

SYSTIMAX® VisiPatch® 360 System Solution Guide

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SYSTIMAX®
SOLUTIONS

What if...

you could add a whole new dimension to your communications room?

a patching system could save you time, space and money?

you could experience performance in a whole new way?

It's possible.
Introducing the SYSTIMAX VisiPatch 360 System.

**It's a revolution
in patching.**



Change how you view performance

It's more than bandwidth.
It's more than speed. It's more than product reliability.

CommScope®, through its SYSTIMAX® brand, has always been dedicated to understanding the user experience, listening to our customers' concerns and needs, analyzing how we can help improve efficiency. And after exhaustive research, we've developed a whole new approach that holistically integrates form, function and usability to deliver true performance.

We call it our 360° design philosophy—an approach that redefines performance from every angle. It combines breakthrough technology with radical design innovation. The result is a whole new approach to network infrastructure solutions.

The first result of this new philosophy is a new generation of patching systems—the SYSTIMAX® VisiPatch® 360 System, which seamlessly incorporates patching and integrated cable management to deliver an ergonomically designed and aesthetically pleasing solution that saves you time, space and money.

A revolutionary difference

The unique reverse patching technology the VisiPatch 360 System employs improves cord management and reduces the "spaghetti" cord clutter of poorly installed RJ-45 systems. The reduced clutter is both visually elegant and ergonomically functional, providing for clear and easy port labeling, a simpler user experience, and a sophisticated appearance in your communications room.



By projecting the cord away from the user and into the patching field, the VisiPatch 360 System makes the patch cord plug-end more accessible, makes reading the labeling information easy and facilitates future moves, adds and changes.

Usable density is also maximized in the VisiPatch 360 System. Patch cord and cable congestion in traditional RJ-45 systems cause usable density to be lower than the actual port density. Not so with the VisiPatch 360 System, which is specifically designed to maximize usable density by minimizing patch cord and cable congestion.

Due to the increased usable density, the VisiPatch 360 System can be more cost-effective than RJ-45 systems.

Continuing the technology and performance excellence that CommScope® is known for, the VisiPatch 360 System makes possible the first real IDC-based 10G components and channel.

Designed with your needs in mind

What the key VisiPatch 360 System features and benefits mean for you:

Save Time

- Best-in-class transmission performance
- Easy access to patch plug
- Snap-together components
- Clear and simple port labeling

Save Space

- Modular, scalable and flexible
- Unique reverse patching technology
- Integrated horizontal and vertical cable and patch cord management

Save Money

- Increased usable density
- Cost-effective 10G connectivity system
- Lower per port cost than traditional RJ45 applications

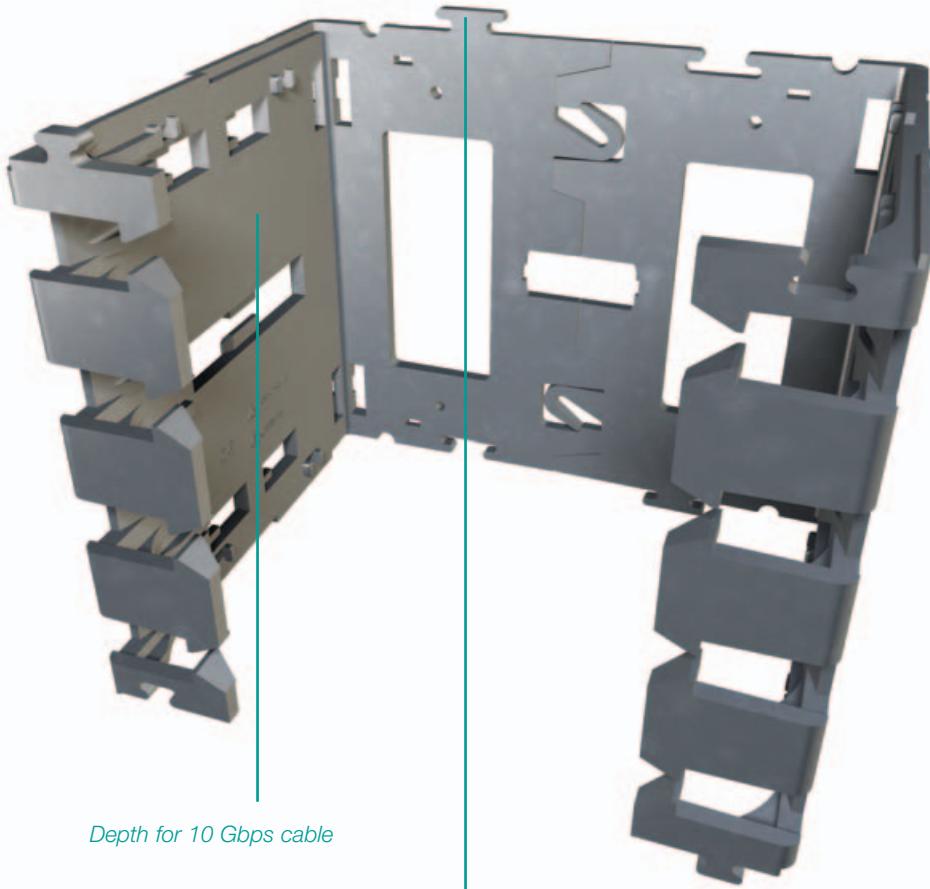
Save time, space and money from the inside out

The **five key components** that make up the VisiPatch 360 System are carefully designed to work together to create a simple and custom installation. This modular nature of the system also means future expansion is easy and cost-effective.

Back Panel

The back panel is made of structural foam and serves as the framework for the system. Careful thought went into making the back panels ergonomically designed to simplify installation as well as future expansion.

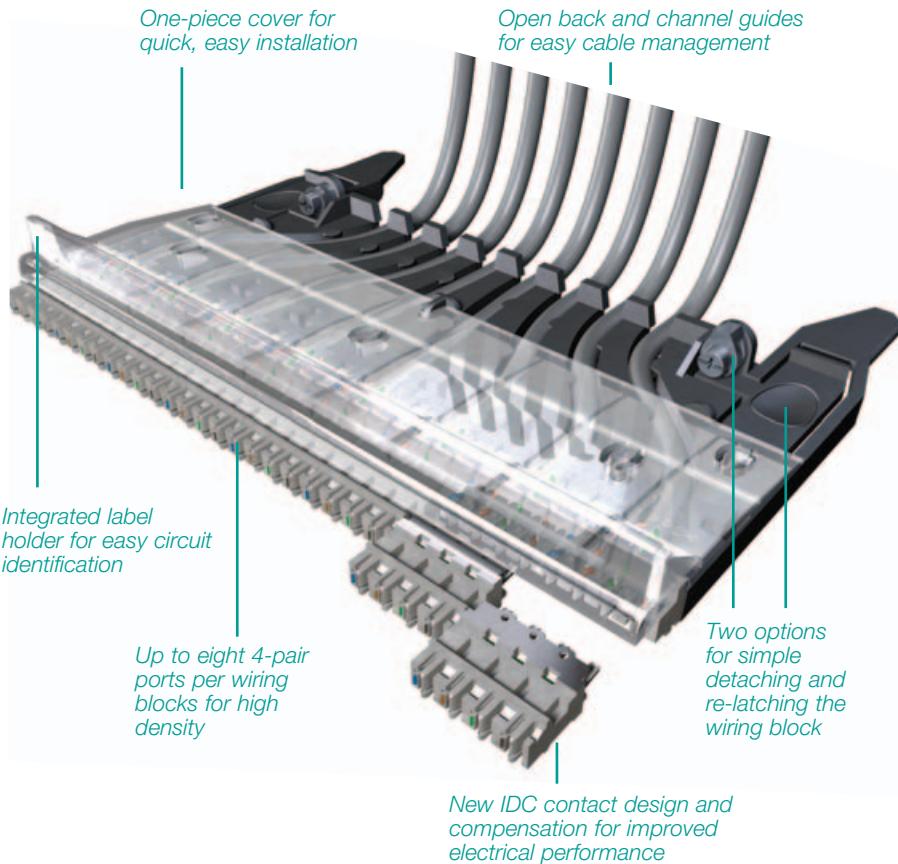
- 7 in (17.78 cm) depth to accommodate 10 Gb/s cable
- Space between the wiring blocks equals to 1U (1RMU)
- Top and bottom guides allow for quick, easy stacking



Wiring Block/Connecting Block

Even the standard wiring block benefited from a complete rethinking. The result was the redesign or addition of several key features that improve performance and ease-of-use.

- Accommodates up to eight 4-pair ports per wiring block for high density
- Eight port count to match server/switch configuration
- Open back and channel guides for easy cable management
- One-touch finger releases for simple detaching and re-latching of the wiring block
- Quarter-turn cam fasteners provide alternative method for detaching the wiring block
- One-piece cover for quick, easy installation
- Patented new IDC contact design and compensation methods, including offset IDCs and parasitic rings, improve electrical performance



Patch Cord

One of the most dramatically redesigned elements in the VisiPatch 360 System is the visually striking patch cord. Designed with ergonomics and appearance in mind, the patch cords offer easy access to plug ends.

- Compact, ergonomically designed plug is easy to grab and patch
- Clear demarcation of gripping points improves speed and efficiency of patching
- 4-pair and 1-pair patch cords available
- Integrated anti-snag design for frustration-free installation and moves, adds and changes post installation
- Labeling area makes future MACs much simpler
- Accommodates data, analog, digital and power circuits

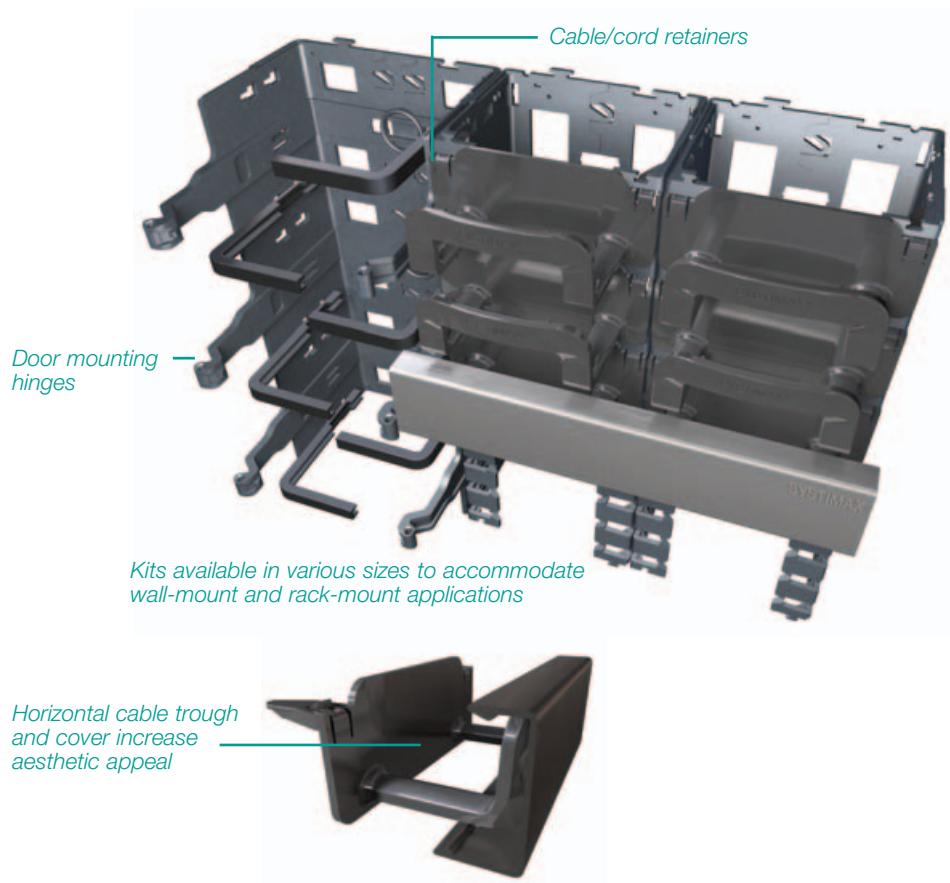


Cable Management

Key to the efficient design and elegant appearance of the VisiPatch 360 System, the innovative cable

management system fully integrates robust vertical and horizontal spaces to increase ease-of-use.

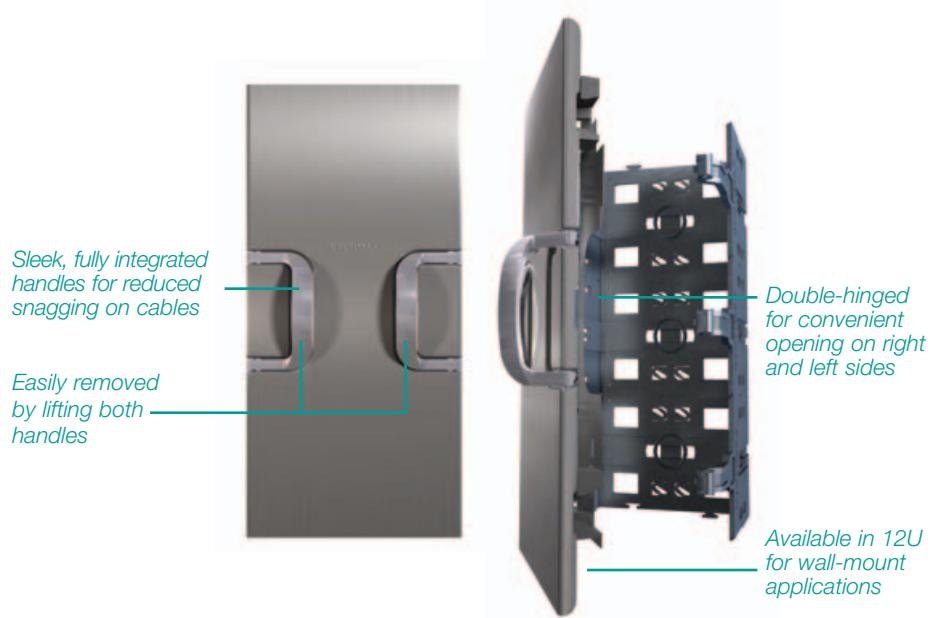
- Spacer module—integral part of the vertical trough cable manager kit—offers easy installation and proper alignment
- Spacer module features 11.5 in (29.21 cm) depth for efficient cable/cord management
- Micro/macro cable/cord retainers available for better cable/cord management in the vertical cable trough
- Modular horizontal cable management trough and cover provide additional spaces for cord management



Vertical Trough Cover

The vertical cable management is concealed by the vertical trough cover, a beautiful brushed aluminum door that can swing easily to either side, or be removed altogether.

- Double-hinged doors allow for convenient right or left opening without removal or awkward handle rotation
- Door can be easily removed by lifting both handles with a smooth, quiet operation
- Door attaches easily to hinge points thanks to added gather and bullet-nosed hinge pins.
- Ergonomic, sleek and fully-integrated polished handles minimize snagging on clothing or cables
- Available in 12U to accommodate wall-mount applications



Guaranteed Performance Specifications for 4-Connection GigaSPEED X10D UTP Channels ¹													
Electrical Parameter		Guaranteed Channel Margins to Amendment 1 to ISO/IEC 11801:2002 Class E _A (1 - 500 MHz)											
Insertion Loss		3 %											
NEXT		1 dB											
PSNEXT		2.5 dB											
ACR-F		6 dB											
PSACR-F		8 dB											
Return Loss, PSANEXT, PSANEXTavg, PSAACR-F, PSAACR-Favg		> 0 dB											

¹ Insertion Loss margin is calculated based on 12m of 95 series cordage and 88m of 91 series cable plus 4 connections. If the total cord length in a 100m channel has to be greater than 12m, please refer to GigaSPEED X10D Design and Installation Guidelines for the instruction on how to scale cable and cord length properly.

Guaranteed Channel Performance Specifications for 4-Connection GigaSPEED X10D UTP Systems														
Freq (MHz)	Insertion Loss (dB)	PS ANEXT (dB)	Avg. PS ANEXT (dB)	PS AACR-F (dB)	Avg. PS AACR-F (dB)	NEXT (dB)	ACR-N (dB)	PS NEXT (dB)	PS ACR-N F (dB)	ACR-F (dB)	PS ACR-F (dB)	Return Loss (dB)	Delay (ns)	Delay Skew (ns)
1.0	3.9	67.0	69.25	67.0	71.0	71.0	68.8	69.5	67.3	69.3	68.3	22.0	580	40
4.0	4.0	67.0	69.25	65.0	69.0	69.0	65.0	68.0	64.0	57.2	56.2	22.0	562	40
8.0	5.6	67.0	69.25	58.9	62.9	64.2	58.6	63.1	57.5	51.2	50.2	22.0	557	40
10.0	6.3	67.0	69.25	57.0	61.0	62.6	56.3	61.5	55.2	49.3	48.3	22.0	555	40
16.0	7.9	67.0	69.25	52.9	56.9	59.2	51.3	58.1	50.2	45.2	44.2	18.9	553	40
20.0	8.9	67.0	69.25	51.0	55.0	57.6	48.7	56.5	47.6	43.2	42.2	19.0	552	40
25.0	9.9	66.0	68.25	49.0	53.0	56.0	46.1	54.8	44.9	41.3	40.3	19.1	551	40
31.3	11.1	65.1	67.35	47.1	51.1	54.4	43.3	53.2	42.1	39.3	38.3	19.2	550	40
62.5	15.9	62.0	64.25	41.1	45.1	49.4	33.5	48.1	32.2	33.3	32.3	17.0	549	40
100.0	20.3	60.0	62.25	37.0	41.0	45.9	25.6	44.6	24.3	29.3	28.3	15.0	548	40
200.0	29.2	55.5	57.75	31.0	35.0	40.8	11.6	39.4	10.2	23.2	22.2	12.0	547	40
250.0	32.9	54.0	56.25	29.0	33.0	39.1	6.2	37.7	4.8	21.3	20.3	11.0	546	40
300.0	36.2	52.8	55.05	27.5	31.5	32.7	-3.5	31.3	-4.9	20.0	19.0	7.2	546	40
400.0	42.3	51.0	53.25	25.0	29.0	30.6	-11.7	29.1	-13.2	17.5	16.5	6.0	546	40
500.0	47.8	49.5	51.75	23.0	27.0	28.9	-18.9	27.3	-20.5	15.5	14.5	6.0	546	40

Note: The table provides reference values only. All parameters comply with the governing equations given above over the entire frequency range. All values and equations apply to worst-case channels utilizing four-pair 91 series cables with full cross-connects, consolidation points and work area outlets (4 connections in a channel) for the length up to 100 meters.

SELECT PRODUCT DIMENSIONS

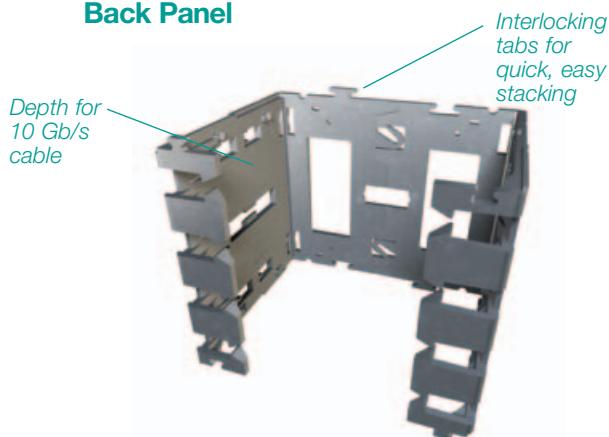
	Height	Width	Depth
Patch Panel Kits			
4U (32 ports)	7.1 in (18.03 cm)	8.5 in (21.59 cm)	11.3 in (28.7 cm)
12U (96 ports)	21.2 in (53.84 cm)	8.5 in (21.59 cm)	11.3 in (28.7 cm)
Cable Manager Kits - Vertical			
12U	21.0 in (53.34 cm)	10.0 in (25.40 cm)	11.8 in (29.97 cm)

ELECTRICAL SPECIFICATIONS:

Insulation Resistance	>1000 MOhms min.	Fault Current Test	7 A for a minimum of 5 seconds
Current Rating	2.0 A @ 20° C (68° F)	UL, cUL, CE, Austel	Listed
TIA/EIA:ISO Class E_A	6A		
Dielectric Withstand Voltage	1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface		

SYSTIMAX® VisiPatch® 360 SYSTEM

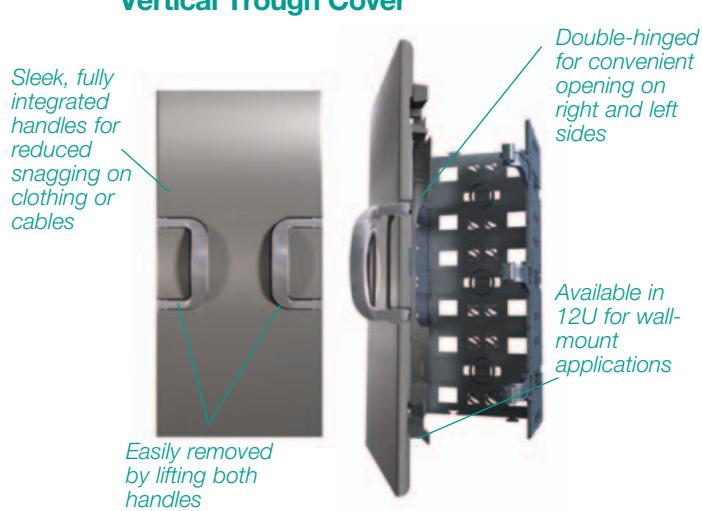
Back Panel



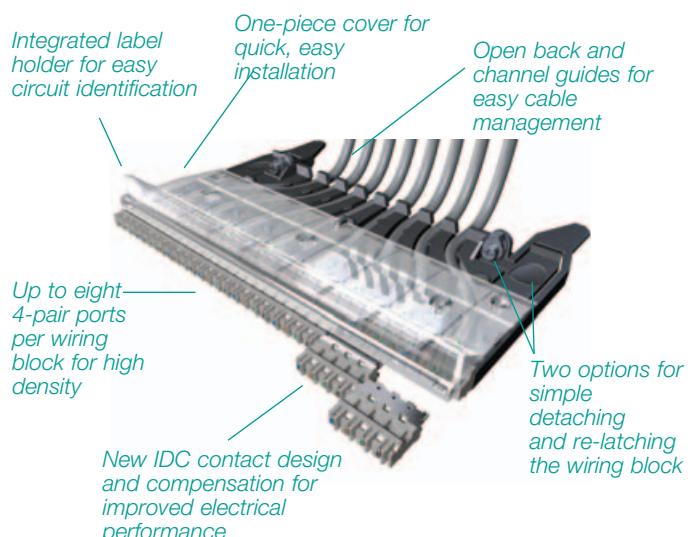
Patch Cord



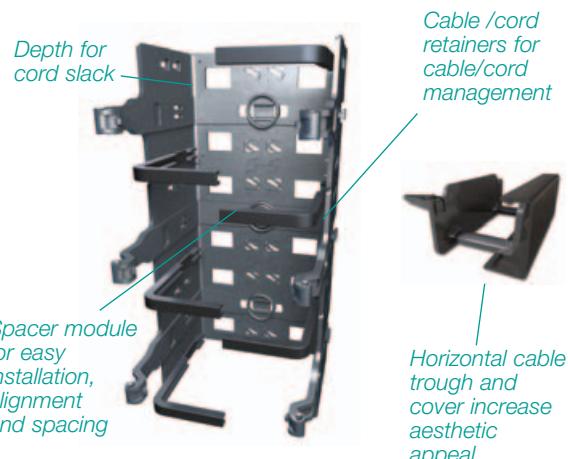
Vertical Trough Cover



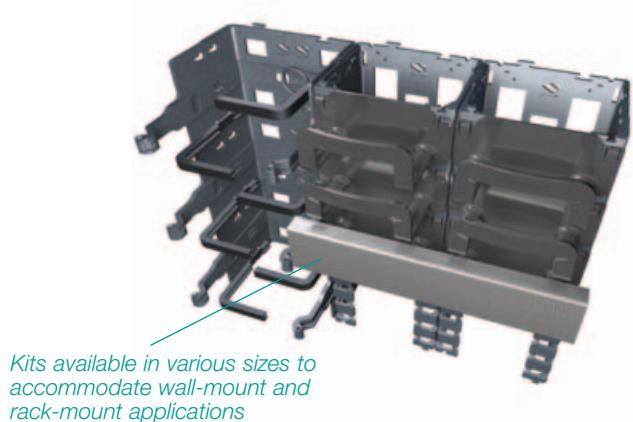
Wiring Block/Connecting Block

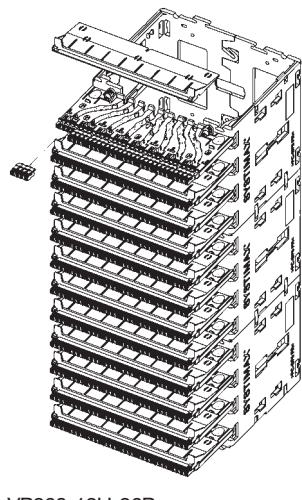


Vertical Cable Management



Horizontal Cable Management





VP360-12U-96P

PATCH PANEL KITS ORDERING INFORMATION

MID	Product ID	Description	Component Description	Qty
760049445	VP360-4U-32P	VisiPatch 360 4U (32 ports) Kit	VisiPatch 360 Back Panel 4U VisiPatch 360 Wiring Block VisiPatch 360 Wiring Block Cover VisiPatch 360 Connecting Block VisiPatch Label Holder White Label	1 4 4 32 4 12
760049452	VP360-12U-96P	VisiPatch 360 12U (96 ports) Kit	VisiPatch 360 Back Panel 12U VisiPatch 360 Wiring Block VisiPatch 360 Wiring Block Cover VisiPatch 360 Connecting Block VisiPatch Label Holder White Label	1 12 12 96 12 12
760074278	VP360-19PNL-KT	VisiPatch 360 19-Inch 1U Panel Kit	VisiPatch 360 19-Inch 1U Panel VisiPatch 360 Wiring Block Wiring Block Cover VisiPatch 360 Connecting Block VisiPatch Label Holder White Label Screw, #12-24 x .50"	1 2 2 16 2 12 4

PATCH CORD ORDERING INFORMATION:

Material ID	Product Number	Description	Jack Color Options	Cord Color Options	UOM	Cable/Cordage Length Options
VisiPatch® 360 System™ GigaSPEED® X10D Patch Cord						
CPCFFX2	VP360T-VP360T-P8X10D	VisiPatch360-VisiPatch360 X10D 4-pair Solid Cord T	0	1,2,3,4,6,7,8,9,B,C,Z	F,M	7-100ft / 2-30m
CPCFFXD	VP360T-VP360T-P8X10D-XD	VisiPatch360-VisiPatch360 X10D 4-pair Solid Cord Crossover T	0	1,2,3,4,6,7,8,9,B,C,Z	F,M	7-100ft / 2-30m
CPCFSX2	VP360T-360GS10E	VisiPatch360-360GS10E X10D 4-pair Solid Hybrid Cord T	0	1,2,3,4,6,7,8,9,B,C,Z	F,M	7-100ft / 2-30m

Ordering Material ID Example: C P C F F 2 - 0 3 F 0 0 7

ORDERING INFORMATION:

Material ID	Product Number	Description	Jack Color Options	Cord Color Options	UOM	Cable/Cordage Length Options
VisiPatch® 360 System™ GigaSPEED® Xpress™ Patch Cord						
CPCFFP2	VP360-VP360-P8XP	VisiPatch360-VisiPatch360 XP 4-pair Cord	0	1,2,3,4,6,7,8,9,B,C,Z	F,M	1-100ft / 1-30m
CPCFLP2	VP360-GSXP	VisiPatch360-GSXP XP 4-pair Solid Hybrid Cord	0	1,2,3,4,6,7,8,9,B,C,Z	F,M	1-100ft / 1-30m
CPCFFQ2	VP360-VP360-P8XP-P	VisiPatch360-VisiPatch360 XP 4-pair Plenum Cord	0	8,Z	F,M	1-100ft / 1-30m
CPCFLQ2	VP360-GSXP-P	VisiPatch360-GSXP XP 4-pair Solid Hybrid Plenum Cord	0	8,Z	F,M	1-100ft / 1-30m
CPCFFR2	VP360-VP360-P8XP-L	VisiPatch360-VisiPatch360 XP 4-pair LSZH Cord	0	8	F,M	1-100ft / 1-30m
CPCFLR2	VP360-GSXP-L	VisiPatch360-GSXP XP 4-pair Solid Hybrid LSZH Cord	0	8	F,M	1-100ft / 1-30m

Ordering Material ID Example: C P C F F P 2 - 0 3 F 0 0 7

ORDERING INFORMATION:

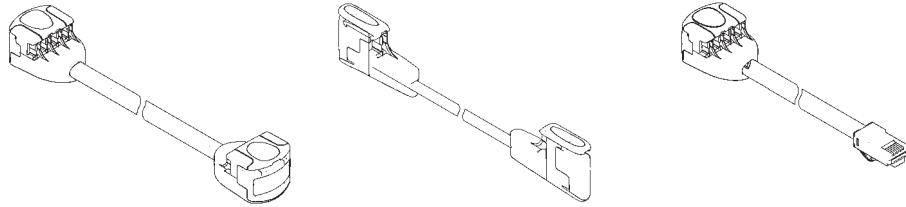
Material ID	Product Number	Description	Jack Color Options	Cord Color Options	UOM	Cable/Cordage Length Options
VisiPatch® 360 System™ GigaSPEED® XL Patch Cord						
CPCFF12	VP360-VP360-P8XL	VisiPatch360-VisiPatch360 XL 4-pair Cord	0	1,2,3,4,6,7,8,9,B,Z	F,M	1-100ft / 1-30m
CPCFF1D	VP360-VP360-P8XL-XD	VisiPatch360-VisiPatch360 XL 4-pair Cord Crossover	0	1,2,3,4,6,7,8,9,B,Z	F,M	1-100ft / 1-30m
CPCF312	VP360-GS8E	VisiPatch360-GS8E XL 4-pair Hybrid Cord	0	1,2,3,4,6,7,8,9,B,Z	F,M	1-100ft / 1-30m

Ordering Material ID Example: **C P C F F 1 2 - 0 3 F 0 0 7**

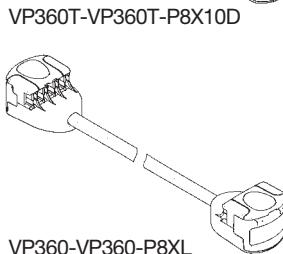
ORDERING INFORMATION:

Material ID	Product Number	Description	Jack Color Options	Cord Color Options	UOM	Cable/Cordage Length Options
VisiPatch® 360 System™ 1 Pair Patch Cord						
CPCFF62	VP360-VP360-P2PS	VisiPatch360-VisiPatch360 1-pair Cord	0	3	F,M	1-100ft / 1-30m

Ordering Material ID Example: **C P C F F 6 2 - 0 3 F 0 0 7**

**Jack Color Options**

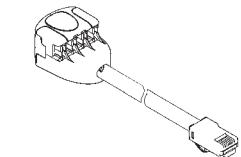
- | | |
|---------------------|--------------|
| 1 Black (BK) | B Lilac (LL) |
| 2 Light Blue (LB) | C Slate (SL) |
| 3 Dark Gray (DG) | Z Blue (BL) |
| 4 Spring Green (GN) | |
| 6 Orange (OR) | |
| 7 Red (RD) | |
| 8 White (WH) | |
| 9 Yellow (YL) | |



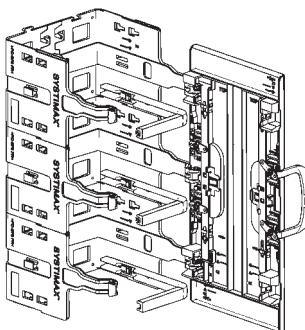
VP360T-VP360T-P8X10D VP360-VP360-P2PS VP360T-360GS10E

Recommended label sizes for patch cord plugs are:

- 3/8" H x 7/8" W for 4-pair
- 1/2" H x 1/4" W for 1-pair



VP360-GS8E



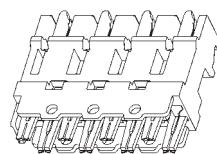
VP360-12U-10VTCM

CABLE MANAGER KITS - VERTICAL ORDERING INFORMATION

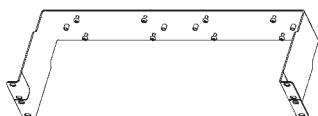
MID	Product ID	Description	Component Description	Qty
760060285	VP360-12U-10VTCM	VisiPatch 360 12U Vertical Trough Cable Mgr Kit e/w Door, 10"	VisiPatch 360 12U VTCM Door, 10" 4U Spacer Module 4U Spacer Module Extender Macro Cable/Cord Retainer	1 3 3 3

CABLE MANAGER KITS - HORIZONTAL ORDERING INFORMATION

MID	Product ID	Description	Component Description	Qty
760060301	VP360-HCM-Kit-27	VisiPatch 360 Horizontal Cable Mgr Kit, 27"	4U Back Panel Base Horizontal CM Trough Horizontal Trough Cover, 27"	2 4 2
760060343	VP360-HCM-Kit-19	VisiPatch 360 Horizontal Cable Mgr Kit, 19"	4U Back Panel Base Horizontal CM Trough Horizontal Trough Cover, 19"	1 2 2
760060863	VP360-HCM-Kit-29	VisiPatch 360 Horizontal Cable Mgr Kit, 29"	4U Back Panel Base Horizontal CM Trough Horizontal Trough Cover, 29"	1 2 2
760060871	VP360-HCM-Kit-37	VisiPatch 360 Horizontal Cable Mgr Kit, 37"	4U Back Panel Base Horizontal CM Trough Horizontal Trough Cover, 37"	2 4 2
760068106	VP360-HCM-Kit-19 Rack	VisiPatch 360 Horizontal Rack Mount Cable Mgr Kit, 19"	4U Back Panel Base Horizontal CM Trough Horizontal Trough Cover, 19"	2 4 2



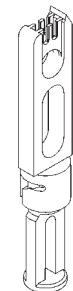
VP360-CB-10



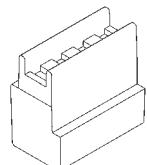
VP360-RMBKT



VP360-CBF-SK



VP360-12U-Door-10



VP360-788-HEAD

ACCESSORIES ORDERING INFORMATION

MID	Product ID	Description	Component Description	Qty
760060277	VP360-CB-10	VisiPatch 360 Connecting Block, 10/pk	VisiPatch 360 Connecting Block	10
760060251	VP360-4U-BPK	VisiPatch 360 4U Back Panel Kit	VisiPatch 360 Back Panel 4U Metal Clip	2 12
760060327	VP360-RMBKT	VisiPatch 360 19" Rack Mount Bracket	19" Rack Mounting Bracket	1
760060335	VP360-CBF-SK	VisiPatch 360 Cable Bundle Fastener Kit, Small	Micro Cable/Cord Retainer	4
760076943	VP360-25PR-WB	VisiPatch 360 Voice Kit for 25-Pair Cable	Wiring Block Designation Cover Connecting Block Label Holders White Label	2 2 14 4 12
760074286	VP360-32PR-WB	VisiPatch 360 Wiring Block Kit	VisiPatch 360 Wiring Block Index Strip Wiring Block Cover VisiPatch 360 Connecting Block VisiPatch Label Holder White Label	2 2 2 16 2 12
760080630	VP360-SIDEPNL	VisiPatch 360 Side Panel	VisiPatch 360 Side Panel	3
760074294	VP360-19PNL	VisiPatch 360 19-Inch 1U Panel	VisiPatch 360 19-Inch 1U Panel Screw, #12-24 x .50"	1 4
760060269	VP360-12U-Door-10	VisiPatch 360 12U Door, 10 in. wide		1
760072488	VP-Label	VisiPatch 360 4 Pair Cord Label		5 (260 labels/sheet)
108528407	110YG3-2688L	Yellow Label		96
108528415	110WG3-2688L	White Label		96
108528423	110SG3-2688L	Slate Label		96
108528431	110RG3-2688L	Red Label		96
108528449	110PG3-2688L	Purple Label		96
108528456	110GG3-2688L	Green Label		96
108528597	110CG3-2688L	Orange Label		96
108528464	110BG3-2688L	Blue Label		96
108528472	110KG3-2688L	Brown Label		96

TOOL KITS ORDERING INFORMATION

MID	Product ID	Description	Component Description	Qty
760060350	VP360-788-HEAD	VisiPatch 360 4-pair Head for 788 Tool	4-pair Block Punch Down Block	1
760060368	VP360-914-BIT	VisiPatch 360 1-pair Tool Bit for D-914 Impact Tool	1-pair Punch Down Bit	1



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08/09