

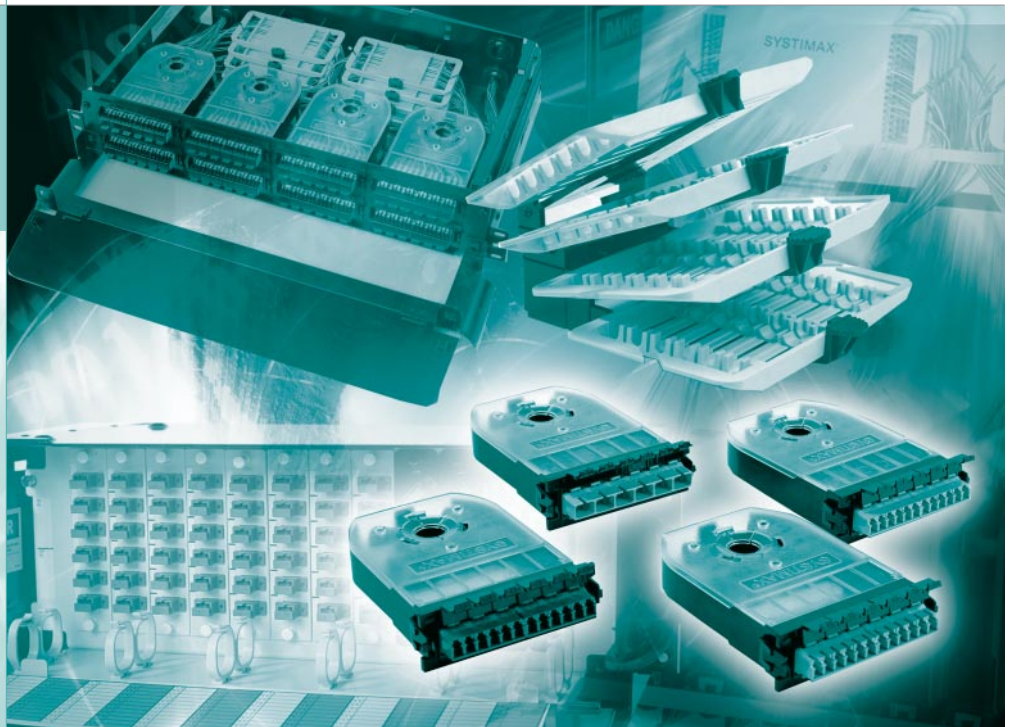
# SYSTIMAX®

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## SOLUTIONS

### SYSTIMAX® G2 Fiber-Optic Connectivity Solution

#### Solution Guide



SYSTIMAX® Structured Connectivity Solutions

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

**The demand and need for enhanced connectivity solutions continues to grow. Whether the organization be Financial/Banking, Healthcare/Medical, Government (Defense/Research), or Education (universities), all need to take steps to 'bullet proof' their network infrastructures to deliver bandwidth, flexibility, redundancy, security, and ease of moves, adds and changes.**

With the increasing use of the network to access services and applications such as the Internet, and with rapid growth in centralized storage area networks (SAN), the building and campus backbones being deployed today are a critical part of the infrastructure. Enterprise end-users have multiple applications running data over the core of the network. They also have multi-level cross connection topologies that call for enhanced connectivity in backbone applications (i.e., cross connections between floor distributors and/or building distributors) whereby innovative fiber apparatus systems offer more cost effective options than traditional offerings.

Networks require re-arrangement flexibility to accommodate moves and/or changes, and to enable users to administer and test the network. The fiber-optic panel and shelf systems used in the telecommunications closets and equipment rooms are critical to achieve flexibility and ease of use.

The drivers for fiber-optic connectivity include:

- A need to efficiently migrate to speeds above 1 Gb/s and 10 Gb/s
- A need to quickly and easily configure work group networks
- A need to most efficiently support multiple connectivity technologies (Singlemode/Multimode, ST/SC/LC, field/pre-terminated, splice/direct terminated)
- High security, high electromagnetic field, high lightning strike, or corrosive environments
- High-density, rapid deployment options
- A need to increase control over network operations
- A need to reduce recurring operational costs

## The Solution to Fiber Systems Administration Needs

SYSTIMAX® Solutions bring the ultimate in fiber-optic technology to the Enterprise customer. SYSTIMAX Solutions™ 40-year heritage in fiber-optic solutions enables us to deliver a complete portfolio of products for the physical layer of the network. SYSTIMAX Solutions supports the deployment of multimode and/or singlemode fiber in the backbone segments of both buildings and campuses, with its TeraSPEED™ ZWP singlemode, LazrSPEED® laser-optimized multimode and OptiSPEED® multimode solutions.

## G2 Fiber Apparatus

The G2 series is comprised of multifunctional fiber-optic shelves that are used for a combination of splicing and termination of fiber-optic building cable or outside plant (OSP) cables. The shelves are designed for use as a termination shelf only (direct connector termination) or as a splice and termination shelf for up to 48 individual fibers (1U 600G2 version), 96 fibers (2U 600G2 version), or 192 fibers (4U 1000G2). They feature either a fixed tray or slide-out tray for easy access. The G2 combination shelves are offered in two configurations, Modular and Panel.

### • SYSTIMAX LazrSPEED Solution

Next generation laser-optimized 50µm multimode solution supporting up to 10 Gb/s over 550 meters using 850 nm VCSEL transceivers

### • SYSTIMAX TeraSPEED Solution

100+ Gb/s full spectrum singlemode solution with added bandwidth/wavelength capacity in the E-band

### • SYSTIMAX OptiSPEED Solution

62.5µm multimode solution for modest bandwidth requirements and LED-based applications

## G2 Modular Fiber-Optic Shelf System

The G2 Modular shelves feature 1U-, 2U- and 4U-height fully enclosed shelves with the front cable management trough included. The G2 modular shelf system features interchangeable G2 modules, available in SC, ST and LC for LazrSPEED, OptiSPEED and TeraSPEED Solutions. The 1U shelf accepts up to 4 G2 modules, while the 2U and 4U shelves accommodate 8 and 12 modules respectively. The modules are fully interchangeable and pre-populated with fiber-optic adapters. The G2 fiber modules are offered either fiberless or equipped with pre-terminated pigtailed ready for splicing. Completing the G2 shelf offer are the patent-pending splice organizers, RoloSplice kit for 600G2, and Splice Wallet kit for 1000G2.

### Each G2 Modular Shelf Comes Equipped With:

- Hinged front doors for easy access
- Front cable management trough
- Top cover panel (600 series)
- Standard cable entry conduit grommets providing strain relief for cables
- Blank labels for identifying fiber splices and terminations

### Features and Options of the Fiber Modules Include:

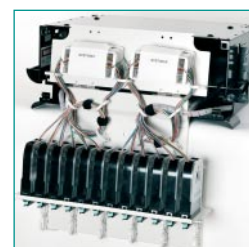
- LazrSPEED modules with twelve LC, six SC, or six ST adapters
- OptiSPEED modules with twelve LC, six SC, or six ST adapters
- TeraSPEED modules with twelve LC, six SC, or six ST adapters
- All module types above are also offered in options equipped with pre-terminated 2-foot long pigtailed
- All modules can be used on all SYSTIMAX G2 series shelves, including 600G2 and 1000G2

### G2 Modular Shelf Optional Parts Includes:

- RoloSplice (600G2) or splice wallet (1000G2) kits for enhanced splicing
- Cable entry/strain relief kit for smaller diameter cable (600G2)
- Universal mounting bracket kit to adapt shelf for ETSI frames or 23" frames (600G2)
- Blank panel with the same footprint as the fiber module
- M-Series bezel panel with the same footprint as the fiber module, which accept up to 4 M-Series jacks for multimedia applications



600G2 Modular Shelf



1000G2 Modular Shelf



G2 Modules



Multimedia G2 Module

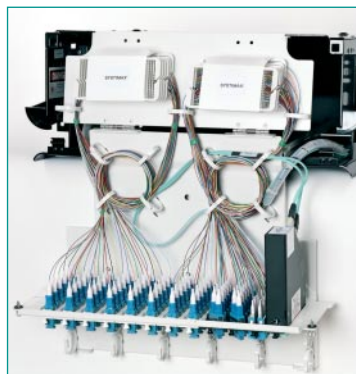
### G2 Panel Fiber-Optic Shelf System

To accommodate legacy components and applications, the G2 panel series of shelves is available in both 600 and 1000 series options. The panel series are available in 1U height, both fixed and sliding versions, and 4U slide version.

For the 600G2 panel series shelves, the shelf is designed for use as a termination shelf only (direct connector termination) or as a splice and termination shelf for up to 48 individual fibers. Faceplates with different configurations are required and can be ordered separately. Common sized front faceplates are used for both the sliding and fixed 600G2 shelf to simplify the ordering process and material management. The front faceplates accept standard simplex or duplex fiber-optic adapters in ST, SC and LC configurations to provide flexibility. Completing the 600G2 shelf offer is the patent-pending “RoloSplice kit”, which provides easy access and administration of two individual splice trays for either fusion or mechanical splices for the 1U shelf.

The 1000G2 panel shelf can be used for combined termination and splicing for up to 192 fibers and for up to 288 fibers if used for termination only (LC connections). The 1000G2 panel shelf system accepts InstaPATCH™ modules or legacy 1000-type panels, available for SC, ST or LC connectors, pre- or un- populated with adapters. Completing the 1000G2 panel shelf offer is the patent-pending “Splice Wallet”, which provides easy access and administration of six individual splice trays. Each 1000G2 shelf will accommodate up to 12 G2 InstaPATCH modules/1000 series panels, and 2 “Splice Wallets”.

1000G2 Panel Shelf



### G2 Connectivity Selection Guide

The SYSTIMAX G2 shelf system is designed to simplify the selection of the fiber-optic apparatus products required in enterprise environments. To optimize product selection, consider the following project requirements, then follow the simple ‘1-2-3’ steps to determine the solution that fits your needs.

To determine which of the SYSTIMAX G2 solutions is best for you, the following requirements should be considered:

- **New Construction or Existing Installation**
  - Main Distribution Frame
  - Equipment Room
  - Telecommunication Closet
- **Applications**
  - Current
  - Future
- **Physical Layout**
  - Number of Buildings
  - Space Constraints
  - Number of Floors
  - Number of Users
  - Geographical Location
  - Environmental Factors
  - Number of Fiber-Optic Cables
  - Fiber Counts per Cable
  - Cable Types (indoor, outdoor, indoor/outdoor)
  - Connector Types (LC, SC, STII)
  - Modularity
  - Density
  - Ease of Use
- **Installation Requirements**
  - Pre-loaded Fiber Pigtails for Splicing
  - Mechanical or Fusion Splicing
  - Pre- and Un-populated Shelves for Direct Termination Onsite

## Configuration as easy as '1-2-3'

The steps on the following pages have been designed to guide you to the appropriate product selection

**Step 1 – Select the modules/panels (field termination or splice)**

**Step 2 – Select the shelf (1U, 2U, 4U)**

**Step 3 – (for splicing) – Select Splice Wallet or RoloSplice**

## STEP 1 – Select G2 Modules/Panels

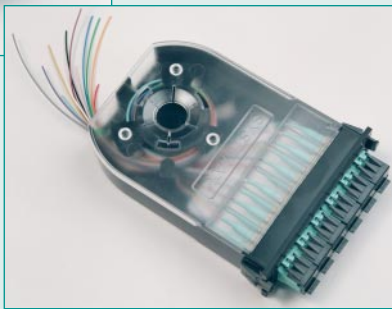
The tables below shows the Module/Panel options for each G2 shelf type based on connector selection.

Select appropriate number of modules/panels from ordering information tables based on preference per shelf, cable and connector type.

### Modular System



Field Termination Module



Factory Terminated Module

Field Termination Module Ordering Information		
Product Code	Description	Material ID
MODG2-12LC-LS	12 LC, LazrSPEED LOMM adapters	760032136
MODG2-12LC-MM	12 LC, OptiSPEED MM adapters	760032169
MODG2-12LC-SM	12 LC, TeraSPEED SM adapters	760032193
MODG2-6SC-LS	6 SC, LazrSPEED LOMM adapters	760032144
MODG2-6SC-MM	6 SC, OptiSPEED MM adapters	760032177
MODG2-6SC-SM	6 SC, TeraSPEED SM adapters	760032201
MODG2-6ST-LS	6 ST, LazrSPEED LOMM adapters	760032151
MODG2-6ST-MM	6 ST, OptiSPEED MM adapters	760032185
MODG2-6ST-SM	6 ST, TeraSPEED SM adapters	760032219

Optional Module Ordering Information		
Product Code	Description	Material ID
MODG2-Blank	Blank panel for G2 modular shelf	760032102
MODG2-MOB	Multimedia outlet bezel for modular shelf, accept 4x outlets with M-Series openings, outlet not included	760032110

Factory Terminated (With Pigtailed) Module Ordering Information		
Note: SC and ST connectors require A and B modules to match TIA color codes.		
Product Code	Description	Material ID
MODG2-12LC-LS-PT	12 LC, LazrSPEED 550 LOMM pigtailed	760027748
MODG2-12LC-MM-PT	12 LC OptiSPEED MM pigtailed	760031021
MODG2-12LC-SM-PT	12 LC, TeraSPEED SM pigtailed	760031039
MODG2-6SC-LS-PT-A	6 SC, Type A, LazrSPEED 550 LOMM pigtailed	760032227
MODG2-6SC-MM-PT-A	6 SC, Type A, OptiSPEED MM pigtailed	760032243
MODG2-6SC-SM-PT-A	6 SC, Type A, TeraSPEED SM pigtailed	760032268
MODG2-6SC-LS-PT-B	6 SC, Type B, LazrSPEED 550 LOMM pigtailed	760034082
MODG2-6SC-MM-PT-B	6 SC, Type B, OptiSPEED MM pigtailed	760034090
MODG2-6SC-SM-PT-B	6 SC, Type B, TeraSPEED SM pigtailed	760034108
MODG2-6ST-LS-PT-A	6 ST, Type A, LazrSPEED 550 LOMM pigtailed	760032235
MODG2-6ST-MM-PT-A	6 ST, Type A, OptiSPEED MM pigtailed	760032250
MODG2-6ST-SM-PT-A	6 ST, Type A, TeraSPEED SM pigtailed	760032276
MODG2-6ST-LS-PT-B	6 ST, Type B, LazrSPEED 550 LOMM pigtailed	760034058
MODG2-6ST-MM-PT-B	6 ST, Type B, OptiSPEED MM pigtailed	760034066
MODG2-6ST-SM-PT-B	6 ST, Type B, TeraSPEED SM pigtailed	760034074

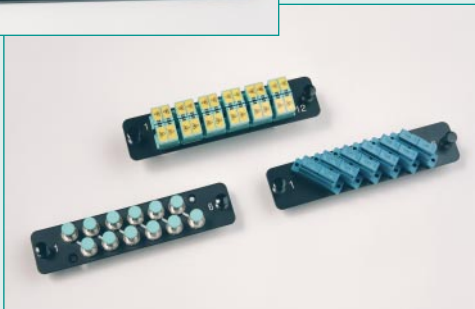
G2 Shelf Product Code Reference

MODG2	- f	g	- s	- PT	- t
	- f - No.		- s - Solution	- pigtail	- t - type
	- fiber/module	g - connection type	- LS = LazrSPEED		- A = type A
	- 6 = 6 fiber	LC = LC	- MM = OptiSPEED MM		- B = type B
	- 12 = 12 fiber	SC = SC	- SM = TeraSPEED		
		ST = ST			

### Panel System



600 Series Panel



1000 Series Panel

G2 Panel Product Code Reference

p	- f	g	- h	- k
p - panel type	- f - No.	g = connection type	h - adapter configuration	- k - adapter type
600 = 600 panel	- 6 = 6 fiber	LC = LC	- SPLX = simplex	00 = no adapter
1000 = 1000 panel	- 12 = 12 fiber	SC = SC	- DPLX = duplex	- LS = LS adapter
	24 = 24 fiber	ST = ST		MM = MM adapter
	48 = 48 fiber			SM = SM adapter

600G2 Un-Populated Panel Ordering Information (Adapters must be ordered separately)		
Product Code	Description	Material ID
600-48LC-DPLX-00	Panel for 24 duplex LC adapters	760033845
600-24LC-SPLX-00	Panel for 24 simplex LC adapters	760033852
600-48SC-DPLX-00	Panel for 24 duplex SC adapters	760033860
600-24SC-DPLX-00	Panel for 12 duplex SC adapters	760033878
600-24SC-SPLX-00	Panel for 24 simplex SC adapters	760033886
600-12SC-SPLX-00	Panel for 12 simplex SC adapters	760033894
600-24ST-SPLX-00	Panel for 24 simplex ST adapters	760033902
600-12ST-SPLX-00	Panel for 12 simplex ST adapters	760033910

1000G2 Pre-Populated Panel Ordering Information		
Product Code	Description	Material ID
1000-24LC-DPLX-LS	12 LC duplex, LazrSPEED LOMM adapters	760028209
1000-24LC-DPLX-MM	12 LC duplex, OptiSPEED MM adapters	760027441
1000-24LC-DPLX-SM	12 LC duplex, TeraSPEED SM adapters	760027433
1000-12SC-DPLX-MM	6 SC duplex, OptiSPEED MM adapters	760021790
1000-12SC-DPLX-SM	6 SC duplex, TeraSPEED SM adapters	760027714
1000-12ST-SPLX-MM	12 ST simplex, OptiSPEED MM adapters	760021832
1000-12ST-SPLX-SM	12 ST simplex, TeraSPEED SM adapters	760027722

1000G2 Un-Populated Panel Ordering Information (Adapters must be ordered separately)		
Product Code	Description	Material ID
1000-12LC-DPLX-00	Panel for 6 duplex LC adapters	700011414
1000-8LC-SPLX-00	Panel for 8 simplex LC adapters	760026369
1000-12SC-DPLX-00	Panel for 6 duplex SC adapters	760024372
1000-6SC-DPLX-00	Panel for 3 duplex SC adapters	700010952
1000-6SC-SPLX-00	Panel for 6 simplex SC adapters	700011398
1000-8SC-SPLX-00	Panel for 8 simplex SC adapters	700168966
1000-12ST-SPLX-00	Panel for 12 simplex ST adapters	760024380
1000-6ST-SPLX-00	Panel for 6 simplex ST adapters	700011406
1000-6ST-SPLX-00	Panel for 6 simplex ST adapters, 12/pk	700011109

1000G2 Blank Panel Ordering Information		
Product Code	Description	Material ID
1000-Blank-BK	Blank panel, Black, 6/pk	760016063
1000-Blank-WH	Blank panel, White, 6/pk	700162936

## STEP 2 – Select G2 Shelf Type and Accessories

The tables below shows the maximum capacity for each G2 shelf type based on connector selection and termination option.

Select shelf type based on preference for connector and splice type and capacity per shelf.



### Modular Shelf

Installation Type	Connection Type	Termination Only	Termination + Fusion Splice	Termination + Mechanical Splice
600G2 Modular System 600G2-1U-MOD	LC	48	48	48
	SC	24	24	24
	ST	24	24	24
600G2 Modular System 600G2-2U-MOD	LC	96	96	96
	SC	48	48	48
	ST	48	48	48
1000G2 Modular System 1000G2-4U-MOD	LC	144	144	144
	SC	72	72	72
	ST	72	72	72

#### G2 Modular Shelf Series Ordering Information

Product Code	Description	Material ID
600G2-1U-MOD-SD	600G2 modular shelf, 1U, sliding	760028324
600G2-1U-MOD-FX	600G2 modular shelf, 1U, fixed	760028332
600G2-2U-MOD-SD	600G2 modular shelf, 2U, sliding	760032086
600G2-2U-MOD-FX	600G2 modular shelf, 2U, fixed	760032094
600G2-1U-UP-FX	600G2 panel shelf, 1U, fixed	760033928
600G2-1U-UP-SD	600G2 panel shelf, 1U, sliding	760033936
1000G2-4U-MOD-SD	1000G2 modular shelf, 4U, sliding	760023200
1000G2-4U-UP-SD	1000G2 panel shelf, 4U, sliding	760026245

Additional selection choices for the 600G2 are sliding or fixed tray versions and an optional cable fitting for small diameter cables and a mounting bracket for 23" frames.

#### Accessories for 600G2 shelf

Product Code	Description	Material ID
600-SRF	Small diameter cable fitting kit for 600G2	760039875
600-23BRKT	Mounting bracket kit for 23" frame for 600G2	760039883

#### G2 Shelf Product Code Reference

aG2	- bb	- c	- d
a - Type	- bb - Shelf Height	- c - Shelf System	- d - Shelf Type
1000 - 1000G2	- 1U = 1U high	- MOD - Modular	- FX = Fixed
600 - 600G2	- 2U = 2U high	- UP = Panel	- SD = Sliding
	- 4U = 4U high	-	-



### Panel Shelf

Installation Type	Connection Type	Termination Only	Termination + Fusion Splice	Termination + Mechanical Splice
600G2 Panel System 600G2-1U-UP	LC	48	48	48
	SC	24	24	24
	ST	24	24	24
1000G2 Panel System 1000G2-4U-UP	LC	288	192	144
	SC	144	144	144
	ST	144	144	144

## STEP 3 – Select G2 Splice Options (if required)

The tables below shows the Splice options for each G2 shelf type.

Select up to 2 splice units from ordering information tables based on splice preference per shelf.

### 600 Modular Splice

Shelf Type	Product Code	Description	Material ID
600G2 Modular System (1U)	RS-2AM-12SF	Mechanical RoloSplice kit for up to 24 splices, includes 2 splice trays	760039859
600G2 Modular System (1U)	RS-2AF-16SF	Fusion RoloSplice kit for up to 32 splices, includes 2 splice trays	760039867
600G2 Modular System (2U)	RS-4AM-12SF	Mechanical RoloSplice kit for up to 48 splices, includes 4 splice trays	760031849
600G2 Modular System (2U)	RS-4AF-16SF	Fusion RoloSplice kit for up to 64 splices, includes 4 splice trays	760031856

### 1000 Modular Splice

Shelf Type	Product Code	Description	Material ID
1000G2 Modular System (4U)	SW-6AM-12SF	Mechanical Splice Wallet kit for up to 72 splices, includes 6 splice trays	760031047
1000G2 Modular System (4U)	SW-6AF-16SF	Fusion Splice Wallet kit for up to 96 splices, includes 6 splice trays	760031054



RoloSplice



#### G2 Splice Kit Product Code Reference

m	n	s	qSF
m - Kit Type	n - No. Trays/kit	s - Splice Type	q - No. Fibers/tray
RS = RoloSplice	00 = no tray	AM = mechanical	12 = 12 fiber
SW = Splice Wallet	2 = 2 trays	AF = fusion	16 = 16 fiber
	4 = 4 trays		
	6 = 6 trays		



Splice Wallet



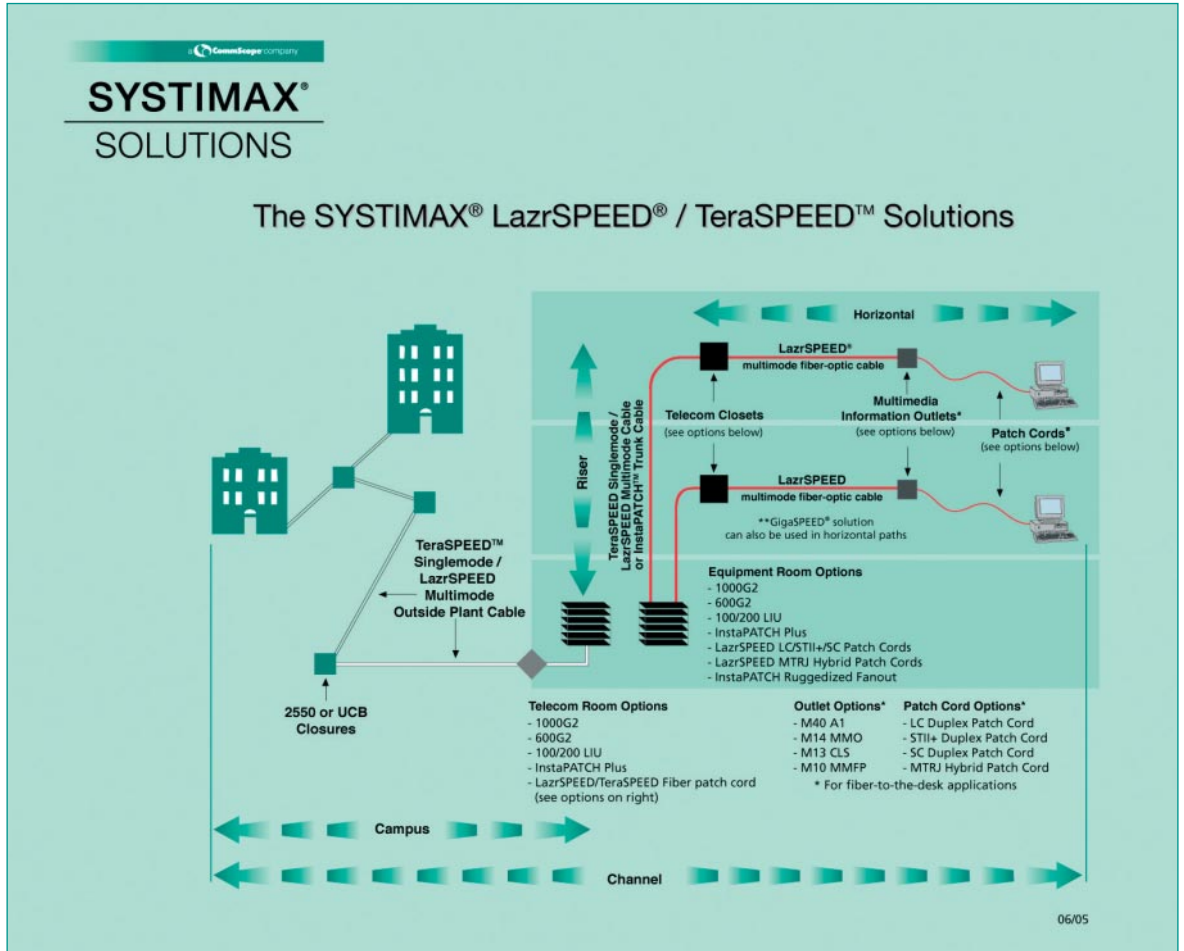
### 600 Panel Splice

Shelf Type	Product Code	Description	Material ID
600G2 Panel System (1U)	RS-2AM-12SF	Mechanical RoloSplice kit for up to 24 splices, includes 2 splice trays	760039859
600G2 Panel System (1U)	RS-2AF-16SF	Fusion RoloSplice kit for up to 32 splices, includes 2 splice trays	760039867

### 1000 Panel Splice

Shelf Type	Product Code	Description	Material ID
1000G2 Panel System (4U)	SW-6AM-12SF	Mechanical Splice Wallet kit for up to 72 splices, includes 6 splice trays	760031047
1000G2 Panel System (4U)	SW-6AF-16SF	Fusion Splice Wallet kit for up to 96 splices, includes 6 splice trays	760031054





**SYSTIMAX Solutions Provides a Complete Fiber Connectivity Solution for Enterprise LAN Environment**

Regardless of whether you choose to install multimode, singlemode, indoor, outdoor, indoor/outdoor, ST/SC/LC, filed or pre-terminated, SYSTIMAX Fiber Connectivity Solutions provides the complete product solution to meet even the most stringent of application requirements in the enterprise environment. The SYSTIMAX Fiber Solution family includes a wide choice of cables, connectors, splices, patch panels and patch cords. The best components engineered together to maximize performance thus providing customers with a single source end-to-end "system solution", that means a single accountable point of contact for cabling system issues. All the approved SYSTIMAX SCS products meet or exceed industry standards. With SYSTIMAX Solutions you can feel confident that you have made the right choice.

# SYSTIMAX<sup>®</sup>

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## SOLUTIONS

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