized MTP/MPO AccuPack Cable*

Performance Specifications for Connectorized Assemblies	
Parameter	Value
Insertion Loss (Maximum)	0.3 dB
Return Loss (Minimum)	-65 dB for APC; -55 dB for UPC
Mating Durability	100 Reconnects
Operating Temperature	-40 ° to +85 °C
Storage Temperature	-40 ° to +85 °C

Ordering Information for 1RU Interconnect Shelf			
JAM Code	Material Description	Comcode	Product Code
N/A	Hub Vlinx Fiber Distribution Panel Rack Mount 24 SC/MTP	301088506	V-Linx 1U S-LIU 24-MTFSCU-FO

# EMUX INTERCONNECT OPTIONS

## 400A INTERCONNECT ENCLOSURE



### 400A INTERCONNECT ENCLOSURE

#### PRODUCT DESCRIPTION

The 400A Enclosure is a wall mounted unit that will accept up to 72 fiber terminations. This enclosure accepts cable on the right side from the V-Linx Combiner, Terminal or Pre-terminated 1RU Shelf. It is equipped with six 12-fiber MTP/MPO Fanouts that provide patch cords from the SC adapters to the electronics or an individual fiber panel.



#### FEATURES

- Capacity of 72 fiber terminations supporting up to 36 duplex business subscriber connections
- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Optical Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- From 24 to 72 SC connector adapters on the faceplate
- Uses both LC and SC connectors
- Multiple cable entry points
- Dimensions: 10” Height x 17” Width x 6” Depth
- Wall Mountable
- RoHS Compliant

Performance Specifications for Connectorized Assemblies	
Parameter	Value
Insertion Loss (Maximum)	0.3 dB
Return Loss (Minimum)	-65 dB for APC; -55 dB for UPC
Mating Durability	100 Reconnects
Operating Temperature	-40 ° to +85 °C
Storage Temperature	-40 ° to +85 °C

Ordering Information for 1RU Interconnect Shelf			
JAM Code	Material Description	Comcode	Product Code
N/A	Hub Vlinx Fiber Distribution Box Wall Mount 72 SC/MTP	301085205	V-Linx 400A2 072 MTF/SCU E/W FANOUT

## 72-FIBER RACK MOUNTED INTERCONNECT ENCLOSURE

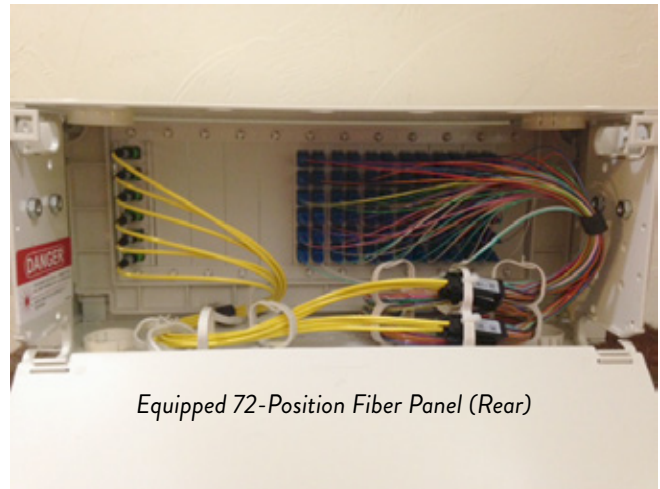
### PRODUCT DESCRIPTION

The 72-fiber panel is a rack mounted panel which can be mounted in a 19" or 23" relay rack framework. It is equipped with six MTP/MPO fan-out connectors with SC adapters. This panel can accept terminated cable with MTP/MPO connectors from the V-Linx Combiner, Terminal or 1RU Rack Mounted Panel, which would terminate on the panel front to the pre-cable MTP/MPO connectors. The SC adapters are used to run patch cords from panel front to the electronics or another fiber panel.

This enclosure supports a combination of 6x12, 3x24 or 1x72 count Terminals. Alternatively, it can support a 1x72 count V-Linx Combiner.

### FEATURES

- Capacity of 72 fiber connections translating to 36 duplex customer connections
- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Optical Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- Equipped with six 12-Fiber MTP/MPOs low loss fanouts with SC adapters
- Dimensions: 7" Height x 17" Width x 11.5" Depth
- RoHS Compliant



Optical Performance	
Parameter	Value
Insertion Loss (Maximum)	0.7 dB
Return Loss (Nominal)	-55 dB

Ordering Information for 72-Fiber Rack Mounted Interconnect Enclosure			
JAM Code	Material Description	Comcode	Product Code
IARN4-72SU	Hub Vlinx Fiber Distribution Panel Rack Mount 72 SC/MTP	301085270	LST1U-072-07-WHT-SCU/MTP(SM)

## CUSTOMER DROP ASSEMBLIES (4-FIBER INDOOR/ OUTDOOR PLENUM PATCHCORD)



### CUSTOMER DROP ASSEMBLIES (4-FIBER INDOOR/ OUTDOOR PLENUM PATCHCORD)

#### PRODUCT DESCRIPTION

A customer drop assembly is used to make the final connection to the CPE. It consists of a 4-fiber white Indoor/Outdoor Plenum rated cable with either SC-UPC or LC-UPC connectors, factory terminated on both ends for a complete plug-and-play installation that requires no field termination. A pulling eye is provided on one end and a protective sock covers both ends of the cable assembly.



#### FEATURES

- AllWave® FLEX+ ITU-T G.657.A2 Single-Mode Optical Fiber with 7.5 mm bend radius; fully splice-compatible with existing G.652.D installed base of fibers
- Assemblies 100% factory connectorized and tested
- Choice of SC-UPC or LC-UPC connectors
- RoHS Compliant

Performance Specifications for Connectorized Assemblies	
Parameter	Value
Insertion Loss (Maximum)	0.3 dB
Return Loss (Minimum)	-65 dB for APC; -55 dB for UPC
Mating Durability	100 Reconnects
Operating Temperature	-40 ° to +85 °C
Storage Temperature	-40 ° to +85 °C

#### Ordering Information for LCU/LCU Connectors FTTB 4-Fiber Service Drop Assemblies

Material Description	Comcode	Length	Product Code
CABLE 4 Fiber LC to LC I/O PLENUM 25'	301091898	25'	LPC2-W-LCULCU-IO9P-004-0025F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 50'	301091906	50'	LPC2-W-LCULCU-IO9P-004-0050F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 75'	301091914	75'	LPC2-W-LCULCU-IO9P-004-0075F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 100'	301091922	100'	LPC2-W-LCULCU-IO9P-004-0100F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 125'	301091930	125'	LPC2-W-LCULCU-IO9P-004-0125F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 150'	301091948	150'	LPC2-W-LCULCU-IO9P-004-0150F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 175'	301091955	175'	LPC2-W-LCULCU-IO9P-004-0175F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 200'	301091963	200'	LPC2-W-LCULCU-IO9P-004-0200F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 225'	301091971	225'	LPC2-W-LCULCU-IO9P-004-0225F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 250'	301091989	250'	LPC2-W-LCULCU-IO9P-004-0250F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 275'	301091997	275'	LPC2-W-LCULCU-IO9P-004-0275F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 300'	301092003	300'	LPC2-W-LCULCU-IO9P-004-0300F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 325'	301092011	325'	LPC2-W-LCULCU-IO9P-004-0325F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 350'	301092029	350'	LPC2-W-LCULCU-IO9P-004-0350F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 375'	301092037	375'	LPC2-W-LCULCU-IO9P-004-0375F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 400'	301092045	400'	LPC2-W-LCULCU-IO9P-004-0400F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 425'	301092052	425'	LPC2-W-LCULCU-IO9P-004-0425F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 450'	301092060	450'	LPC2-W-LCULCU-IO9P-004-0450F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 475'	301092078	475'	LPC2-W-LCULCU-IO9P-004-0475F-W-24U/24UPE
CABLE 4 Fiber LC to LC I/O PLENUM 500'	301092086	500'	LPC2-W-LCULCU-IO9P-004-0500F-W-24U/24UPE

Ordering Information for SCU/SCU Connectors FTTB 4-Fiber Service Drop Assemblies

Material Description	Comcode	Length	Product Code
CABLE 4 Fiber SC to SC I/O PLENUM 25'	301091492	25'	LPC2-W-SCUSCU-IO9P-004-0025F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 50'	301091500	50'	LPC2-W-SCUSCU-IO9P-004-0050F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 75'	301091518	75'	LPC2-W-SCUSCU-IO9P-004-0075F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 100'	301091526	100'	LPC2-W-SCUSCU-IO9P-004-0100F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 125'	301091534	125'	LPC2-W-SCUSCU-IO9P-004-0125F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 150'	301091542	150'	LPC2-W-SCUSCU-IO9P-004-0150F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 175'	301091559	175'	LPC2-W-SCUSCU-IO9P-004-0175F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 200'	301091567	200'	LPC2-W-SCUSCU-IO9P-004-0200F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 225'	301091575	225'	LPC2-W-SCUSCU-IO9P-004-0225F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 250'	301091583	250'	LPC2-W-SCUSCU-IO9P-004-0250F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 275'	301091591	275'	LPC2-W-SCUSCU-IO9P-004-0275F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 300'	301091609	300'	LPC2-W-SCUSCU-IO9P-004-0300F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 325'	301091617	325'	LPC2-W-SCUSCU-IO9P-004-0325F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 350'	301091625	350'	LPC2-W-SCUSCU-IO9P-004-0350F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 375'	301091633	375'	LPC2-W-SCUSCU-IO9P-004-0375F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 400'	301091641	400'	LPC2-W-SCUSCU-IO9P-004-0400F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 425'	301091658	425'	LPC2-W-SCUSCU-IO9P-004-0425F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 450'	301091666	450'	LPC2-W-SCUSCU-IO9P-004-0450F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 475'	301091674	475'	LPC2-W-SCUSCU-IO9P-004-0475F-W-24U/24UPE
CABLE 4 Fiber SC to SC I/O PLENUM 500'	301091682	500'	LPC2-W-SCUSCU-IO9P-004-0500F-W-24U/24UPE



## CUSTOMER DROP ASSEMBLIES (4-FIBER INDOOR/ OUTDOOR PLENUM PATCHCORD)



### Ordering Information for LCU/SCU Connectors FTTB 4-Fiber Service Drop Assemblies

Material Description	Comcode	Length	Product Code
CABLE 4 Fiber SC to LC I/O PLENUM 25'	301091690	25'	LPC2-W-LCUSCU-IO9P-004-0025F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 50'	301091708	50'	LPC2-W-LCUSCU-IO9P-004-0050F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 75'	301091716	75'	LPC2-W-LCUSCU-IO9P-004-0075F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 100'	301091724	100'	LPC2-W-LCUSCU-IO9P-004-0100F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 125'	301091732	125'	LPC2-W-LCUSCU-IO9P-004-0125F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 150'	301091740	150'	LPC2-W-LCUSCU-IO9P-004-0150F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 175'	301091757	175'	LPC2-W-LCUSCU-IO9P-004-0175F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 200'	301091765	200'	LPC2-W-LCUSCU-IO9P-004-0200F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 225'	301091773	225'	LPC2-W-LCUSCU-IO9P-004-0225F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 250'	301091781	250'	LPC2-W-LCUSCU-IO9P-004-0250F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 275'	301091799	275'	LPC2-W-LCUSCU-IO9P-004-0275F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 300'	301091807	300'	LPC2-W-LCUSCU-IO9P-004-0300F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 325'	301091815	325'	LPC2-W-LCUSCU-IO9P-004-0325F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 350'	301091823	350'	LPC2-W-LCUSCU-IO9P-004-0350F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 375'	301091831	375'	LPC2-W-LCUSCU-IO9P-004-0375F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 400'	301091849	400'	LPC2-W-LCUSCU-IO9P-004-0400F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 425'	301091856	425'	LPC2-W-LCUSCU-IO9P-004-0425F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 450'	301091864	450'	LPC2-W-LCUSCU-IO9P-004-0450F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 475'	301091872	475'	LPC2-W-LCUSCU-IO9P-004-0475F-W-24U/24UPE
CABLE 4 Fiber SC to LC I/O PLENUM 500'	301091880	500'	LPC2-W-LCUSCU-IO9P-004-0500F-W-24U/24UPE

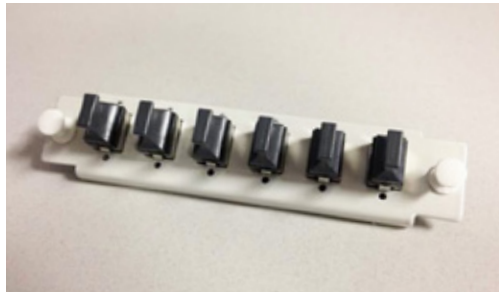
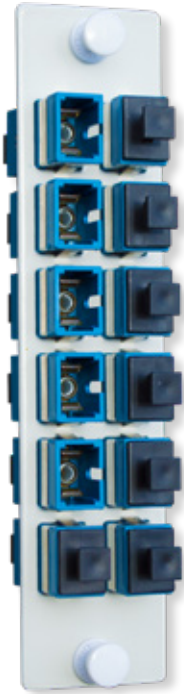
**MTP ADAPTERS AND FANOUTS**

**PRODUCT DESCRIPTION**

MTP/MPO adapters and fanouts are used to connect the V-Linx Combiner or a V-Linx Terminal to the EMUX Interconnect. The V-Linx Combiner or V-Linx Terminal connect into the MTP adapter (as shown earlier on the right side of the 400A unit). On the other side of the adapter, an MTP fanout connects via MTP to the EMUX Interconnect.

These fanouts and adapters provide a reliable, high-quality transition to individual fiber connection ports. The MTP/MPO adapters are available with SC or LC connectors, which help assure low insertion loss and reflectance.

The ordering codes specify the product lengths including the MPO ribbon end and the breakout to either 8 or 12 simplex connectors.



Ordering Information for MTP Adapters and Fanouts

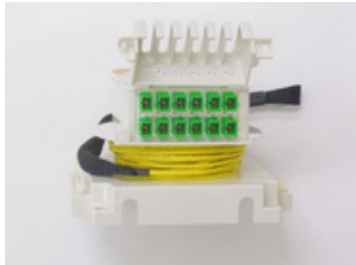
Material Description	Comcode	Product Code
Fanout MTP to SC Pigtail for Vlinx	301106092	MTP12NU/SCU-91-RCW0X-1/002F
Adapter Vlinx 12-Pack SC for OFS FTTB Hub	300446945	1000SC1-12-WHT-SPLX-SC12-SM
Adapter Vlinx 6-Pack MTP for OFS FTTB Hub	301046348	1000MP1-06-WHT-SPLX-MPX72-SM
MTP Tool Kit for pin exchange	18963	MTPPRO BASIC KIT
Pin Exchanger, F YL, no pins	18841	MTPPRO EXCHANGER SM ELITE F YL
Pin Exchanger, M YL, with 2 pins	18843	MTPPRO EXCHANGER SM ELITE M YL



**APPENDIX I**  
**V-LINX® PRODUCT PHOTOS**



V-Linx 12-Fiber SC Terminal Front  
 (with clip)



V-Linx 12-Fiber SC Terminal Side



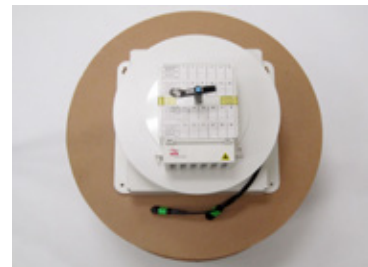
V-Linx 24-Fiber LC Terminal Side



V-Linx 24-Fiber LC Terminal Front



V-Linx Installation Tool  
 (with clip on side)



V-Linx 24-Fiber Combiner  
 on Spool Front



V-Linx Combiner Side  
 (50 meter version)



Plastic Corrugated Spool  
 Front



Plastic Corrugated Spool  
 Side



V-Linx Combiner Front  
 (50 meter version)



For additional information please contact your sales representative.

You can also visit our website at

[www.ofsoptics.com](http://www.ofsoptics.com)

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