



SYSTIMAX® Solutions

Intelligent Infrastructure (iPatch) Solutions Guide

Vision + Knowledge = Control



SYSTIMAX Intelligent Infrastructure Solutions:

- Add intelligence to copper and fiber structured cabling systems
- Automate change management
- Improve productivity
- Increase network reliability and availability
- Track physical location of networked devices
- Secure your network
- Facilitate compliance

In today's network infrastructure, nothing stands still. New waves of technology demand more bandwidth to the desktop and exponentially more in the backbone. With convergence, one infrastructure is shared among all those new technologies, meaning your underlying network must be more robust, reliable, and available than ever before.

The network has truly become the fourth utility. It must be available 24 hours a day, 7 days a week. Gone are the days when an IT manager or help desk need only operate during "normal" business hours. Today's global companies require continual access.

Every piece of networking equipment, every application, every server, every terabyte of storage that is added to support the growth of the network has to be managed by the IT staff – which is growing nowhere near as fast as the network they manage. Solutions have to be provided that help IT keep pace with these changes, empowering them with the productivity improvements they need.

CommScope® is an industry leader in the development of innovative solutions that enhance your **Vision, Knowledge** and **Control**.

CommScope understands your world and the challenges you face. We know you need built-in intelligence to help you manage your infrastructure.

Your Network GPS

An Intelligent Infrastructure Solution is like a GPS Navigation System for your network. It eliminates your blind spots, guiding you to your destination on the most efficient route possible—saving you time and money.

Don't settle for less – with an Intelligent Infrastructure Solution, you get more than just a highly reliable physical layer network. You get the **Vision** and **Knowledge** you need to be in **Control**.

Solution Components

Built on world-renowned high-performance SYSTIMAX® copper and fiber connectivity, SYSTIMAX Intelligent Infrastructure Solutions are more than just hardware – they are comprehensive, fully supported solutions that have been engineered to help you document, manage and monitor your physical network infrastructure.

SYSTIMAX iPatch® hardware, including intelligent copper panels, fiber optic shelves and infrastructure control systems, give you **Vision** into real-time changes to your physical layer network.

SYSTIMAX iPatch System Manager Infrastructure Operations Software correlates this vision with information from networking equipment, IP endpoints and other systems to provide **Knowledge** of how the network layer devices map to the physical layer.

This combination of hardware and software – of vision and knowledge – gives you unprecedented **Control** of your physical layer infrastructure. You will have what you need for a real-time, comprehensive view of your physical network infrastructure to document, plan and execute changes.

Backed by the SYSTIMAX Intelligent Infrastructure Solutions research, development and support teams and CommScope's Certified iPatch BusinessPartners, you will have the support you need to design, install, configure and maintain an Intelligent Infrastructure Solution.



Features and Benefits

Here is what you can expect from SYSTIMAX Intelligent Infrastructure Solutions:

Features

- Accurate documentation of the end-to-end connectivity between networked devices
- Realtime tracking of changes to physical layer connections
- Alerts on unauthorized or unplanned changes
- Notification of impacts to critical circuits
- Discovery of network devices, with tracking of physical locations
- Service provisioning and electronic work orders for guided deployment in data centers or office environments

Benefits

- Complete visibility and control of your physical layer infrastructure
- Enhanced productivity through automation and process efficiency
- Reduced cost associated with capacity and asset management
- Realtime enhanced view of the physical location of IP endpoints
- Control of your workflow process
- Reduced MAC cycle time and rework through guided patching
- Simplified audit and tracking process

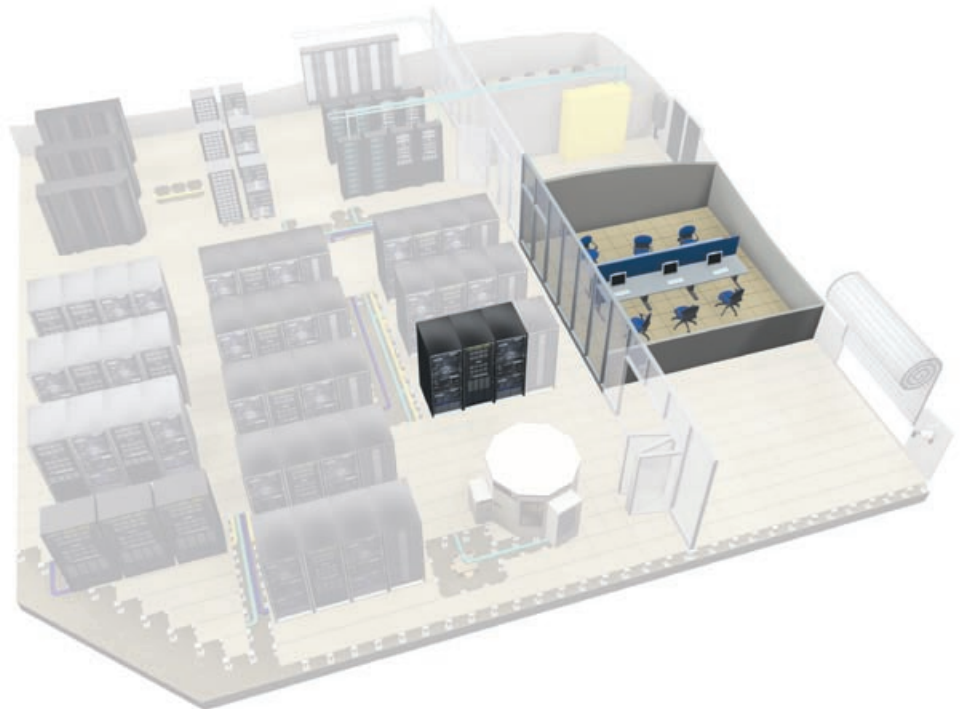
Roles

No matter your role in your network's physical infrastructure, SYSTIMAX Intelligent Infrastructure Solutions can make your job easier:

- Network administrators get reporting tools that track unused switch ports, physical locations of IP endpoints and completed, in process and overdue jobs
- Cabling administrators get automated documentation of the physical layer
- Technicians can trace connections, receive guidance for required changes, handle alerts and confirm actions
- IT and Data Center Managers get productivity gains, automated change management, increased reliability, reduced downtime, a more secure network and improved compliance



iPatch System



iPatch System Manager Intelligent Infrastructure Operations Software



Warranty Information

SYSTIMAX iPatch System Manager Intelligent Infrastructure Operations Software is covered by an initial 90-day limited warranty against defects in materials and workmanship.

Included with registered copies of the software is a one year subscription to our Software Assurance Program (some restrictions apply). Software Assurance gives you access to our InSite support Web site and the right to download software updates, upgrades and utilities.

Beginning with the second year (and every year thereafter), in order to receive ongoing support, updates and upgrades, you must renew your subscription to our Software Assurance Program.

More information on this program can be found in the SYSTIMAX Intelligent Infrastructure Solutions Services Guide.

Understanding your physical infrastructure's configuration brings with it the power to control your network, reduce operating costs, improve efficiency and increase reliability. As part of Intelligent Infrastructure Solutions, iPatch® System Manager Intelligent Infrastructure Operations Software enables you to document and monitor your infrastructure through an intuitive graphical user interface.

Management gains a high-level, real-time view of end-to-end network connections. Connectivity traces can be accessed in seconds. Electronic work orders for routine changes become simple to implement. Unplanned changes and alarms are reported automatically so network administrators can respond immediately.

System Manager – Basic Edition

The Standard Edition license provides base System Manager functionality. This includes ability to document cabling through the infrastructure, up to 5 concurrent users, and limited web reporting capability. Communication with iPatch hardware is not enabled.

System Manager – Enterprise Edition

The Enterprise Edition licenses provide all of the functionality you need to manage, monitor and control your intelligent infrastructure on an enterprise scale. Supporting up to 128 concurrent users, System Manager Enterprise Edition provides Windows, PDA and web client interfaces; guided patching; device discovery; event notification; web reports; and SNMP support for over 45 LAN/SAN switch families across more than a dozen vendors. The GUI can be localized for any one of the 11 supported languages. Also included is an XML application programming interface.

Software Assurance

The Software Assurance Program ensures you will get optimal value from your System Manager software by providing online support, including version updates and upgrades. The first year of Software Assurance is included with the purchase price of Enterprise Edition (some restrictions apply). CommScope is proud to bring you a unique tool to increase the Vision, Knowledge, and Control you need to succeed in today's demanding IT environments.

Features and Benefits, iPatch System Manager

iPatch System Manager is available in Basic and Enterprise editions. Based on the needs of your business, select the Basic Edition to:

- Document your physical layer network

For more complete Vision, Knowledge and Control, select the Enterprise Edition to:

- Discover networked devices and map logical connections to the physical layer
- Initiate and manage electronic work orders based on selecting services to deploy to a networked device
- Manage multiple sites from a single client
- Access the system from a Web-based client or PDA
- Leverage your existing enterprise authentication systems and database servers
- Use the XML-based API to integrate with other industry-leading network management solutions (contact your CommScope sales representative for available integrations)

iPatch Intelligent Infrastructure Control System

SYSTIMAX control systems also provide technicians with a local user interface. To aid in tracing existing connections, the display provides end-to-end connectivity information, including the location of patch cords as well as the devices connected on either end of the circuit.

This wealth of information far surpasses the level of insight provided by traditional port or cord labels. In addition, control systems provide the added benefit of automatic updates when changes occur in the patching field or at the endpoints of a circuit.

The iPatch Control System enhances guided patching operations by displaying work orders generated by your System Manager software. A local display makes steps in the work order simple, displaying the ports to be connected or disconnected, as well as providing visual and audible feedback on the progress of that step. LEDs on iPatch panels aid the process, too, lighting up to signal each patching change.

For unguided operations, the iPatch Control System can be used to confirm changes made on iPatch panels. All connectivity changes in iPatch panels are automatically detected by the control system and forwarded on to iPatch System Manager, where alerts for unauthorized changes can be forwarded to systems administrators.

With the iPatch Control System operating as a reporting system for your Intelligent Infrastructure Solutions, you gain the Vision and Knowledge you need to take Control of your network.



SYSTIMAX 360 iPatch Network Manager



SYSTIMAX 360 iPatch Panel Manager

Features and Benefits

iPatch Control System

- Multi-line backlit liquid crystal display (LCD) and soft-key menu system
 - Guides technicians in completing electronic work orders
 - Displays status, tracing information, job instructions and other vital information
 - Used for confirming changes in unguided patching operations and setting up the system
 - Multiple language support
- LEDs to indicate trace in progress, outstanding alarms or patching jobs
- Includes a dedicated panel bus to interconnect and provide power for up to 45 panels, depending on specific panel configuration

iPatch Panel Manager

- Innovative, cost effective, space-saving technology and design simplifies deployment in just 1U of space
- Localized languages support includes Danish, English, French, German, Italian, Russian, Spanish, Chinese, Korean, Polish and Portuguese
- Features the elegant SYSTIMAX 360 design

Warranty Information

The iPatch Panel Manager and other intelligent infrastructure control systems are active components covered by the SYSTIMAX iPatch System Active Components 3-Year Product Warranty.

iPatch Intelligent Copper Patch Panels



**SYSTIMAX 360 iPatch
1100GS6 48 Port Panel**

Warranty Information

The passive components in the panel qualify for the same SYSTIMAX Structured Connectivity Solutions 20-year Extended Product Warranty and Applications Assurance as standard SYSTIMAX copper panels when included in a certified SYSTIMAX PowerSUM, GigaSPEED XL or GigaSPEED X10D channel. The active components, including the patch panels' tracing modules, are covered by the SYSTIMAX iPatch System Active Components 3-year Product Warranty.

Building on the industry-leading performance of SYSTIMAX 1100-series GigaSPEED® XL and GigaSPEED X10D panels, iPatch 1100GS3 and 1100GS6 copper patch panels provide intelligence for managing your network infrastructure. Both 1100GS3 and 1100GS6 iPatch panels are available in either 24-port 1U or 48-port 2U models.

The SYSTIMAX 360 "iPatch-ready" copper panels can be upgraded in the field at a later stage with the 360 iPatch Upgrade Kit. The upgrade can be performed without network disruptions, since it does not require the removal of patch cords. The SYSTIMAX 360 solution offers customers the option to deploy intelligence immediately or in phases, according to their needs and budgetary requirements. By providing a clear strategy that includes an upgradeable product line, CommScope intends to bring intelligence to the masses and raise awareness of the business benefits of intelligent infrastructures.

iPatch intelligent copper patch panels provide unequalled Vision into changes in your physical layer infrastructure. This Vision is combined with Knowledge provided by iPatch System Manager software to deliver the Control you need to manage your network.

Features and Benefits, iPatch Intelligent Copper Patch Panels

- All panels feature a one-button tracing function with an LED indicator per port
- Each port detects the insertion or removal of standard patch cords and reports changes to the iPatch Control System
- iPatch 1100 series panels are available in 24- and 48-port configurations featuring universal A/B labeling
- iPatch 1100 series panels feature termination control managers and a redesigned rear IDC housing to allow for easier, faster, more reliable terminations, and reduced variability in the placement and termination of cables to the panel

iPatch 1100 Panels:

- GS6 multi-connector module utilizes patented straddle pair cross-over contacts and new patent pending technologies to achieve efficient alien crosstalk reduction ensuring industry standards are met for Category 6A/E_A performance levels
- Architectural design and flexibility - supports 5 meter cables in 3 and 4 connector channels, 3 meter cables in 2 connector channels and cross connect cords down to 1 meter
- Alien Crosstalk complies to industry standards; TIA-568-C and IEC 11801
- Available in 24 port and 48 port options
- Features the elegant SYSTIMAX 360 design
- No tools required when installing iPatch Ready upgrade kits

iPatch F/UTP Panel:

- Simple-to-use grounding solution
- Features the elegant SYSTIMAX 360 design
- Supports 5 meter cables in 3 and 4 connector channels, 3 meter cables in 2 connector channels and cross connect cords down to 1 meter when using the GigaSPEED X10D Shielded High Density Information Outlet (HGS620)
- TAA compliant

iPatch Intelligent Fiber Optic Shelves

iPatch Intelligent Fiber Shelves are equipped with either SC or LC couplers that support the SYSTIMAX fiber portfolio - LazrSPEED®, TeraSPEED® and OptiSPEED® applications. Models are available in 1U and 2U footprint with fixed or sliding fiber trays, and pre-terminated (MPO) versions are also available.

The SYSTIMAX 360 1U optical fiber shelves are “iPatch-Ready” and can be upgraded in the field at a later stage with the 360 iPatch Upgrade Kit. The upgrade can be performed without network disruptions, since it does not require the removal of patch cords. The SYSTIMAX 360 solution offers customers the option to deploy intelligence immediately or in phases, according to their needs and budgetary requirements. By providing a clear strategy that includes an upgradeable product line, CommScope intends to bring intelligence to the masses and raise awareness of the business benefits of intelligent infrastructures.

iPatch intelligent fiber optic shelves provide unequalled Vision into changes in your physical layer infrastructure. This **Vision** is combined with **Knowledge** provided by iPatch System Manager software to deliver the **Control** you need to manage your network.



SYSTIMAX 360 iPatch G2 Fiber Shelf



SYSTIMAX 360 iPatch G2 High Density Fiber Shelf

Features and Benefits, SYSTIMAX 360 iPatch Fiber Shelves

- Bend limiters maximize space by integrating into the shelf trough
- Push/push-style latch on the front trough door improves access to shelf interior
- Unique open-floor trough design enhances access for patch cord latching and de-latching
- Displays intuitively-placed port labeling when door is open
- Features the elegant SYSTIMAX 360 design
- Offered in fixed and sliding options
- Available in 1RU and 2RU sizes (SYSTIMAX 360 iPatch G2 Fiber Shelves available in 1U only)

Features and Benefits, iPatch Pre-Terminated Shelves

- 12-fiber MPO connector-based modular design for simple connections
- Factory-terminated and tested modules for instant field connections and guaranteed quality and performance
- Designed for the administrative convenience of guaranteed transmit-to-receive connectivity
- No special or non-standard polarity components
- Supports easy reconfiguration for moves, adds and changes
- Easy upgrade path to parallel connectivity and associated applications

Features and Benefits, iPatch Intelligent Fiber Optic Shelves

- Hinged front door for easy access
- Front cable management trough
- Top cover panel
- Standard water-tight cable entry conduit connectors
- Blank labels for identifying fiber splices and terminations

Warranty Information

The passive components in iPatch standard and pre-terminated fiber shelves qualify for the same SYSTIMAX 20-year Extended Product Warranty and Applications Assurance as standard SYSTIMAX 360 fiber shelves when included in a certified SYSTIMAX LazrSPEED, TeraSPEED or OptiSPEED channel.

The active components, including the fiber shelves' tracing modules, are covered by the SYSTIMAX iPatch System Active Components 3-year Product Warranty.



SYSTIMAX Intelligent Infrastructure Solutions Services allow you to:

- Leverage SYSTIMAX Solutions technology expertise and support
- Get more value out of your SYSTIMAX Intelligent Infrastructure Solutions purchase
- Minimize the impact to your internal resources
- Protect your investment

SYSTIMAX® Intelligent Infrastructure Solutions Services

CommScope® knows that bringing the efficient, powerful infrastructure dashboard called Intelligent Infrastructure Solutions to your enterprise can empower you with the Vision and Knowledge you need to Control your network.

Since you often face an overwhelming list of responsibilities, the SYSTIMAX® Intelligent Infrastructure Solutions are supported by CommScope and its BusinessPartners with a range of value-added services to assist you when you need it the most. Whether they are simply freeing you up to pursue other responsibilities, or enhancing your Vision, Knowledge and Control over your network, these services provide a necessary component to your Intelligent Infrastructure Solutions. The services allow you to leverage CommScope's technology expertise and support to get more value out of your purchase, minimize the impact to your internal resources, and protect your investment.

Configuration Services

Invite a Certified iPatch BusinessPartner to install and certify your Intelligent Infrastructure Solutions or contact your local CommScope representative to discuss available options

Software Assurance

Keep up-to-date with the latest software updates and upgrades while enjoying cost savings

InSite

Access online support information 24 hours a day, 7 days a week

3-Year Product Warranty

Increase peace of mind about the stability and reliability of your Intelligent Infrastructure Solutions installation



Vision, Knowledge, Control

SYSTIMAX Intelligent Infrastructure Solutions document, monitor and manage your physical network infrastructure.

Building on world-renowned SYSTIMAX copper and fiber reliability and performance, SYSTIMAX Intelligent Infrastructure Solutions combine hardware and software to provide you with a real-time, comprehensive view of your physical network infrastructure.

SYSTIMAX Intelligent Infrastructure Solutions provide all the support you need for a powerful, responsive network, addressing your concerns in:

- Change Management
- Security
- Availability
- Physical Location
- Compliance
- Productivity

Don't settle for less – with an Intelligent Infrastructure Solution, you get more than just a highly reliable physical layer network. You get the **Vision** and **Knowledge** you need to be in **Control**.

Contact your CommScope BusinessPartner or visit www.commscope.com for more information on SYSTIMAX Intelligent Infrastructure Solutions, featuring iPatch technology.



Benefits of Intelligent Infrastructure Solutions

- Operational efficiencies
- Reduced infrastructure materials
- Reduced maintenance
- Increased productivity
- Real-time reports and monitoring

SYSTIMAX Intelligent Infrastructure Solutions give you the **Vision** and **Knowledge** you need to **Control** your network.

SYSTIMAX INTELLIGENT INFRASTRUCTURE SOLUTIONS ORDERING INFORMATION

Infrastructure Operations Software		
Material ID	Product Number	Description
Download(1)	iP-SYS-MGR-BASIC	iPatch System Manager Basic
760111187	iP-SYS-MGR-EE-2K	iPatch System Manager Enterprise 2000
760111195	iP-SYS-MGR-EE-10K	iPatch System Manager Enterprise 10000
760090068	iP-SYS-MGR-EE-UNL	iPatch System Manager Enterprise Unlimited
760111203	iP-SYS-MGR-UPG-2-10	iPatch System Manager Upgrade, 2K to 10K
760111229	iP-SYS-MGR-UPG-10-UNL	iPatch System Manager Upgrade, 10K to Unlimited
760111211	iP-SYS-MGR-UPG-2-UNL	iPatch System Manager Upgrade, 2K to Unlimited

(1) System Manager Basic – downloadable for no charge for registered Intelligence-Enabled deployments.

System Integrations		
Material ID	Product Number	Description
760083402	iP-SYS-MGR-ELS-INT	iPatch System Manager Enhanced Location Service for Emergency Response
760083410	iP-SYS-MGR-OPC-INT	iPatch System Manager OPC Integration

Software Assurance		
Material ID	Product Number	Description
760111237	SA-SYS-MGR-EE-2K	Software Assurance for iPatch System Manager Enterprise 2000
760111245	SA-SYS-MGR-EE-10K	Software Assurance for iPatch System Manager Enterprise 10000
760090266	SA-SYS-MGR-EE-UNL	Software Assurance for iPatch System Manager Enterprise Unlimited

Infrastructure Control Systems		
Material ID	Product Number	Description
760105353	360-iP-NET-MGR-MOD	360 iPatch Network Manager
760095562	360-iP-PANEL-MGR	360 iPatch Panel Manager

iPatch Intelligent Copper Patch Panels				
Material ID	Product Number	Description	iPatch Ready	iPatch
760152363	360-iP-1100-E-GS6-1U-24	360 iPatch 1100GS6 24-Port Evolve Patch Panel		X
760152348	360-iP-1100-E-GS6-2U-48	360 iPatch 1100GS6 48-Port Evolve Patch Panel		X
760152355	360-iP-1100-E-GS3-1U-24	360 iPatch 1100GS3 24-Port Evolve Patch Panel		X
760152330	360-iP-1100-E-GS3-2U-48	360 iPatch 1100GS3 48-Port Evolve Patch Panel		X
760104992	360-iP-UP-KIT-1100-24	360 iPatch Upgrade Kit for 360 1100 24-Port Panel, 10 Pack		
760105015	360-iP-UP-KIT-1100-48	360 iPatch Upgrade Kit for the 360 1100 48-Port Panel, 5 Pack		
760152280	360-iP-UP-KIT-E-24	360 iPatch Upgrade Kit for 360 Evolve 24-Port Panel, 10 Pack		
760152298	360-iP-UP-KITE+PMAX-48	360 iPatch Upgrade Kit for 360 Evolve and PATCHMAX 48-Port Panels, 5 Pack		
760130393	360-iP-PMAX-GS6-24	360 iPatch PATCHMAX GS6 24-Port Panel		X
760130401	360-iP-PMAX-GS6-48	360 iPatch PATCHMAX GS6 48-Port Panel		X
760123489	360-iP-PMAX-GS3-24	360 iPatch PATCHMAX GS3 24-Port Panel		X
760123497	360-iP-PMAX-GS3-48	360 iPatch PATCHMAX GS3 48-Port Panel		X
760152306	360-iP-UP-KIT-PMAX-2U-24	360 iPatch Upgrade Kit, PATCHMAX 24-Port, 2U		
760152371	360-iP-M-E-HD6B-1U-24	SYSTIMAX 360 iPatch Evolve High Density F/UTP Modular Panel, 24-port		X
760152389	360-iP-M-E-HD6B-2U-48	SYSTIMAX 360 iPatch Evolve High Density F/UTP Modular Panel, 48-port		X

For a complete listing of all SYSTIMAX Products in our Intelligent Infrastructure Solution, visit www.commscope.com/systimax

SYSTIMAX INTELLIGENT INFRASTRUCTURE SOLUTIONS ORDERING INFORMATION

iPatch Intelligent Fiber Optic Shelves						
Material ID	Product Number	Ports	Connector	Cable Type	Sleeve Type	Shelf Type
760105163	360-iP-G2-1U-LC-FX	24 Duplex	LC	Multimode/ Single-mode	Ceramic	Fixed
760105171	360-iP-G2-1U-LC-SD	24 Duplex	LC	Multimode/ Single-Mode	Ceramic	Sliding
760105148	360-iP-UP-KIT-G2-LC	24 Duplex,	LC	Multimode/ Single-Mode	N/A	Fixed/Sliding
760005595	iP-600A-12-SC-MMF	12 Duplex	SC	Multimode	Ceramic	Fixed
760005629	iP-600B-12-SC-MMF	12 Duplex	SC	Multimode	Ceramic	Sliding
760010777	iP-600A-12-SC-SMF	12 Duplex	SC	Single-mode	Ceramic	Fixed
760010785	iP-600B-12-SC-SMF	12 Duplex	SC	Single-mode	Ceramic	Sliding

iPatch Intelligent Pre-Terminated Fiber Optic Shelves						
Material ID	Product Number	Ports	Connector	Cable Type	Sleeve Type	Shelf Type
760038513	iP-PTF-12-SC-LS	12 Duplex	SC	LazrSPEED	Ceramic	Sliding
760066183	iP-PTF-12-SC-OS	12 Duplex	SC	OptiSPEED	Ceramic	Sliding
760038521	iP-PTF-12-SC-TS	12 Duplex	SC	TeraSPEED	Ceramic	Sliding
760117432	360-iP-INSTA-LC-4LS	24 Duplex	LC	LazrSPEED	Ceramic	Sliding
760117440	360-iP-INSTA-LC-4TS	24 Duplex	LC	TeraSPEED	Ceramic	Sliding
760117424	360-iP-INSTA-LC-4OS	24 Duplex	LC	OptiSPEED	Ceramic	Sliding

iPatch Intelligent Fiber Optic Shelves						
Material ID	Product Number	Ports	Connector	Cable Type	Sleeve Type	Shelf Type
760093336	360-iP-HD-2U-IP-SD	up to 72 Duplex	LC	All Types	Ceramic	Sliding
760093344	360-iP-HD-MOD-LC-LS	24 Duplex	LC	LazrSPEED	Ceramic	Sliding
760093351	360-iP-HD-MOD-LC-LS-3	72 Duplex	LC	LazrSPEED	Ceramic	Sliding
760093369	360-iP-HD-MOD-LC-TS	24 Duplex	LC	TeraSPEED	Ceramic	Sliding
760093377	360-iP-HD-MOD-LC-TS-3	72 Duplex	LC	TeraSPEED	Ceramic	Sliding
760093385	360-iP-HD-MOD-LC-OS	24 Duplex	LC	OptiSPEED	Ceramic	Sliding
760093393	360-iP-HD-MOD-LC-OS-3	72 Duplex	LC	OptiSPEED	Ceramic	Sliding

For a complete listing of all SYSTIMAX Products in our Intelligent Infrastructure Solution, visit www.commscope.com/systemax



www.commscope.com

Visit our Web site or contact your local CommScope representative for more information.

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