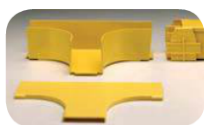


5. FiberGuide System

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FiberGuide System

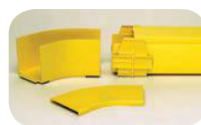
2" H x 2" W - Fittings



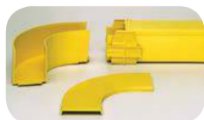
Horizontal T
(FGS-MHTA-C)



Horizontal Cross
(FGS-MHXP-C)



45° Horizontal Elbow
(FGS-MH4A-C)



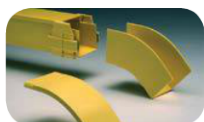
90° Horizontal Elbow
(FGS-MH9A-C)



90° Extended
Horizontal Elbow
(FGS-MH9A-C-45/2)



45° Up Elbow
(FGS-MU4A-C)



45° Down Elbow
(FGS-MD4A-C)



2x2 to 4x4
Straight Adapter
(FGS-MDSA-AC)



End Cap
(FGS-HMEC-C)

ORDERING INFORMATION

Description	Number of Junctions	Catalog Number	
		Yellow System	Black System
2x2 fittings			
Horizontal T; <i>cover included</i>	3	FGS-MHTA-C	FGSB-MHTA-C
Horizontal cross; <i>cover and two 2x2 junctions included; two additional 2x2 junctions required (see p. 22)</i>	2+2	FGS-MHXP-C	FGSB-MHXP-C
45° horizontal elbow; <i>cover included</i>	2	FGS-MH4A-C	FGSB-MH4A-C
90° horizontal elbow; <i>cover included</i>	2	FGS-MH9A-C	FGSB-MH9A-C
90° extended horizontal elbow; <i>cover included; similar to two 45° horizontal elbows joined</i>	2	FGS-MH9A-C-45/2	FGSB-MH9A-C-45/2
45° up elbow; <i>cover included</i>	2	FGS-MU4A-C	FGSB-MU4A-C
90° up elbow; <i>cover included</i>	2	FGS-MU9A-C	FGSB-MU9A-C
45° down elbow; <i>cover included</i>	2	FGS-MD4A-C	FGSB-MD4A-C
90° down elbow; <i>cover included</i>	2	FGS-MD9A-C	FGSB-MD9A-C
2x2 conversions			
2x2 to 4x4 straight adapter; <i>cover included</i>	(1) 2x2, (1) 4x4	FGS-MDSA-AC	FGSB-MDSA-AC
2x2 end cap			
End cap; <i>junction included</i>	--	FGS-HMEC-C	FGSB-HMEC-C

FiberGuide System

2" H x 2" W - Downspouts and Attachments



2x2 Standard Downspout
(FGS-MSDS-C)



2x2 Extended Downspout
(FGS-MDSP-C)



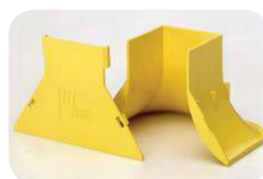
Extended Downspout
(FGS-KDH2-C shown attached to
2x2 FiberGuide system)



Dual 7/8" Flex Tube Attachment
(FGS-KT03-C)



Dual 7/8" Flex Tube Attachment
(FGS-KT03-C shown attached
to downspout)



2x2 Trumpet Flare
(FGS-MTRM-C)

ORDERING INFORMATION

Description	Number of Junctions	Catalog Number	
		Yellow System	Black System
2x2 downspouts			
Standard downspout; <i>cover included</i>	2	FGS-MSDS-C	FGSB-MSDS-C
Extended downspout; <i>cover included</i>	1	FGS-MDSP-C	FGSB-MDSP-C
Extended downspout; <i>cover and 2" flex tube, 2' long, included</i>	1	FGS-KDH2-C	FGSB-KDH2-C
Trumpet flare; <i>2x2 junction included</i>	-	FGS-MTRM-C	FGSB-MTRM-C
2x2 attachments			
2x2 flex tube attachment - 2" flex tube and a 2x2 junction included			
5' length	-	FGS-MEX1-C-5F	FGSB-MEX1-C-5F
10' length	-	FGS-MEX1-C-10F	FGSB-MEX1-C-10F
15' length	-	FGS-MEX1-C-15F	FGSB-MEX1-C-15F
Dual 7/8" flex tube attachment - two lengths of 7/8" flex tube and a 2x2 junction included			
(2) 5' length	-	FGS-KT03-C	FGSB-KT03-C
(2) 10' length	-	FGS-KT03-C-10F	FGSB-KT03-C-10F
(2) 15' length	-	FGS-KT03-C-15F	FGSB-KT03-C-15F
Flex tube clamp kit of 10; attaches 7/8" flex tube to rack	-	FGS-HSHC-10	FGSB-HSHC-10

FiberGuide System

2" H x 2" W – Straight Section and Junction

Straight Section

The 2x2 straight section is a U-shaped trough that provides a protective raceway for optical fibers. Available in 6-foot lengths, the straight section carries fibers horizontally throughout the system. It can also be installed vertically when routing around obstructions. A warning label indicating caution around fiber optic cable is included with each junction kit.



Horizontal Straight Section

ORDERING INFORMATION

Description	Catalog Number	
	Yellow System	Black System
2x2 straight section; horizontal straight section; 6' long, cover included	FGS-MSHA-C	FGSB-MSHA-C

Junction

The 2x2 junction is used for mechanically joining FiberGuide® sections. No tools are required for assembly.



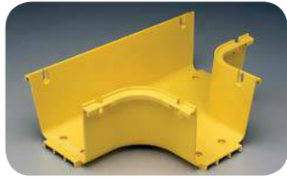
Junction
(FGS-MJWR-C)

ORDERING INFORMATION

Description	Catalog Number	
	Yellow System	Black System
2x2 junction	FGS-MJWR-C	FGSB-MJWR-C

FiberGuide System

4" H x 4" W - Fittings



Horizontal T
(FGS-MHRT-A)



Horizontal Cross
(FGS-MHXP-A)



90° Horizontal Elbow
(FGS-MH9E-A)



90° Up Elbow
Metal Cover Included
(FGS-MU9E-A)



90° Down Elbow
(FGS-MD9E-A)



45° Horizontal Elbow
(FGS-MH4E-A)



45° Up Elbow
Metal Cover Included
(FGS-MU4E-A)



45° Down Elbow
(FGS-MD4E-A)



4x4 to 4x6 Straight Adapter
(FGS-MDSA-AB)



Expandable Straight Section
(FGS-MVAR-A)



Cut-in T
(FGS-MHIS-A)



Cut-in T Fixture
shown on straight section
(FGS-MHIS-JIG-A/B/F)



End Cap
(FGS-HMEC-A)



Snap-on Plastic Cover
(FGS-SH4E-A shown attached to 45°
horizontal elbow with junctions)

FiberGuide System

4" H x 4" W - Fittings

ORDERING INFORMATION

Description	Number of Junctions	Part Number			
		Yellow System	Yellow System Snap-on Cover	Black System	Black System Snap-on Cover
4x4 fittings					
Horizontal T	3	FGS-MHRT-A	FGS-SHRT-A	FGSB-MHRT-A	FGSB-SHRT-A
Horizontal cross	4	FGS-MHXP-A	FGS-SHXP-A	FGSB-MHXP-A	FGSB-SHXP-A
90° horizontal elbow	2	FGS-MH9E-A	FGS-SH9E-A	FGSB-MH9E-A	FGSB-SH9E-A
90° up elbow metal cover included	2	FGS-MU9E-A	FGS-SU9E-A	FGSB-MU9E-A	FGSB-SU9E-A
90° down elbow	2	FGS-MD9E-A	FGS-SD9E-A	FGSB-MD9E-A	FGSB-SD9E-A
45° horizontal elbow	2	FGS-MH4E-A	FGS-SH4E-A	FGSB-MH4E-A	FGSB-SH4E-A
45° up elbow metal cover included	2	FGS-MU4E-A	FGS-SU4E-A	FGSB-MU4E-A	FGSB-SU4E-A
45° down elbow	2	FGS-MD4E-A	FGS-SD4E-A	FGSB-MD4E-A	FGSB-SD4E-A
4x4 conversions					
4x4 to 4x6 straight adapter	(1) 4x4, (1) 4x6	FGS-MDSA-AB	FGS-SDSA-AB	FGSB-MDSA-AB	FGSB-SDSA-AB
4x4 expandable straight section	2	FGS-MVAR-A	-	FGSB-MVAR-A	-
4" Cut-in T assembly hardware included	-	FGS-MHIS-A	-	FGSB-MHIS-A	-
6" Cut-in T assembly hardware included	-	FGS-MHIS-B	-	FGSB-MHIS-B	-
12" Cut-in T assembly hardware included	-	FGS-MHIS-F	-	FGSB-MHIS-F	-
Cut-in T fixture	-	FGS-MHIS-JIG-A/B/F	-	FGS-MHIS-JIG-A/B/F	-
4x4 end cap	-	FGS-HMEC-A	-	FGS-HMEC-A	-

FiberGuide System

4" H x 4" W - Downspouts and Attachments



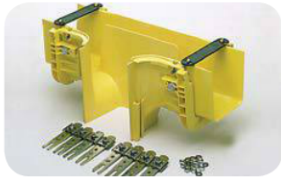
Downspout
(FGS-MDSP-A)



Cover for 4x4 Downspout
(FGS-MCDS-AB)



Extended Downspout
(FGS-MDSP-EX-A)
shown with and without cover



Insertable Downspout
(FGS-MDSP-A/I)



Trumpet Flare
(FGS-MTRM-A)



**Downspout Exit
Junction Kit**
(FGS-MJWR-A)



4x4/4x6 Downspout Insert
(FGS-HDSI-AB)



**4" Square to 2" Round Adapter
with Flex Tube**
(FGS-ASRI
requires FGS-MJWR-A
Junction Kit)



Dual 2" Flex Tube Attachment
(FGS-KT03-A)



Single 2" Flex Tube Attachment
(FGS-KT03-A1)



2" Quad Flex Tube Attachment
(FGS-KT03-A4)

FiberGuide System

4" H x 4" W - Downspouts and Attachments

An array of 4x4 downspout options are available to feed fiber from overhead straight sections into fiber optic equipment below.

ORDERING INFORMATION

Description	Number of Junctions	Part Number	
		Yellow System	Black System
4x4 downspouts			
Downspout	2**	FGS-MDSP-A	FGSB-MDSP-A
Cover for 4x4 downspout	-	FGS-MCDS-AB	FGSB-MCDS-AB
Extended downspout	2*	FGS-MDSP-EX-A	FGSB-MDSP-EX-A
Cover for 4x4 extended downspout	-	FGS-MCDS-EX-AB	FGSB-MCDS-EX-AB
Insertable downspout	-	FGS-MDSP-A/I	FGSB-MDSP-A/I
Trumpet flare used on both 4x4 and 4x6 downspouts; no 4" junction kit required	-	FGS-MTRM-A	FGSB-MTRM-A
Downspout exit junction kit	-	FGS-MJWR-A	FGSB-MJWR-A
4x4/4x6 downspout; insert converts bottom of downspout to 2x2" without using 2" to 4" adapter, saving vertical space	-	FGS-HDSI-AB	FGS-HDSI-AB
4x4 attachments			
Square to 2" round adapter with flex tube; one 4x4 junction kit (FGS-MJWR-A) required to attach to a downspout drop			
5' length	1	FGS-ASRI-5F	FGSB-ASRI-5F
10' length	1	FGS-ASRI-10F	FGSB-ASRI-10F
15' length	1	FGS-ASRI-15F	FGSB-ASRI-15F
Dual 2" flex tube attachment; no 4x4 junction kit required			
(2) 5' length	-	FGS-KT03-A	FGSB-KT03-A
(2) 10' length	-	FGS-KT03-A10F	FGSB-KT03-A10F
(2) 15' length	-	FGS-KT03-A15F	FGSB-KT03-A15F
Single 2" flex tube attachment; no 4x4 junction kit required			
5' length	-	FGS-KT03-A1	FGSB-KT03-A1
10' length	-	FGS-KT03-A1-10F	FGSB-KT03-A1-10F
15' length	-	FGS-KT03-A1-15F	FGSB-KT03-A1-15F
Quad 2" flex tube attachment; no 4x4 junction kit required			
(4) 5' length	-	FGS-KT03-A4-5F	FGSB-KT03-A4-5F
(4) 10' length	-	FGS-KT03-A4-10F	FGSB-KT03-A4-10F
(4) 15' length	-	FGS-KT03-A4-15F	FGSB-KT03-A4-15F
4x4 quad 7/8" flex tube attachment; no 4x4 junction kit required			
(4) 5' length	-	FGS-KT07-A4-5F	FGSB-KT07-A4-5F
(4) 10' length	-	FGS-KT07-A4-10F	FGSB-KT07-A4-10F
(4) 15' length	-	FGS-KT07-A4-15F	FGSB-KT07-A4-15F

*A third junction is needed if drop is to a fitting or straight section.

**This drop junction must be a junction type FGS-MJWR-A, FGSB-MJWR-A.

FiberGuide System

4" H x 4" W – Straight Section and Snap-Fit™ Junction

Straight Section

The unique four-channel design of the 4x4 FiberGuide straight section allows the standard system to be attached to the support structure without the need to cut or drill any holes within the trough. This ensures that the patch cords will not come in contact with any screw heads or bolts, an important consideration in 4x4 systems where higher cable counts apply increased pressure on patch cords at the bottom of the trough.



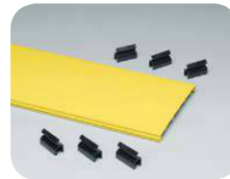
**Horizontal
Straight Section**
(FGS-MSHS-A)



**Expandable
Straight Section**
(FGS-MVAR-A)



**Hinged Cover for
Horizontal Straight Section**
(FGS-MSNC-A)



**Snap-On
Cover for Horizontal
Straight Section**
(FGS-MSSC-A)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x4 straight section		
Horizontal straight section; 6' long, cover sold separately	FGS-MSHS-A	FGSB-MSHS-A
Expandable straight section	FGS-MVAR-A	FGSB-MVAR-A
4x4 accessories		
Hinged cover kit for horizontal straight section; includes three mounting hinges and three clips	FGS-MSNC-A	FGSB-MSNC-A
Snap-on cover kit for horizontal straight section; includes six capture clips with mounting clasps	FGS-MSSC-A	FGSB-MSSC-A
Kit - 10 black capture clips	FGS-DHCP	FGS-DHCP
Kit - 10 black capture clips and 10 hinges	FGS-DHHC (Yellow Hinge)	FGSB-DHHC (Black Hinge)

Snap-Fit™ Junction

The Snap-Fit™ junction assembly is available for the 4-inch FiberGuide system. The Snap-Fit junction is a completely tool-less junction. No additional tools are required for installation or removal. The junction exhibits superior holding force and accommodates support brackets. A warning label indicating caution around fiber optic cable is included with each junction kit.



Snap-Fit Junction
(FGS-MFAW-A)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x4 Snap-Fit™ junction	FGS-MFAW-A	FGSB-MFAW-A

FiberGuide System

2" H x 6" W - Fittings, Downspouts and Attachments



2x6 to 2x2 Downspout
(FGS-MDSP-G)



Horizontal T
(FGS-MHRT-G)



Horizontal Cross
(FGS-MHXP-G)



90° Horizontal Elbow
(FGS-MH9E-G)



90° Down Elbow
(FGS-MD9E-G)



45° Horizontal Elbow
(FGS-MH4E-G)



45° Up Elbow
(FGS-MU4E-G)
(Metal Cover Included)



45° Down Elbow
(FGS-MD4E-G)



2x6 to 4x4 Adapter
(FGS-MDSA-GA)



2x6 to 4x6 Adapter
(FGS-MDSA-GB)



Trumpet Flare
(FGS-MTRM-G)

FiberGuide System

2" H x 6" W – Fittings, Downspouts and Attachments

ORDERING INFORMATION

Description	Number of Junctions	Part Number	
		Yellow System	Black System
2x6 fittings			
Horizontal T	3	FGS-MHRT-G	FGSB-MHRT-G
Horizontal cross	4	FGS-MHXP-G	FGSB-MHXP-G
90° horizontal elbow	2	FGS-MH9E-G	FGSB-MH9E-G
90° down elbow	2	FGS-MD9E-G	FGSB-MD9E-G
45° horizontal elbow	2	FGS-MH4E-G	FGSB-MH4E-G
45° up elbow, metal cover included	2	FGS-MU4E-G	FGSB-MU4E-G
45° down elbow	2	FGS-MD4E-G	FGSB-MD4E-G
2x6 conversions			
2x6 to 4x4 adapter	(1) 2x6, (1) 4x4	FGS-MDSA-GA	FGSB-MDSA-GA
2x6 to 4x6 adapter	(1) 2x6, (1) 4x6	FGS-MDSA-GB	FGSB-MDSA-GB
2x6 downspouts			
2x6 to 2x2 downspout	2	FGS-MDSP-G	FGSB-MDSP-G
Trumpet flare	-	FGS-MTRM-G	FGSB-MTRM-G
2x6 attachments			
Dual 2" flex tube attachment	-	FGS-KT03-G-5F	FGSB-KT03-G-5F
2x6 end cap	-	FGS-HMEC-G	FGS-HMEC-G

Low-Profile Express Exit™

Designed for low-ceiling or height restricted environments, the Express Exit™ for the 2x6 FiberGuide system extends only two inches above the straight section sidewall. The Express Exit accommodates up to 150 (3 mm) patch cords, includes removable rear cable guides for additional cable management, and features a 2x2 exit opening. It is designed specifically for the 2x6 FiberGuide system and should not be used on any other FiberGuide system.



Express Exit
(FGS-MEXP-LP-G)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
Low-Profile Express Exit™ (designed exclusively for the 2x6 system) <i>Base, cover, mounting hardware, and support bracket included</i>	FGS-MEXP-LP-G	FGSB-MEXP-LP-G

FiberGuide System

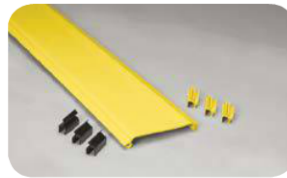
2" H x 6" W – Straight Section and Junction

Straight Section

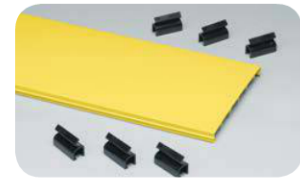
The unique four-channel design of the 2x6 FiberGuide straight section allows the standard system to be attached to the support structure without the need to cut or drill any holes within the trough. This ensures that the patch cords will not come in contact with any screw heads or bolts.



Straight Section
(FGS-MSHS-G)



Hinged Cover Kit for Horizontal Straight Section
(FGS-MSNC-B/G)



6-inch Snap-on Cover
(FGS-MSSC-B/G)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
2x6 straight section; horizontal straight section; 6' long, cover sold separately	FGS-MSHS-G	FGSB-MSHS-G
2x6 accessories		
2x6 hinged cover kit for horizontal straight section; three mounting hinges and three clips included	FGS-MSNC-B/G	FGSB-MSNC-B/G
6-inch snap-on cover kit for horizontal straight section; six capture clips with mounting clasps included	FGS-MSSC-B/G	FGSB-MSSC-B/G
Kit-10 black capture clips	FGS-DHCP	FGS-DHCP

Junction

The one-piece junction employs factory-installed set screws to assure strength and durability. No cutting or drilling of the components is required for assembly. A warning label indicating caution around fiber optic cable is included with each junction kit.



2x6 Junction
(FGS-JUNC-G)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
2x6 junction	FGS-JUNC-G	FGSB-JUNC-G

FiberGuide System

4" H x 6" W - Fittings



Horizontal T
(FGS-MHRT-B)



Horizontal Cross
(FGS-MHXP-B)



90° Horizontal Elbow
(FGS-MH9E-B)



90° Up Elbow
Cover Included
(FGS-MU9E-B)



90° Down Elbow
(FGS-MD9E-B)



45° Horizontal Elbow
(FGS-MH4E-B)



45° Up Elbow
Cover Included
(FGS-MU4E-B)



45° Down Elbow
(FGS-MD4E-B)



4x4 to 4x6 Straight Adapter
(FGS-MDSA-AB)



Expandable
Straight Section
(FGS-MVAR-B)



6" Cut-in T
(FGS-MHIS-B)



Cut-in T Fixture
(FGS-MHIS-JIG-A/B/F shown on a straight section)



4x12 to Single 4x6 Adapter
(FGS-MDSA-FB)
(Cover: FGS-SDSA-FB)



End Cap
(FGS-HMEC-B)



Snap-on Plastic Cover
(FGS-SH4E-B shown attached to 45° horizontal elbow with junctions)

FiberGuide System

4" H x 6" W - Fittings

ORDERING INFORMATION

Description	Number of Junctions	Part Number			
		Yellow System	Yellow System Snap-on Cover	Black System	Black System Snap-on Cover
4x6 fittings					
Horizontal T	3	FGS-MHRT-B	FGS-SHRT-B	FGSB-MHRT-B	FGSB-SHRT-B
Horizontal cross	4	FGS-MHXP-B	FGS-SHXP-B	FGSB-MHXP-B	FGSB-SHXP-B
90° horizontal elbow	2	FGS-MH9E-B	FGS-SH9E-B	FGSB-MH9E-B	FGSB-SH9E-B
90° up elbow metal cover included	2	FGS-MU9E-B	-	FGSB-MU9E-B	-
90° down elbow	2	FGS-MD9E-B	FGS-SD9E-B	FGSB-MD9E-B	FGSB-SD9E-B
45° horizontal elbow	2	FGS-MH4E-B	FGS-SH4E-B	FGSB-MH4E-B	FGSB-SH4E-B
45° up elbow metal cover included	2	FGS-MU4E-B	FGS-SU4E-B	FGSB-MU4E-B	FGSB-SU4E-B
45° down elbow	2	FGS-MD4E-B	FGS-SD4E-B	FGSB-MD4E-B	FGSB-SD4E-B
4x6 conversions					
4x4 to 4x6 straight adapter	(1) 4x4, (1) 4x6	FGS-MDSA-AB	FGS-SDSA-AB	FGSB-MDSA-AB	FGSB-SDSA-AB
4x12 to single 4x6 adapter	-	FGS-MDSA-FB	FGS-SDSA-FB	FGSB-MDSA-FB	FGSB-SDSA-FB
4x6 expandable straight section	2	FGS-MVAR-B	-	FGSB-MVAR-B	-
4" Cut-in T; assembly hardware included	-	FGS-MHIS-A	-	FGSB-MHIS-A	-
6" Cut-in T; assembly hardware included	-	FGS-MHIS-B	-	FGSB-MHIS-B	-
12" Cut-in T; assembly hardware included	-	FGS-MHIS-F	-	FGSB-MHIS-F	-
Cut-in T fixture	-	FGS-MHIS-JIG-A/B/F	-	FGS-MHIS-JIG-A/B/F	-
4x6 end cap	-	FGS-HMEC-B	-	FGS-HMEC-B	-

FiberGuide System

4" H x 6" W - Downspouts and Attachments



Downspout
(FGS-MDSP-B)



Cover for 4x6 Downspout
(FGS-MCDS-AB)



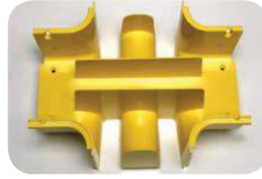
Extended Downspout
(FGS-MDSP-EX-B shown with and without cover)



Insertable Downspout
(FGS-MDSP-B/I)



Dual Downspout
(FGS-MDSP-2B)



Dual Downspout with Divider
(FGS-MDSP-2B-IMP)



Trumpet Flare Kit for 4x6 Dual Downspout
(FGS-MTRM-2B)



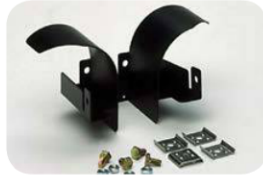
Trumpet Flare Kit for Dual Downspout with Divider
(FGS-MTRM-2B-IMP)



Single 2" Flex Tube Attachment
(FGS-KT03-A1)



Trumpet Flare Kit
(FGS-MTRM-A shown attached to downspout)



4x4/4x6 Downspout Insert
(FGS-HDSI-AB)



Downspout Exit Junction Kit
(FGS-MJWR-A)



4" Square to 2" Round Adapter with Flex Tube
(FGS-ASRI requires FGS-MJWR-A junction kit)



Dual 2" Flex Tube Attachment
(FGS-KT03-A)



2" Quad Flex Tube Attachment
(FGS-KT03-A4)

FiberGuide System

4" H x 6" W - Downspouts and Attachments

4x6 downspouts and attachments feed fiber from overhead straight sections into fiber optic equipment below. All 4x6 downspouts feature 4-inch exits and attach to the 4-inch x 4-inch attachments listed below.

ORDERING INFORMATION

Description	Number of Junctions	Part Number	
		Yellow System	Black System
4x6 downspouts			
Downspout <i>Note: If a trumpet flare is required use a 4x4 flare (FGS-MTRM-A)</i>	2*	FGS-MDSP-B	FGSB-MDSP-B
Cover for 4x6 downspout and dual downspout	-	FGS-MCDS-AB**	FGSB-MCDS-AB**
Extended downspout	2	FGS-MDSP-EX-B	FGSB-MDSP-EX-B
Cover for 4x6 extended downspout	-	FGS-MCDS-EX-AB	FGSB-MCDS-EX-AB
Insertable downspout	-	FGS-MDSP-B/I	FGSB-MDSP-B/I
Dual drop downspout	2*	FGS-MDSP-2B	FGSB-MDSP-2B
Trumpet flare for dual drop downspout (kit of 2 FGS-MTRM-A)	-	FGS-MTRM-2B	FGSB-MTRM-2B
Dual drop downspout with divider	2	FGS-MDSP-2B-IMP	FGSB-MDSP-2B-IMP
Trumpet flare for dual drop downspout with divider (kit of 2)		FGS-MTRM-2B-IMP	FGSB-MTRM-2B-IMP
Junction for downspout exit		FGS-MJWR-A	FGSB-MJWR-A
4x4/4x6 downspout insert; <i>converts bottom of downspout to 2x2 without using 2" to 4" adapter, saving vertical space</i>		FGS-HDSI-AB	FGS-HDSI-AB
4x4 Trumpet flare; used on exits of 4x4 and 4x6 downspouts – <i>no 4" junction kit required</i>		FGS-MTRM-A	FGSB-MTRM-A
4x6 Trumpet flare		FGS-MTRM-B	FGSB-MTRM-B
4x6 attachments			
4x4 square to 2" round adapter with flex tube; <i>one 4x4 junction kit (FGS-MJWR-A) required to attach to a downspout drop</i>			
5' length	1	FGS-ASRI-5F	FGSB-ASRI-5F
10' length	1	FGS-ASRI-10F	FGSB-ASRI-10F
15' length	1	FGS-ASRI-15F	FGSB-ASRI-15F
4x4 dual 2" flex tube attachment; <i>no 4x4 junction kit required</i>			
(2) 5' length	-	FGS-KT03-A	FGSB-KT03-A
(2) 10' length	-	FGS-KT03-A10F	FGSB-KT03-A10F
(2) 15' length	-	FGS-KT03-A15F	FGSB-KT03-A15F
4x4 single 2" flex tube attachment; <i>no 4x4 junction kit required</i>			
5' length	-	FGS-KT03-A1	FGSB-KT03-A1
10' length	-	FGS-KT03-A1-10F	FGSB-KT03-A1-10F
15' length	-	FGS-KT03-A1-15F	FGSB-KT03-A1-15F
4x4 quad 2" flex tube attachment; <i>no 4x4 junction kit required</i>			
(4) 5' length	-	FGS-KT03-A4-5F	FGSB-KT03-A4-5F
(4) 10' length	-	FGS-KT03-A4-10F	FGSB-KT03-A4-10F
(4) 15' length	-	FGS-KT03-A4-15F	FGSB-KT03-A4-15F
4x4 quad 7/8" flex tube attachment; <i>no 4x4 junction kit required</i>			
(4) 5' length	-	FGS-KT07-A4-5F	FGSB-KT07-A4-5F
(4) 10' length	-	FGS-KT07-A4-10F	FGSB-KT07-A4-10F
(4) 15' length	-	FGS-KT07-A4-15F	FGSB-KT07-A4-15F

*A 4x4 junction is needed to drop to a fitting or a straight section.
This drop junction must be a junction type FGS-MJWR-A or FGSB-MJWR-A.
**Dual downspout requires two covers.

FiberGuide System

4" H x 6" W – Straight Section and Junction

Straight Section

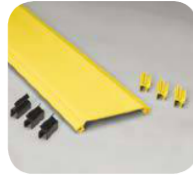
The unique four-channel design of the 4x6 FiberGuide straight section allows the standard system to be attached to the support structure without the need to cut or drill any holes within the trough. This ensures that the patch cords will not come in contact with any screw heads or bolts, an important consideration in 4x6 systems where higher cable counts apply increased pressure on patch cords at the bottom of the trough.



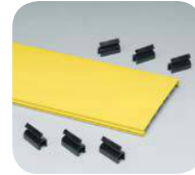
Horizontal Straight Section
(FGS-MSHS-B)



Expandable Straight Section
(FGS-MVAR-B)



Hinged Cover Kit
for Horizontal Straight Section
(FGS-MSNC-B/G)



6" Snap-on Cover
for Horizontal Straight Section
(FGS-MSSC-B/G)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x6 straight sections		
Horizontal straight section; 6' long, cover sold separately	FGS-MSHS-B	FGSB-MSHS-B
Expandable straight section	FGS-MVAR-B	FGSB-MVAR-B
Slack storage straight section	FGS-MSHS-STOR-B	FGSB-MSHS-STOR-B
4x6 accessories		
Hinged cover kit for horizontal straight section; includes three mounting hinges and three clips	FGS-MSNC-B/G	FGSB-MSNC-B/G
6" snap-on cover kit for horizontal straight section; includes six capture clips with mounting clasps	FGS-MSSC-B/G	FGSB-MSSC-B/G
Kit - 10 black capture clips	FGS-DHCP	FGS-DHCP
Kit - 10 black capture clips and 10 hinges	FGS-DHHC (Yellow Hinge)	FGSB-DHHC (Black Hinge)

Snap-Fit™ Junction

The Snap-Fit™ junction assembly is available for the 6-inch FiberGuide system. The new junction is a completely tool-less junction. No additional tools are required for installation or removal. The Snap-Fit Junction exhibits superior holding force and accommodates support brackets. A warning label indicating caution around fiber optic cable is included with each junction kit.



Snap-Fit Junction
(FGS-MFAW-B)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x6 Snap-fit junction	FGS-MFAW-B	FGSB-MFAW-B

FiberGuide System

4" H x 12" W - Fittings



Horizontal T
(FGS-MHRT-F)



Horizontal Cross
(FGS-MHXP-F)



90° Horizontal Elbow
(FGS-MH9E-F)



90° Down Elbow
(FGS-MD9E-F)



45° Horizontal Elbow
(FGS-MH4E-F)



45° Up Elbow
(FGS-MU4E-F)



45° Down Elbow
(FGS-MD4E-F)



Horizontal T with Single 6" Exit
(FGS-MHRT-F/B)



Horizontal Cross with Two 6" Exits
(FGS-MHXP-B/F)



4x12 to Dual 4x6 Adapter
(FGS-MDSA-F2B)



4x12 to Single 4x6 Adapter
(FGS-MDSA-FB)



4x12 to 4x6 Adapter - Right
(FGS-MDSA-FB-R)



4x12 to 4x6 Adapter - Left
(FGS-MDSA-FB-L)



End Cap
(FGS-HMEC-F)



Expandable Straight Section
(FGS-MVAR-F)



12" Cut-in T
(FGS-MHIS-F)



Cut-in T Fixture
(FGS-MHIS-JIG-A/B/F shown on a straight section)



Snap-on Cover
(FGS-SH4E-F shown separate)



Snap-on Cover Installation



Snap-on Cover
(FGS-SH4E-F shown installed)

FiberGuide System

4" H x 12" W - Fittings

ORDERING INFORMATION

Description	Number of Junctions	Part Number			
		Yellow System	Yellow System Snap-on Cover	Black System	Black System Snap-on Cover
4x12 fittings					
Horizontal T	3	FGS-MHRT-F	FGS-SHRT-F	FGSB-MHRT-F	FGSB-SHRT-F
Horizontal cross	4	FGS-MHXP-F	FGS-SHXP-F	FGSB-MHXP-F	FGSB-SHXP-F
90° horizontal elbow	2	FGS-MH9E-F	FGS-SH9E-F	FGSB-MH9E-F	FGSB-SH9E-F
90° down elbow	2	FGS-MD9E-F	FGS-SD9E-F	FGSB-MD9E-F	FGSB-SD9E-F
45° horizontal elbow	2	FGS-MH4E-F	FGS-SH4E-F	FGSB-MH4E-F	FGSB-SH4E-F
45° up elbow, metal cover included	2	FGS-MU4E-F	FGS-SU4E-F	FGSB-MU4E-F	FGSB-SU4E-F
45° down elbow	2	FGS-MD4E-F	FGS-SD4E-F	FGSB-MD4E-F	FGSB-SD4E-F
Horizontal T with single 6" exit	(2) 4x12, (1) 4x6	FGS-MHRT-F/B	FGS-SHRT-F/B	FGSB-MHRT-F/B	FGSB-SHRT-F/B
Horizontal cross with two 6" exits	(2) 4x12, (2) 4x6	FGS-MHXP-B/F	FGS-SHXP-B/F	FGSB-MHXP-B/F	FGSB-SHXP-B/F
4x12 conversions					
4x12 to dual 4x6 adapter	(1) 4x12, (2) 4x6	FGS-MDSA-F2B	FGS-SDSA-F2B	FGSB-MDSA-F2B	FGSB-SDSA-F2B
4x12 to single 4x6 adapter	(1) 4x12, (1) 4x6	FGS-MDSA-FB	FGS-SDSA-FB	FGSB-MDSA-FB	FGSB-SDSA-FB
4x12 to 4x6 right adapter; <i>includes fastening hardware</i>		FGS-MDSA-FB-R		FGS-MDSA-FB-R	
Fixed metal cover for right adapter		FGS-VDSA-FB-R		FGS-VDSA-FB-R	
4x12 to 4x6 left adapter; <i>includes fastening hardware</i>		FGS-MDSA-FB-L		FGS-MDSA-FB-L	
Fixed metal cover for left adapter		FGS-VDSA-FB-L		FGS-VDSA-FB-L	
Expandable straight section	2	FGS-MVAR-F	-	FGSB-MVAR-F	-
4" Cut-in T; <i>assembly hardware included</i>	-	FGS-MHIS-A	-	FGSB-MHIS-A	-
6" Cut-in T; <i>assembly hardware included</i>	-	FGS-MHIS-B	-	FGSB-MHIS-B	-
12" Cut-in T; <i>assembly hardware included</i>	-	FGS-MHIS-F	-	FGSB-MHIS-F	-
Cut-in T fixture	-	FGS-MHIS-JIG-A/B/F	-	FGS-MHIS-JIG-A/B/F	-
4x12 end cap		FGS-HMEC-F		FGS-HMEC-F	
4x12 variable support locator kits for; <i>Each kit contains all necessary mounting hardware. Fitting sold separately.</i>					
FGS-MDSP-F (downspout)		FGS-MDSP-F-VS		FGS-MDSP-F-VS	
FGS-MHRT-F (horizontal T)		FGS-MHRT-F-VS		FGS-MHRT-F-VS	
FGS-MHXP-F (horizontal cross)		FGS-MHXP-F-VS		FGS-MHXP-F-VS	
FGS-MH9E-F (90° horizontal elbow)		FGS-MH9E-F-VS		FGS-MH9E-F-VS	
FGS-MHRT-F/B (horizontal T - 6"/12")		FGS-MHRT-F/B-VS		FGS-MHRT-F/B-VS	
FGS-MHXP-B/F (horizontal cross- 6"/12")		FGS-MHXP-B/F-VS		FGS-MHXP-B/F-VS	

FiberGuide System

4" H x 12" W - Downspouts and Attachments



Downspout
(FGS-MDSP-F)



Cover for 4x12 Downspout
(FGS-SDSP-F)



Trumpet Flare
(FGS-MTRM-F)



Downspout with Rear T
(FGS-MDRT-F)



Island T
(FGS-ISLAND-F)



Island T with Recessed Dividing Spool
(FGS-ISLAND3-F shown with 12" Junction, 90° Down Elbow and Trumpet Flare)



4x6 Dual 2" Flex Tube Attachment
(FGS-KT03-B)



4x6 Trumpet Flare Kit
(FGS-MTRM-B shown alone and attached to 4x12 Downspout)



4x12 to 4x4 Downspout Converter
(FGS-HDSI-F/D)



The FGS-HSDI-F/D attached to both the 4x12 downspout and the 4x4 slotted duct without the use of hardware

FiberGuide System

4" H x 12" W - Downspouts and Attachments

An array of 4x12 downspouts and attachments are available to feed fiber from overhead straight sections into fiber optic equipment below. The 4x12 downspout features a 4x6 exit and accepts the 4x6 exit attachments listed below.

ORDERING INFORMATION

Description	Number of Junctions	Yellow System Part Number	Black System Part Number
4x12 downspouts			
Downspout	2*	FGS-MDSP-F	FGSB-MDSP-F
Cover for 4x12 downspout	-	FGS-SDSP-F	FGSB-SDSP-F
Insertable downspout	-	FGS-MDSP-F/I	FGSB-MDSP-F/I
Trumpet flare	-	FGS-MTRM-F	FGSB-MTRM-F
Downspout with rear T	3*	FGS-MDRT-F	FGSB-MDRT-F
Island T with spool and factory installed trumpet flare	2	FGS-ISLAND-F	FGSB-ISLAND-F
Island T with trumpet and dividing spool; <i>Variable Support Locator Kit included</i>	2	FGS-ISLAND-F-513	FGSB-ISLAND-F-513
Island T with recessed dividing spool	3	FGS-ISLAND3-F	FGSB-ISLAND3-F
4x12 attachments			
4x6 dual 2" flex tube attachment			
5' length	-	FGS-KT03-B	FGSB-KT03-B
10' length	-	FGS-KT03-B-10F	FGSB-KT03-B-10F
15' length	-	FGS-KT03-B-15F	FGSB-KT03-B-15F
4x6 trumpet flare kit; <i>used on 4x12 downspouts</i>		FGS-MTRM-B	FGSB-MTRM-B
4x12 to 4x4 downspout converter; <i>converts downspout opening to accept 4x4 slotted duct</i>	-	FGS-HDSI-F/D	FGS-HDSI-F/D
4x12 to 2x2 downspout converter	-	FGS-HDSI-F/C	FGS-HDSI-F/C

*An additional junction is needed if drop is to fitting or straight section.
This 4x6 junction must be a junction type FGS-MFAW-B, FGSB-MFAW-B.

FiberGuide System

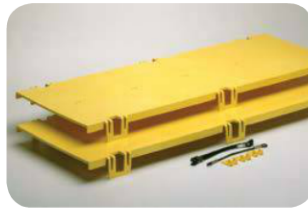
4" H x 12" W - Straight Section

The unique nine-channel design of the 4x12 FiberGuide straight section provides unmatched strength and allows the attachment of support structure without the need to cut or drill holes within the raceway. This ensures that the patch cords will not come in contact with any screw heads or bolts, an important consideration in 4x4, 4x6, and 4x12 systems where higher cable counts apply increased pressure on the patch cords at the bottom of the raceway.

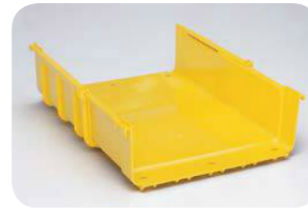
The 4x12 system covers feature a snap-on design. This allows the cover to be used in environments with limited headroom. Two 3-foot cover sections come with each order, making it easy for one person to remove the covers. Each cover kit includes a tether kit. The straight section covers are designed to be placed over the 4x12 downspouts, speeding installation time by reducing the number of measurements and cuts that need to be made.



Horizontal Straight Section
(FGS-MSHS-F)



Horizontal Straight Section Cover
(FGS-MSSC-F includes two 3' Lengths and Tethering Hardware)



Expandable Straight Section
(FGS-MVAR-F)



12" Hinged Cover for Horizontal Straight Section
(FGS-MSNC-F)



Straight Section Cover in Tethered Position



Straight Section Cover Attached to Straight Section

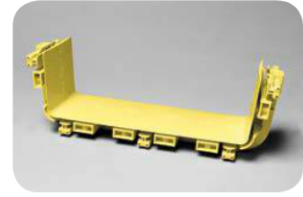
ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x12 straight section		
Horizontal straight section; 6' long, cover sold separately	FGS-MSHS-F	FGSB-MSHS-F
Expandable straight section	FGS-MVAR-F	FGSB-MVAR-F
Slack storage straight section	FGS-MSHS-STOR-F	FGSB-MSHS-STOR-F
4x12 accessories		
Hinged cover kit for horizontal straight section; includes five mounting hinges and three clips	FGS-MSNC-F	FGSB-MSNC-F
Snap-on cover kit for horizontal straight section; includes 3' covers, optional tethering kit	FGS-MSSC-F	FGSB-MSSC-F
Kit - 10 black capture clips	FGS-DHCP	FGS-DHCP
Kit - 10 black capture clips and 10 hinges	FGS-DHHC	FGSB-DHHC

FiberGuide System

4" H x 12" W - Snap-Fit™ Junction

The new Snap-Fit™ junction is available for the 12-inch FiberGuide system. The Snap-Fit junction is a completely tool-less junction. No additional tools are required for installation or removal. The Snap-Fit junction exhibits superior holding force and accommodates support brackets.



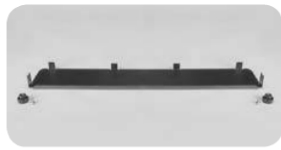
4x12 Snap-Fit Junction
(FGS-MFAW-F)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x12 Snap-Fit™ junction	FGS-MFAW-F	FGSB-MFAW-F

FiberGuide System

4" H x 24" W – Fittings



End Cap
(FGS-HMEC-H)



Horizontal Cross with Dual 12" Exits
(FGS-MHXP-F/H)



Horizontal Cross
(FGS-MHXP-H)



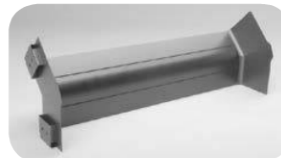
45° Horizontal Elbow
(FGS-MH4E-H)



Horizontal T with Single 12" Exit
(FGS-MHRT-H/F)



12" Cut-in T
(FGS-MHIS-F/H)



45° Down Elbow
(FGS-MD4E-H)



4x24 to 4x12 Adapter
(FGS-MDSA-HF)



45° Up Elbow
(FGS-MU4E-H)

ORDERING INFORMATION

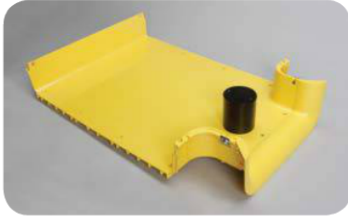
Description	Part Number	
	Yellow System	Black System
4x24 fittings		
45° horizontal elbow	FGS-MH4E-H	FGSB-MH4E-H
Horizontal T with single 12" exit	FGS-MHRT-H/F	FGSB-MHRT-H/F
Horizontal T with three 24" exits	FGS-MHRT-H	FGSB-MHRT-H
Horizontal cross	FGS-MHXP-H	FGSB-MHXP-H
Horizontal cross with dual 12" exits	FGS-MHXP-F/H	FGSB-MHXP-F/H
45° up elbow	FGS-MU4E-H	FGSB-MU4E-H
45° down elbow	FGS-MD4E-H	FGSB-MD4E-H
4x24 conversions		
12" cut-in T for 4x24*	FGS-MHIS-F/H	FGSB-MHIS-F/H
6" cut-in T for 4x24*	FGS-MHIS-B/H	FGSB-MHIS-B/H
4" cut-in T for 4x24*	FGS-MHIS-A/H	FGSB-MHIS-A/H
4x24 to 4x12 adapter	FGS-MDSA-HF	FGSB-MDSA-HF
4x24 end cap		
	FGS-HMEC-H	FGS-HMEC-H

*Designed exclusively for the 4x24" system.

FiberGuide System

4" H x 24" W - Downspouts

4x24 downspouts and attachments feed fiber from overhead straight sections into fiber optic equipment below.



Island T with Single 12" Exit
(FGS-ISLAND-H/F)



Trumpet Flare
(FGS-MTRM-H)

ORDERING INFORMATION

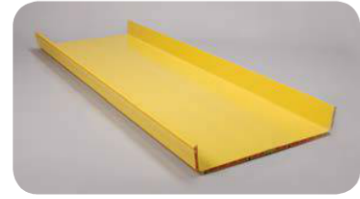
Description	Part Number	
	Yellow System	Black System
Island T with single 12" exit	FGS-ISLAND-H/F	FGSB-ISLAND-H/F
Trumpet flare	FGS-MTRM-H	FGS-MTRM-H

FiberGuide System

4" H x 24" W – Straight Section, Snap-Fit™ Junctions and covers

Straight Section

The unique double wall channel design of the 4x24 straight section provides exceptional strength and durability for high fiber count applications and allows the standard system to be attached to the support structure without the need to cut or drill any holes within the trough. The six channel design ensures that the patch cords will not come in contact with any screw heads or bolts, an important consideration in 4x24 systems where higher cable counts apply increased pressure on patch cords at the bottom of the trough.



Straight Section
(FGS-MSHS-H)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x24 straight section; horizontal straight section, 6' long	FGS-MSHS-H	FGSB-MSHS-H

Snap-Fit Junction

The Snap-Fit™ Junction assembly is available for the 24-inch FiberGuide System. The Snap-Fit junction is a completely tool-less junction. No additional tools are required for installation or removal. The junction exhibits superior holding force and accommodates support brackets. A warning label is included with each junction kit.



Snap-Fit Junction
(FGS-MFAW-H)

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4x24 Snap-Fit™ junction	FGS-MFAW-H	FGSB-MFAW-H

Cover Kits

ORDERING INFORMATION

Description	Part Number
Cover for 4"x24"x6' straight section - FGS-MSHS-H	FGS-FSFC-H
Cover for 4"x24"horizontal tee with single 12" Exit - FGS-MHRT-H/F	FGS-FHRT-H/F
Cover for 4"x24"horizontal cross with dual 12" Exits - FGS-MHXP-F/H	FGS-FHXP-F/H
Cover for 4"x24"horizontal cross - FGS-MHXP-H	FGS-FHXP-H
Cover for 4"x24" 45° horizontal elbow - FGS-MH4E-H	FGS-FH4E-H
Cover for 4"x24"horizontal tee - FGS-MHRT-H	FGS-FHRT-H
Cover for 4"x24" 4° down elbow - FGS-MD4E-H	FGS-FD4E-H
Cover for 4"x24" to 4"x12" reducer - FGS-MDSA-HF	FGS-FDSA-HF

FiberGuide System

LighTrax to FGS adaptors

FiberGuide Adaptation kits

Adaptation kits make it possible to easily migrate from Lightrax to FiberGuide. They are easy to install and offer the opportunity to seamlessly expand your current raceway system.

Adaptation kits are available for the following sizes: 4x4", 4x6/4x8", 4x12/4x8" and 4x12".

ORDERING INFORMATION

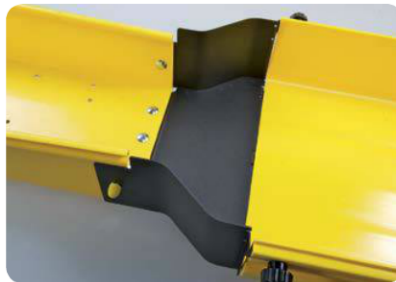
Description	Part Number
Adapter Kit 4" to 4" (100 to 100mm)	FGS-FRH-4/4ADP
Adapter Kit FGS 4x6" to Lightrax 4x8" (150 to 200mm)	FGS-FRH-6/8ADP
Adapter Kit FGS 4x12" to Lightrax 4x8" (300 to 200mm)	FGS-FRH-12/8ADP
Adapter Kit 12" to 12" (300 to 300mm)	FGS-FRH-12/12ADP



Adapter Kit 4" to 4"



Adapter Kit FGS 4x6" to Lightrax 4x8"



Adapter Kit FGS 4x12" to Lightrax 4x8"



Adapter Kit 12" to 12"

FiberGuide System

Express Exit™ Family for 4x4, 4x6 and 4x12 Systems

ADC's patented* Express Exit™ family accommodates various raceway environments and applications. By simply securing an Express Exit to the sidewall of any 4x4, 4x6, 4x12, or 4x24 FiberGuide straight section, jumpers can be permanently or temporarily routed to fiber optic terminal (FOT) equipment below. No cutting of the FiberGuide system is required. Positioning a drop with a member of the Express Exit family greatly simplifies installation, protects the integrity of fibers already present in the raceway, and increases overall flexibility of the raceway system. All Express Exits guarantee 2-inch bend radius protection.



Express Exit Family

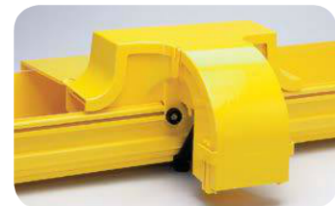
Express Exit Style	Height Above Sidewall	Exit Opening	3 mm Patch Cord Capacity	2 mm Patch Cord Capacity	Hinged Rear Cover	Exit Fin Inserts
2-Inch Express Exit	4"	2" x 2" ¹	150	350	No	No
Low-Profile Express Exit	2"	2" x 2" ¹	150	350	No	No
4-Inch Express Exit	4"	4" x 4" ²	300	700	Yes	Yes

¹Accepts all standard 2x2" attachments.

²Accepts all standard 4x4" attachments.

4-Inch Express Exit™

The 4-Inch Express Exit is designed to distribute and manage medium cable counts to FOT or ODF equipment. It features a 4-inch by 4-inch exit opening to accept all standard 4x4 downspout attachments and includes insertable exit fins and removable rear cable guides for additional cable management.



4-Inch Express Exit

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
4-inch Express Exit™		
Express Exit; base, base cover, mounting hardware, support bracket, and exit inserts included	FGS-MEXP-E-A/B/F	FGSB-MEXP-E-A/B/F
4-inch accessories		
Express Exit rear hinged cover kit; one 4x4, 4x6, 4x12 rear hinged cover	FGS-MEXC-E-A/B/F	FGSB-MEXC-E-A/B/F
Express Exit rear hinged cover for 4x4 raceway	FGS-MEXC-E-A	FGSB-MEXC-E-A
Express Exit rear hinged cover for 4x6 raceway	FGS-MEXC-E-B	FGSB-MEXC-E-B
Express Exit rear hinged cover for 4x12 raceway	FGS-MEXC-E-F	FGSB-MEXC-E-F

*Other patents pending.

FiberGuide System

Express Exit™ Family for 4x4, 4x6 and 4x12 Systems

2-Inch Express Exit™

The 2-Inch Express Exit, ADC's initial offering in the Express Exit product family, accommodates up to 350, 2 mm patch cords. The patch cords are routed from a 4x4, 4x6, 4x12 or 4x24 straight section to FOT equipment below the raceway.



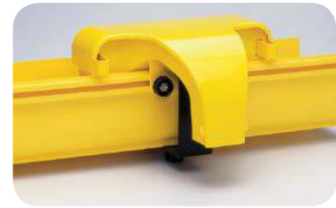
2-Inch Express Exit

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
2-Inch Express Exit™ ; base, base cover, mounting hardware and support bracket included	FGS-MEXP-A/B/F	FGSB-MEXP-A/B/F

Low-Profile Express Exit™

Designed for low-ceiling or height-restricted environments, the Low-Profile Express Exit features a front-removable cover and extends only 2 inches above the FiberGuide straight section sidewall. It also includes removable rear cable guides for additional cable management.



Low-Profile Express Exit

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
Low-Profile Express Exit™ ; base, base cover, mounting hardware and support bracket included	FGS-MEXP-LP-A/B/F	FGSB-MEXP-LP-A/B/F

Attachments for 2-Inch Express Exit™ and Low-Profile Express Exit™

ORDERING INFORMATION

Description	Part Number	
	Yellow System	Black System
2x2 trumpet flare ; junction included	FGS-MTRM-C	FGSB-MTRM-C
Single 2" flex tube attachment ; 2" flex tube and a 2x2 junction to attach to Express Exit unit included		
5' length	FGS-MEX1-C-5F	FGSB-MEX1-C-5F
10' length	FGS-MEX1-C-10F	FGSB-MEX1-C-10F
15' length	FGS-MEX1-C-15F	FGSB-MEX1-C-15F
Dual 7/8" flex tube attachment ; two lengths of 7/8" flex tube and a 2" junction to attach to Express Exit unit included		
(2) 5' lengths	FGS-KT03-C	FGSB-KT03-C
(2) 10' lengths	FGS-KT03-C-10F	FGSB-KT03-C-10F
(3) 15' lengths	FGS-KT03-C-15F	FGSB-KT03-C-15F

FiberGuide System

System Support Kits for 2x6, 4x4 and 4x6 Systems



Ladder Rack Cantilever Support Bracket Kit
(FGS-HDLB-4)



L Bay Support Bracket Kit
(FGS-HLBK shown alone and attached to 4x4 FiberGuide)



New Threaded Rod Bracket kit
(FGS-HNTR-XX shown alone and attached to threaded rod)



Existing Threaded Rod Bracket Kit
(FGS-HETR-XX shown alone and attached to threaded rod)



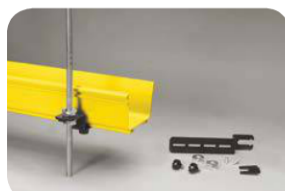
Modified New Threaded Rod Bracket Kit (FGS-HNTR-5/8-A shown alone and attached to threaded rod)



Top Support Low Profile C-bracket Kit
(FGS-HNTS-XX-LP)



Top Support C-Bracket Kit
(FGS-HNTS-XX)



Modified Existing Threaded Rod Bracket Kit
(FGS-HETR-5/8-A shown alone and attached to threaded rod)



Center Support Bracket Kit
(FGS-HTUB-XX)

ORDERING INFORMATION

Description	Part Number
2x6, 4x4, 4x6 system support kits	
Ladder rack cantilever support bracket kit	FGS-HDLB-3
L bay support bracket kit	FGS-HLBK
New threaded rod bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm, 18 mm)	FGS-HNTR-XX
Existing threaded rod bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	FGS-HETR-XX
Modified new threaded rod bracket kit; 5/8"	FGS-HNTR-5/8-A
Top support low-profile C-bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	FGS-HNTS-XX-LP
Top support C-bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	FGS-HNTS-XX
Modified existing threaded rod bracket kit; 5/8"	FGS-HETR-5/8-A
Center support bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm, 20 mm)	FGS-HTUB-XX
Digital cableway bracket kit; 305 mm (12")	FGS-HCBL-12
Digital cableway bracket kit; 381 mm (15")	FGS-HCBL-15
Ladder rack center support bracket kit	FGS-HNLR-AB
OMX frame center support bracket kit; 16 mm (.63")	FGS-HOMX-16MM
Under floor support bracket kit	FGS-HUFB-A

For custom brackets please contact your local Sales Representative

FiberGuide System

System Support Kits for 4x12 Systems



Existing Threaded Rod Trapeze Bracket Kit
(FGS-HETP-F-XX)



Trapeze Bracket Kit
(FGS-HNTP-F-XX)



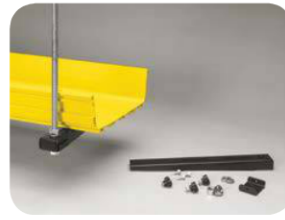
Center Support Threaded Rod Bracket Kit
(FGS-HTUB-F-XX shown alone and attached to threaded rod)



Top Support Low-Profile Threaded Rod Bracket Kit
(FGS-HNTS-F-XX-LP shown alone and attached to threaded rod)



Top Support Threaded Rod Bracket Kit
(FGS-HNTS-F-XX)



New Threaded Rod Bracket Kit
(FGS-HNTR-F-XX)



Existing Threaded Rod Bracket Kit
(FGS-HETR-F-XX)

ORDERING INFORMATION

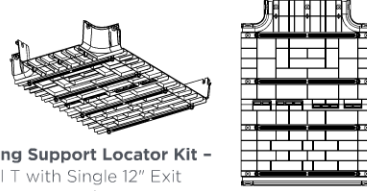
Description	Part Number
4x12 system support kits	
New ladder rack center support bracket kit	FGS-HNLR-F
Existing threaded rod trapeze bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	FGS-HETP-F-XX
Trapeze bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	FGS-HNTP-F-XX
Center support threaded rod bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm, 20 mm)	FGS-HTUB-F-XX
Top support low-profile threaded rod C-bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	FGS-HNTS-F-XX-LP
Top support threaded rod C-bracket kit; (XX = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	FGS-HNTS-F-XX
New threaded rod bracket kit; (XX = size: 5/8", 14 mm, 16 mm, 18 mm)	FGS-HNTR-F-XX
Existing threaded rod bracket kit; (XX = size: 5/8", 14 mm, 16 mm)	FGS-HETR-F-XX

FiberGuide System

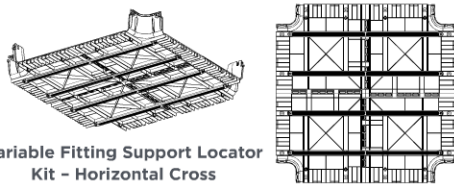
System Support Kits for 4x24 Systems



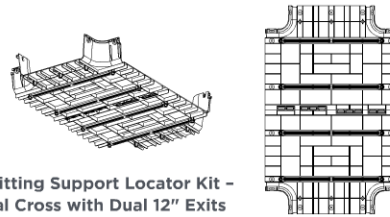
Variable Fitting Support Locator Kit - Horizontal Elbow
(FGS-MH4E-H-VS)



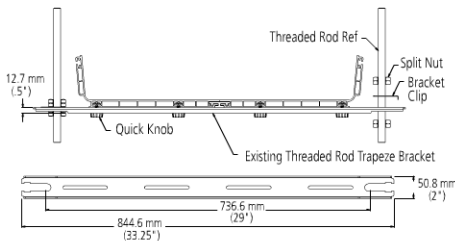
Variable Fitting Support Locator Kit - Horizontal T with Single 12" Exit
(FGS-MHRT-H/F-VS)



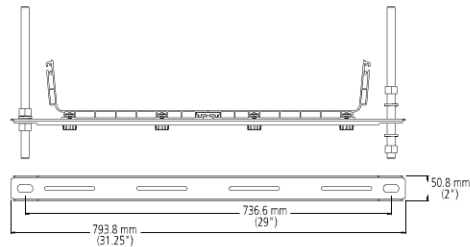
Variable Fitting Support Locator Kit - Horizontal Cross
(FGS-MHXP-H-VS)



Variable Fitting Support Locator Kit - Horizontal Cross with Dual 12" Exits
(FGS-MHXP-F/H-VS)



Existing 5/8" Threaded Rod Trapeze Bracket Kit
(FGS-HETP-H-5/8)



New 5/8" Threaded Rod Trapeze Bracket Kit
(FGS-HNTP-H-5/8)

ORDERING INFORMATION

Description	Part Number
4x24 System Support Kits	
Variable fitting support Locator kit for;	
Horizontal elbow	FGS-MH4E-H-VS
Horizontal T with single 12" exit	FGS-MHRT-H/F-VS
Horizontal cross	FGS-MHXP-H-VS
Horizontal cross with dual 12" exits	FGS-MHXP-F/H-VS
Threaded rod trapeze bracket kit for;	
Existing; 5/8"	FGS-HETP-H-5/8
New; 5/8"	FGS-HNTP-H-5/8

6. Storage Area Management (SAM)

Optical Cable Management, Simplified!	84
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Storage Area Management (SAM)

Optical Cable Management, Simplified!

Your data center is managing more information than ever. This is the driving force behind the need for more efficient and effective storage solutions. The increasing complexity of managing a large quantity of devices and data is escalating the cost of software and services, and is drawing most of the IT community's attention. The physical layer drives much of the complexity associated with installing SAN systems, and many of the impediments associated with these implementations.

There are a number of challenges with SAN cabling at the physical layer. High-density port groupings, the sheer volume of patch cords, moves, adds, and changes, and the ports themselves—installing and tracking the actual devices and cables connecting them, can all prove to be difficult. Plus, space is at a premium in most data centers; many have narrow cabinets or four post racks with inadequate cable management space.

TE's Storage Area Management (SAM) Solution for network infrastructures is designed to reduce the bulkiness of cabling and connectors in the data center by up to 80% and enable high-density deployment with fewer costly cabinet or infrastructure upgrades. SAM can help you save time, reduce costs, maximize efficiency, and open up much needed space in your data center. It takes the complexity out of cable management, and optimizes the performance of your data center floor space, racks and electronics.

De-clutter your racks for a highly organized, eco-friendly network infrastructure. SAM delivers operational efficiency to Storage Area Network (SAN) cabling and can help customers:

- Reduce SAN switch cabling volume by up to 80%
- Implement high-density deployment with fewer cabinet or infrastructure upgrades
- Reduce space requirements by managing up to 768 fiber ports within 2 rack units
- Minimize footprint—no additional front vertical, side, or horizontal cable management devices
- Deploy in narrow cabinets or racks and limited space environments
- Minimize cable mass and slack management using linecard-optimized hydra assemblies
- Easily access ports
- Maintain unobstructed linecard maintenance
- Achieve simplified scalability
- Organize with pre-labeled ports
- Speed up deployment and reduce connection errors with color-coded and keyed connections
- Simplify installation, upgrades and migration with dedicated linecard kits
- Improve operational response time
- Remove and redeploy linecards in several quick "clicks"
- Leverage the high density UCP cable management system with MPOptimate Quick-Fit cassettes
- Can be combined with other MPOptimate products in the channel within budget limits of the application



Storage Area Management (SAM)

Under-chassis Enclosure & Adaptor Plates

SAM Rack Mount Optical Fiber Enclosure

FEATURES

- Accepts 12 SAM adaptor plates
- Angled front face for improved visibility and cable management
- Rugged aluminum construction
- Internal guides to ease installation of trunk assemblies
- Adjustable front and rear mounting brackets included
- Panel labelling on rear to simplify location and documentation
- Pre-loaded with 12 blank plates



ORDERING INFORMATION

Description	Part Number
Rack Mount Patch Enclosure, 2U MPO SECURE	1553761-1

SAM MPO Adaptor Plates

FEATURES

- Adaptor counts match 16, 32, 48 and 64-port blades
- Color-coded keying on adaptors minimize risk of improper mating (keying on hydra side only—trunk side is not keyed)
- Port numbering matches blades
- Robust screw-in mounting system
- Accepts Multi Mode and Single Mode assemblies



ORDERING INFORMATION

Description	Part Number
16-Port blade (2 x MPO secure coupler)	2193050-1
32-Port blade (4 x MPO secure coupler)	2193051-1
48-Port blade (6 x MPO secure coupler)	2193052-1
64-Port blade (8 x MPO secure coupler)	2193016-1
Adaptor Plate Blank with 2 Cable Management rings	2111481-1

Storage Area Management (SAM)

Hydra Cable Assemblies

SAM Hydra Cable Assemblies

FEATURES

- 8-Port/16-fiber assemblies
- Length optimized for minimum slack
- SECURE MPO or MPOOptimate connectors feature color coded keying for proper mating
- Overmolded LSZH cables
- Uniboot universal pitch LC connectors
- Individually labelled legs



ORDERING INFORMATION

Description	Port Label	MPO Color	Part Number MPO OS2	Part Number MPOOptimate OM4
Hydra Cable Assembly for 16-Port & 32-Port blade	0-7	green	2160323-1	2160322-1
Hydra Cable Assembly for 16-Port & 32-Port blade	8-15	orange	2160325-1	2160324-1
Hydra Cable Assembly for 32-Port blade	16-23	green	2160323-2	2160322-2
Hydra Cable Assembly for 32-Port blade	24-31	orange	2160325-2	2160324-2
Hydra Cable Assembly for 48-Port blade	0-7	red	2160317-1	2160503-1
Hydra Cable Assembly for 48-Port blade	8-15	yellow	2160319-1	2160318-1
Hydra Cable Assembly for 48-Port blade	16-23	blue	2160321-1	2160320-1
Hydra Cable Assembly for 48-Port blade	24-31	red	2160317-2	2160503-2
Hydra Cable Assembly for 48-Port blade	32-39	yellow	2160319-2	2160318-2
Hydra Cable Assembly for 48-Port blade	40-47	blue	2160321-2	2160320-2
Hydra Cable Assembly for 64-Port blade	0-7	orange	2160386-1	2160385-1
Hydra Cable Assembly for 64-Port blade	8-15	slate	2160388-1	2160387-1
Hydra Cable Assembly for 64-Port blade	16-23	aqua	2160390-1	2160389-1
Hydra Cable Assembly for 64-Port blade	24-31	violet	2160392-1	2160391-1
Hydra Cable Assembly for 64-Port blade	32-39	orange	2160386-2	2160385-2
Hydra Cable Assembly for 64-Port blade	40-47	slate	2160388-2	2160387-2
Hydra Cable Assembly for 64-Port blade	48-55	aqua	2160390-2	2160389-2
Hydra Cable Assembly for 64-Port blade	56-63	violet	2160392-2	2160391-2

Storage Area Management (SAM)

Far-End Panel Equipment

SAM Far-End MPO/MPOptimate Quick-Fit cassettes

FEATURES

- 8 port (16 fiber) cassette to replicate 8 SFP ports on director blade
- Rear side: 1 x MPO (to accept one MPO trunk assembly)
Front side: 4 x LC Quad (to accept eight standard LC duplex assemblies)
- Maintains same port identity and labelling scheme as the hydra assemblies (including 8 pre-numbered port labels)
- To be used in UCP panels



ORDERING INFORMATION

Description	Part Number
MPOptimate OM4 Quick-Fit cassette	2160270-3
MPO OS2 Quick-Fit cassette	2160270-2

UCP Patch Panel Angled and Flushmount

Please refer to Chapter 4, page 48



Storage Area Management (SAM)

Trunk Cable Assemblies

SAM MPO/MPOptimate Trunk Cable Assemblies

FEATURES

- 24-fiber assemblies (16 active when mated to hydras) provide an upgrade path to 40 and 100 GbE
- Mate with SAM adaptor plates and SAM Quick-Fit cassettes
- Non-keyed MPO interface
- LSZH rated, indoor outdoor loose tube cable
- Pre-tested and ready to install
- The trunks are equipped with midi fan-out and 3.8mm round cable MPO tails (1.4mtr)
- All tails are protected with transparent protection sleeve



ORDERING INFORMATION

Description	Part Number
MPOptimate OM4	Y-2160301-X
MPO OS2	Y-2160302-X

Y- X	Length	Y- X	Length	Y- X	Length	Y- X	Length	Y- X	Length	Y- X	Length	Y- X	Length	Y- X	Length
0- -2	2 m	1- -3	13 m	2- -4	24 m	3- -5	35 m	4- -6	46 m	5- -7	57 m	6- -8	68 m	7- -9	79 m
0- -3	3 m	1- -4	14 m	2- -5	25 m	3- -6	36 m	4- -7	47 m	5- -8	58 m	6- -9	69 m	8- -0	80 m
0- -4	4 m	1- -5	15 m	2- -6	26 m	3- -7	37 m	4- -8	48 m	5- -9	59 m	7- -0	70 m	8- -1	81 m
0- -5	5 m	1- -6	16 m	2- -7	27 m	3- -8	38 m	4- -9	49 m	6- -0	60 m	7- -1	71 m	8- -2	82 m
0- -6	6 m	1- -7	17 m	2- -8	28 m	3- -9	39 m	5- -0	50 m	6- -1	61 m	7- -2	72 m	8- -3	83 m
0- -7	7 m	1- -8	18 m	2- -9	29 m	4- -0	40 m	5- -1	51 m	6- -2	62 m	7- -3	73 m	8- -4	84 m
0- -8	8 m	1- -9	19 m	3- -0	30 m	4- -1	41 m	5- -2	52 m	6- -3	63 m	7- -4	74 m	8- -5	85 m
0- -9	9 m	2- -0	20 m	3- -1	31 m	4- -2	42 m	5- -3	53 m	6- -4	64 m	7- -5	75 m	8- -6	86 m
1- -0	10 m	2- -1	21 m	3- -2	32 m	4- -3	43 m	5- -4	54 m	6- -5	65 m	7- -6	76 m	8- -7	87 m
1- -1	11 m	2- -2	22 m	3- -3	33 m	4- -4	44 m	5- -5	55 m	6- -6	66 m	7- -7	77 m	8- -8	88 m
1- -2	12 m	2- -3	23 m	3- -4	34 m	4- -5	45 m	5- -6	56 m	6- -7	67 m	7- -8	78 m	8- -9	89 m

7. Core VSM System

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Core VSM

Management Panels

Rack Mount Quick-Fit Panel

FEATURES

- Accepts up to 9 Quick-Fit modules
- 3U
- Including cable support bars with tie down options and Fiber Optic tail over length

Color: Black (RAL 9005) and galvanised finish



ORDERING INFORMATION

Description	Part Number
Rack Mount Quick-Fit Panel	1671907-1

Cable Management Tray

FEATURES

- Optimized to replace Cisco Nexus 7010 switch cable manager
- Provides vertical patch cord guiding

Color: Black (RAL 9005)



ORDERING INFORMATION

Description	Part Number
Cable Management Tray for Cisco Nexus 7010	1671633-1

RJ-45 to MRJ21 Quick-Fit Cassettes (1 or 10 Gb/s)

For RJ-45 copper management please use our MRJ21 Quick-Fit cassettes:

- for 10 GbE (XG) see page 26



- for 1 GbE see page 28



MRJ21 to MRJ21 shielded cable assemblies (1 or 10 Gb/s)

For RJ-45 copper management please use our MRJ21 trunk cable assemblies:

- for 10 GbE (XG) see page 27



- for 1 GbE see page 30



Category 6_A S/FTP Patch Cord RJ-45

FEATURES

- Exceeds Category 6_A performance suitable for 10 Gb/s data transmission
- Category 7 S/FTP stranded cable
- LSZH sheath
- Color-matched snagless boots
- Universal B-wiring
- Specially engineered patch cord length allows one length for all patch cords in a rack, reducing inventory holding costs and increasing flexibility for MACs



ORDERING INFORMATION

Description	Part Number
Patch Cord RJ45 Cat. 6 _A S/FTP, White	2153188-1

Category 5e F/UTP Patch Cord RJ-45

FEATURES

- Category 5e according to ISO/IEC 11801 and EN-50173-1
- 4 Pair stranded F/UTP cable
- LSZH sheath
- Color-matched snagless boots
- Universal wiring
- Specially engineered patch cord length allows one length for all patch cords in a rack, reducing inventory holding costs and increasing flexibility for MACs



ORDERING INFORMATION

Description	Part Number
Patch Cord RJ45 Cat 5E F/UTP, White	2153190-1

LC to MPO Quick-Fit cassettes or MPO to MPO modules

For LC or MPO fiber management please use our MPOptimate Quick-Fit cassettes and modules

- for MPO to LC Quick-Fit cassettes see page 4



- for MPO Coupler Quick-Fit modules see page 20



MPOptimate pre-terminated trunks

For LC or MPO fiber management please use our MPOptimate pre-terminated trunks on page 3



MPOptimate patch cords

For LC or MPO fiber management please use our MPOptimate pre-terminated patch cords on page 5



MPOptimate System LC patch cords

FEATURES

- Patch cords with optimized LC connectors
- Cable performance: OM4 XG_A or OM3 XG 10 Gb/s; LSZH construction
Optical performance: Attenuation \leq 0.15 dB; RL \geq 35 dB
- Specially engineered patch cord length allows one length for all patch cords in a rack, reducing inventory holding costs and increasing flexibility for MACs



ORDERING INFORMATION

Description	Part Number
Patch cord LC Duplex - LC Duplex; OM3 XG 10 Gb/s	2160506-1
Patch cord LC Duplex - LC Duplex; OM4 XG _A 10 Gb/s	2160506-2

MPOptimate Fan-Out cable assemblies

FEATURES

- Low loss transition from MPO to LC tails 2 mm
- Terminated with male MPOptimate connectors
- OM4 cable performance, LSZH construction
- Specially engineered fan-out cable length allows one length for all cable assemblies in a rack, reducing inventory holding costs and increasing flexibility for MACs



ORDERING INFORMATION

Description	Part Number
MPO male - LC Fan-out OM4 XG _A 10 Gb/s for 48 port blade	2160537-1
MPO male - LC Fan-out OM4 XG _A 10 Gb/s for 32 port blade	2160538-1

8. Quareo Physical Layer Management System

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Quareo Physical Layer Management System

Quareo ICM Server Software

Quareo Infrastructure Configuration Manager Software

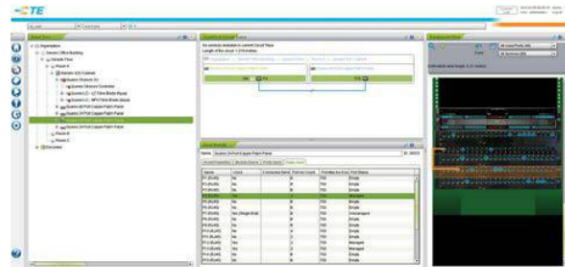
The TE Managed Connectivity software (ICM) supports both AMPTRAC and Quareo technologies.

Quareo ICM can be used either as a 'stand alone' application or as a tool for integrating valuable Quareo information into third party / custom applications.

As a stand alone retail application ICM provides the following features:

FEATURES

- Fully automated documentation system
- Real time monitoring
- Automatic database update on changes
- Self-discovers Patch Cords
- Event logs and data base reports
- Programmable alerts
- Automated work order processing
- Auto-discovers IP devices
- Automatic re-synchronization on power outages
- User management
- Supports ITIL best practices
- ISO 20000 and BS 15000 compliant
- CSV data import
- Easy to use and intuitive menu structure
- Support for ICM Mobile Software App (available from Apple iTunes™)



ORDERING INFORMATION

Description	Part Number
ICM Software; 480 Port License	1591369-1
ICM Software; 2400 Port License	1591369-2
ICM Software; 4800 Port License	1591369-3
ICM Software; 9600 Port License	1591369-4
ICM Software; 24,000 Port License	1591369-5
ICM Software; 48,000 Port License	1591369-6
ICM Software; 96,000 Port License	1591369-7

Alternative port and service packages also available.

Quareo Physical Layer Management System

Q4000 Managed Fiber Platform

Quareo forms one of the two hardware base technologies within TE's Managed Connectivity Solution.

The Fiber solution comprises of fiber network Chassis (1, 2 and 4U), which accommodate 0.5U blades (2, 4 and 8 respectively). Fiber blades support MPO-MPO and MPO-LC configurations. The portfolio is supported by a range of managed trunks and patch cords.

Q4000 Network Chassis: Q4200, Q4400, Q4800

Q4000 Series Network Chassis featuring Quareo™ Technology allow network personnel to view, manage and audit the physical layer. This means, for the first time, the physical layer is now subject to the same compliance policy as higher layers of the network. With 70% of network outages attributed to errors made in the physical layer, TE introduces a new category of products. Simply put, Quareo enables Managed Connectivity using connection point identification (CPID).



The Quareo Q4000 Series chassis are designed to accommodate the Q3000 blades for an unmanaged solution or the Q4000 blades for a managed solution utilizing CPID.

FEATURES

- Supports a Q4000 Series Chassis Controller
- User Indicators
 - Power: Green
 - Alert: Yellow
 - Status: Green/Red
- Reset Button
- Trunk and Fan-out brackets supplied for rear cable management
- Maintenance Services available on this product

SPECIFICATIONS

PHYSICAL:

Rack Mounting:	EIA/ETSI/WECO/IEC 60297 19" equipment racks
Grounding:	2-screw grounding location for standard grounding lug
Dimensions (HxWxD):	Q4200: 1U, 44.5 mm x 483 mm x 338 mm (1.75" x 19" x 13.3") Q4400: 2U, 88.9 mm x 483 mm x 338 mm (3.5" x 19" x 13.3") Q4800: 4U, 177.8 mm x 483 mm x 338 mm (7" x 19" x 13.3")

ENVIRONMENTAL:

Operating Temperature:	-10 °C to +60° C (+14 °F to +140° F)
Storage Temperature:	-40 °C to +85° C (-40°F to +185° F)
Humidity:	5% to 95% non-condensing RoHS Compliant

Safety:

Flammability:	(UL), c(UL), CE, A-TICK (UL) 94 V-0 UL 1863
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EMC:

EMC Directive, 2004/108/EEC

ORDERING INFORMATION

Description	Part Number
Q4200 (2 blades); 1U Network Chassis, accommodates 2 each Q4000 series blades	QCH-1RU
Q4400 (4 blades); 2U Network Chassis, accommodates 4 each Q4000 series blades	QCH-2RU
Q4800 (8 blades); 4U Network Chassis, accommodates 8 each Q4000 series blades	QCH-4RU

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Q4000 Managed Fiber Platform

Q4000 Network Chassis: QCC-4 Chassis Controller

The QCC-4 Chassis Controller is compatible with Q4000 Series Chassis.



FEATURES

- Supports a Q4000 Series Chassis
- User Indicators
 - Ethernet Link: Green
 - Ethernet Activity: Yellow
- Maintenance Services available on this product

SPECIFICATIONS

PHYSICAL:

Dimensions (HxWxD):	25.2 mm x 87.9 mm x 124.7 mm (0.99" x 3.46" x 4.91")
Electrical I/F:	RJ45
Electrical Aux. I/F:	2-Pin Micro-Fit 3.0™

ENVIRONMENTAL:

Operating Temperature:	-10° C to +60° C (+14° F to +140° F)
Storage Temperature:	-40° C to +85° C (-40° F to +185° F)
Humidity:	5% to 95% non-condensing RoHS Compliant

ELECTRICAL:

PoE Power:	IEEE 802.3af Class 0
Auxiliary input Power:	+48VDC @ 270mA
Safety:	(UL), c(UL), CE, A-TICK UL 1863
EMC:	EMC Directive, 2004/108/EEC
Network:	Supports 10Base-T and 100Base-TX

ORDERING INFORMATION

Description	Part Number
QCC-4; Chassis Controller for Q4000 Network Chassis	QCPU-MCBM

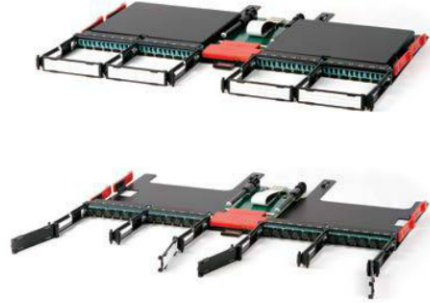
Quareo Physical Layer Management System

Q4000 Managed Fiber Platform

Q4000 Blades

COMMON FEATURES

- Available in multimode and singlemode
- Blade Controller is hot swappable in blade
- Front cable management with removable designation labels
- Rear cable management tie down points to work with Q4000 Series Network Chassis Rear Cable Management
- Blade remains powered when extended to the first position
- User Indicators Blade Controller (LED)
Power: Green Alert: Yellow/Green
- User Indicators Blade (LED) Duplex Ports: Yellow/Green
- Maintenance services are available



FEATURES

- 0.5U blade
- 16 MPO ports on MPO-to-MPO blade
- 24 Duplex LC ports distributed from 2EA 12 fiber MPO cables on LC-to-MPO blade
- Supports Quareo enabled and standard 12 fiber MPO cables
- Supports Quareo enabled and standard LC-LC duplex patch cords
- Requires 1EA QBC-4 Blade Controller (ships with Blade)

SPECIFICATIONS

PHYSICAL

Dimensions (HxWxD): 19.3 mm x 438.4 mm x 373.1 mm (0.76" x 17.26" x 14.69")

ENVIRONMENTAL

Operating Temperature: -10° C to +60° C (+14° F to +140° F)
Storage Temperature: -40° C to +85° C (-40° F to +185° F)
Humidity: 5% to 95% non-condensing

ELECTRICAL

Input Power: 1.0 W Max.
Optical Interface
MPO-to-MPO: 12 Fiber MPO
LC-to-MPO: Duplex LC (front), 12 Fiber MPO (rear)

COMPLIANCE

Safety: RoHS Compliant
(UL), c(UL), CE, A-TICK
Flammability: (UL) 94 V-0
UL 1863
EMC: EMC Directive, 2004/108/EEC

ORDERING INFORMATION

Description	Part Number
Chassis Blade Fiber; 16 Port (192 Fiber), MPO-to-MPO	
Multimode	QFB-192FMPOMMHR
Singlemode	QFB-192FMPOSMHR
Chassis Blade Fiber; 24 Port (48 Fiber), LC-to-MPO	
Multimode	QFB-48FDLCMMHR
Singlemode	QFB-48FDLCMSMHR
Blank Blade Cover for Empty Blade Position Q4000/Q3000	QBCB-HR

Quareo Physical Layer Management System

Quareo Managed Fiber Trunk Cables and Patch Cords

Quareo MPO-to-MPO Trunk Cables

FEATURES

- Plug-and-Play Cables to connect active equipment into the network
- Round design eliminates preferential bend issues which results in increased density and greater manageability
- Performance Specifications: OM3/OM4: Attenuation \leq 0.7 dB (max); RL \geq 20 dB (min)
OS2: Attenuation \leq 1.0 dB (max); RL \geq 55 dB (min)



ORDERING INFORMATION

Product Description	Fiber Type				Part Number
12 Fiber LSZH	Singlemode	OS2	Trunk	MPO-to-MPO	QFA-1WWSMZNXMMAA
	Multimode	OM3	Trunk	MPO-to-MPO	QFA-1FFM3ZNXMMAA
		OM4	Trunk	MPO-to-MPO	QFA-1FFM4ZNXMMAA
24 Fiber LSZH	Singlemode	OS2	Trunk	MPO-to-MPO	QFA-2WWSMZNXMMAA
	Multimode	OM3	Trunk	MPO-to-MPO	QFA-2FFM3ZNXMMAA
		OM4	Trunk	MPO-to-MPO	QFA-2FFM4ZNXMMAA
48 Fiber LSZH	Singlemode	OS2	Trunk	MPO-to-MPO	QFA-4WWSMZNXMMAA
	Multimode	OM3	Trunk	MPO-to-MPO	QFA-4FFM3ZNXMMAA
		OM4	Trunk	MPO-to-MPO	QFA-4FFM4ZNXMMAA
96 Fiber LSZH	Singlemode	OS2	Trunk	MPO-to-MPO	QFA-8WWSMZNXMMAA
	Multimode	OM3	Trunk	MPO-to-MPO	QFA-8FFM3ZNXMMAA
		OM4	Trunk	MPO-to-MPO	QFA-8FFM4ZNXMMAA

Replace XXX with desired length in Meters. Example 001 for 1 m, 010 for 10 m. Additional configurations available upon request

Quareo Fiber Patch Cords

FEATURES

- Managed Fiber cables feature Quareo Technology with connection point identification
- Can be used in cross-connect, test, or equipment areas
- Standard Lengths: 1, 2, 3, 5 and 10 m
- Standard Colors: Aqua for multimode, Yellow for Singlemode
- Standard Materials: LSZH (plenum also available)
- Performance Specifications: OM3/OM4: Attenuation \leq 0.3 dB (max); RL \geq 20 dB (min)
OS2: Attenuation \leq 0.3 dB (max); RL \geq 55 dB (min)



ORDERING INFORMATION

Product Description	Fiber Type		Polarity	Part Number
LC-LC LSZH	Multimode	OM3	A-to-A	QFPC-MPPM3ZAXXXM
			A-to-B	QFPC-MPPM3ZBXXXM
		OM4	A-to-A	QFPC-MPPM4ZAXXXM
			A-to-B	QFPC-MPPM4ZBXXXM
	Singlemode	OS2	A-to-A	QFPC-MKKSMAZAXXXM
			A-to-B	QFPC-MKKSMAZBXXXM

Replace XXX with desired length in meters E.G 001 for 1m. Other materials available upon request.