

# MapIT® G2 Infrastructure Management

Take your network management to the next level. MapIT G2 integrates a powerful combination of innovative Smart Patch Panels, user-friendly Master Control Panels and infrastructure management software to provide real-time tracking and reporting of network-wide physical layer activity. The system continuously monitors your network – 24/7, reducing downtime and increasing physical-layer security by tracking and providing instant alerts on changes in critical device connectivity as well as potential security threats, such as unauthorized connections and devices. All such activity is automatically updated in the system database, ensuring 100% accuracy of your infrastructure documentation. With these advantages in documentation, security, uptime and asset management, most customers see ROI in less than 2 years.

- Angled Smart Patch Panels (SPP) – Angled panels eliminate the need for horizontal cable managers, greatly improving patching density
- MTP Plug and Play Smart Fiber Enclosures – Compatible with standard MTP Plug and Play cable assemblies for rapid deployment of monitored high-speed data center links
- MapIT G2 Interconnect System – Interconnect system allows reliable tracking of direct patching links between switches and Smart Patch Panels

## Section Contents

MapIT G2 Control Panels . . . . .	8.1 – 8.2
Optional Accessories . . . . .	8.2
MapIT G2 Copper Systems . . . . .	8.3 – 8.4
MapIT G2 Fiber Systems . . . . .	8.5 – 8.6

# MapIT® G2 Master and Distribution Control Panels

The MapIT G2 Master Control Panel (MCP) collects all network infrastructure data provided by the Smart Patch Panels and Fiber Enclosures, monitoring up to 2880 ports in just 1 rack mount space (1U). The MCP and DCP features an integrated LCD display and keypad, which provide technicians access to critical network architecture and diagnostic information. By providing this interactive interface locally within the patching zone, the MapIT G2 virtually eliminates the need for technicians to carry PDAs or directly access the MapIT software server. This user interface allows full end-to-end graphic circuit traces for any channel in the system and can perform diagnostic tasks on any component or port.



### Superior Density

Low profile 1U design increases density and reduces usage of costly rack and cabinet space in data centers and telecommunication rooms

### Reduced Power Consumption

75% lower power consumption compared to traditional intelligent patching systems for monitoring equipment. This power savings decreases operating expenses and provides a more environmentally friendly solution

### Excellent Thermal Efficiency

The MCP and DCP's combination of ultra low heat generation and a low profile design limits airflow impedance, helping to maximize cooling efficiency in data center environments

### Simple, Multi-Functional User Interface

Large graphic LCD and keypad enables technicians to view circuit traces, patch cord traces, perform diagnostics and more, improving efficiency in maintenance and MAC work

### Ease of Implementation

Simple design and straightforward implementation and setup reduces the time and technician skill required to design and install the system



MCP Graphic LCD



Redundant power and Ethernet



Field-terminated control connections (RJ45 Front or S310 Rear)

# MapIT® G2 Master and Distribution Control Panels

## Ordering Information:

- M-MCP..... MapIT Master Control Panel, 1U, black\*
- M-DCP..... MapIT Distribution Control Panel, 1U, black\*

\*Includes mounting hardware (1) probe pen, (1) power supply with adapters for various regions, rear cable manager, cable ties, S310 stuffer caps and ground lug  
 Note: 1U = 44.5mm



## Optional Accessories

### Second Power Supply

M-PS.....6.0V, 3.0A power supply for MCP or DCP

### Replacement Probe Pen

M-PEN .....MapIT pen probe, 7.62m (25 ft.) cord

### Category 5e Shielded Cable for Control Connections

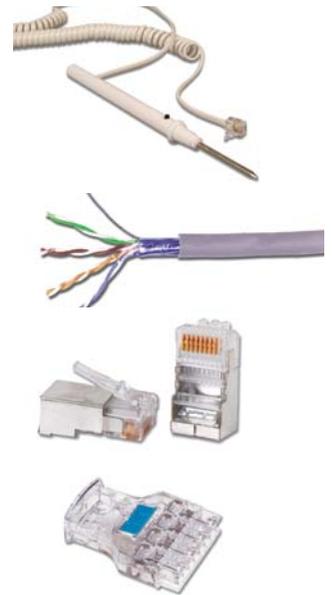
- 9A5R4-E1-(XX)-R1A.....Riser (CMR, CSA FT4) 305m (1000 ft.) Reel, (US)
- 9A5R4-E2.....PVC (CMR, CSA FT4) Blue jacket, 305m (1000 ft.), Reel-in-Box (International)

### PS-8-8 Shielded RJ45 Plugs

PS-8-8.....8-position shielded modular plug with 8 contacts (compatible with Siemon and Tyco crimp tools)

### S110® Patch Plugs

S110P4.....4-pair, field-terminated S110 patch plug (colored icons not included)



## MapIT IM and PLM Software



This software manages, monitors and documents your network infrastructure through Siemon's MapIT G2 connectivity. For more information on MapIT IM and PLM software, including features, capabilities and system requirements, please contact your local Siemon representative, or visit [www.siemon.com](http://www.siemon.com).

# MapIT® G2 Interconnect Solution

The MapIT G2 interconnect solution enables tracking of direct MapIT G2 connectivity between a switch and a single Smart Patch Panel (SPP) – without the need for an additional SPP as is required in a cross-connect configuration. The interconnect topology (see diagram below) can increase rack density, cut installation costs and reduce installation time. Compatible with existing Siemon MapIT G2 copper connectivity, simply use the Interconnect Module (M-ICM) to unlock the design flexibility of an interconnect topology.

Deployment is simple - just plug a MapIT G2 patch cord into the switch and plug the other end into the Interconnect Module, which discovers the switch port and relays the information to the MapIT G2 system. Then, remove the cord from the module, plug it into the SPP and the link is detected.



### Reduced Costs

The interconnect solution requires half the number of patch panels versus an intelligent cross connect installation, cutting both material and installation labor costs

### Faster Deployment

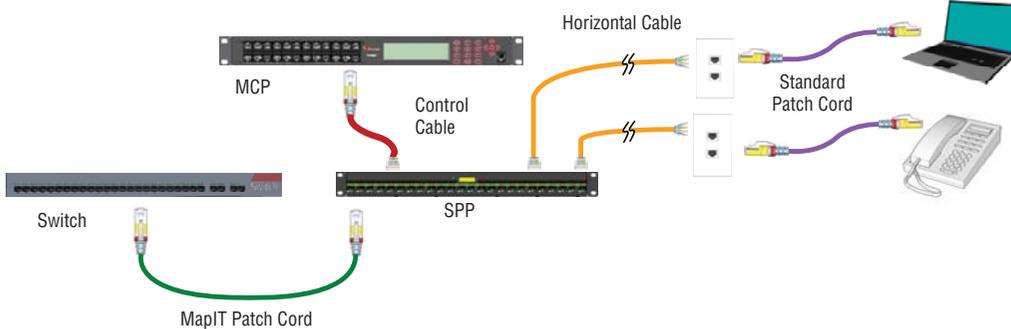
By reducing the number of patch panels and associated connectivity, installation and testing time is dramatically reduced

### Increased Density

As the interconnect topology uses half the number of patch panels versus cross-connect, cabinet/rack density is greatly improved. For even greater density, use the angled version of Siemon's SPP

### User-Friendly Module

Simple, single-button functionality combined with on-board LCD display that provides technicians with clear instructions and status information allows intelligent links to be deployed in seconds



## MapIT G2 Interconnect Module

The MapIT G2 Interconnect Module is used to create a link between the switch and panel port connections during initial installation or during moves, adds and changes.

M-ICM .....MapIT G2 Interconnect Module



# MapIT® G2 Smart Patch Panel

The MapIT G2 Smart Patch Panel (SPP) is an industry first in intelligent infrastructure management. The panel features on board intelligence and a combination of LEDs and a backlit LCD to guide technicians. The LCD can be used to display patch cord trace and connectivity diagnostic information. It can also be used to troubleshoot network issues, which can drastically reduce downtime and increase productivity. Also, since it is actively connected to your database, the LCD could be used as a virtual label, dynamically displaying panel and port information directly from the MapIT software.



**Smart** — on panel intelligence tracks patch cord connections and drives LCD/LEDs for technician guidance

**High Density** — 24 ports in a compact design, angled version also available

**Green** — MapIT G2 uses 78% less power than competing systems



**Robust** — Single piece construction integrates outlet retention and cable management. Panel includes Quick-Ground technology for shielded systems.

**Reliable** — Panels have been tested to 20-years MTBF. All active components are field serviceable

**Simple** — Control connections to the MCP or DCP are made on the back of the patch panel with 5e solid shielded cable.



Trace patch cord connections

With a touch of the probe pen a complete end-to-end circuit trace is shown on-screen at the MCP or DCP.

Custom system cables are a thing of the past. Now, category 5e solid shielded cable can be terminated in the field for all Control connections.

## Ordering Information:

### MapIT® G2 Smart Patch Panel

M-SPP(X)-K24E(XX) .....MapIT G2 24-port modular Smart Patch Panel, accepts Siemon shielded and unshielded Z-MAX™ Keystone outlets or unshielded MAX keystone outlets (sold separately)  
Includes mounting hardware, labels, (24) cable ties and panel ground lug

Use (X) to specify panel type: Blank = Flat, A = Angled

Use (XX) to specify software option:

Blank = 24 IM software port licenses included

NS = software sold separately



### MapIT® G2-Ready Patch Panel

M-SPP(X)-K24E-001 .....MapIT G2-Ready 24-port modular Patch Panel, accepts Siemon shielded and unshielded Z-MAX Keystone outlets or unshielded MAX keystone outlets (sold separately)  
Includes mounting hardware, labels, (24) cable ties and panel ground lug

M-SPP(X)-PCBA-24 .....MapIT G2 Upgrade Kit for MapIT G2 Ready Patch Panels. (Upgrade kit includes PCB with built-in sensor pads, LED's and LCD display, new front panel cover, additional mounting hardware & components with instructions), software sold separately

Use (X) to specify panel type: Blank = Flat, A = Angled

## Optional Accessories

### Siemon Keystone Outlets

Z6A-SK(XX) .....Keystone shielded Z-MAX 6A outlet, T568A/B  
Z6A-K(XX) .....Keystone unshielded Z-MAX 6A outlet, T568A/B  
Z6-K(XX) .....Keystone unshielded Z-MAX 6 outlet, T568A/B  
MX6-K01 .....Keystone unshielded MAX 6 outlet, black

Use (XX) to specify color:

01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green,  
09 = orange, 20 = ivory, 25 = bright white, 80 = light ivory



Shielded Keystone  
Z-MAX



Unshielded Keystone  
Z-MAX

# MapIT® G2 Copper Systems

## MapIT G2 Patch Cords

These advanced cords also feature a 9th wire and sensor pin contained in a robust over-molded boot.

This embedded sensor technology enables tracking of connections between Smart Patch Panel ports.

**Supports Siemon's High-Performance Systems** — Category 6A shielded, category 6A UTP and category 6 UTP

**Robust Strain Relief** — Over-molded boots provide plug to cable strain relief and retention of sensor pin. 100% transmission testing ensures component and channel performance

**Reliable Integrated Sensor Connections** — Sensor pins feature 50 microinches gold plating for long-term contact reliability and resistance to corrosion

**Simple Testing Features** — Sensor pin is accessible at the rear of the boot for test and mapping purposes



### Ordering Information:

M-10GMCS-(XX)M(XX)L . . . . . MapIT G2 Category 6A shielded, double-ended, stranded modular cord, color-matching boot, T568A/B, LS0H

	<u>Jacket Color</u>
<u>Length</u>	<b>02</b> = White
	<b>04</b> = Gray
	<b>06</b> = Blue
<b>01</b> = 1 m (3.3 ft.)	
<b>02</b> = 2 m (6.6 ft.)	
<b>03</b> = 3 m (9.8 ft.)	
<b>05</b> = 5 m (16.4 ft.)	

M-MC6-(XX)-(XX) . . . . . MapIT G2 Category 6 UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, CMG

	<u>Jacket Color</u>
	<b>02</b> = White
	<b>04</b> = Gray
	<b>06</b> = Blue
<u>Length</u>	<b>03</b> = 0.9m (3 ft.)
	<b>05</b> = 1.5m (5 ft.)
	<b>07</b> = 2.1m (7 ft.)
	<b>10</b> = 3.1m (10 ft.)
	<b>15</b> = 4.6m (15 ft.)
	<b>20</b> = 6.1m (20 ft.)



M-10GMC-(XX)-(XX) . . . . . MapIT G2 Category 6A UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, CMG

	<u>Jacket Color</u>
<u>Length</u>	<b>02</b> = White
	<b>04</b> = Gray
	<b>06</b> = Blue
<b>03</b> = 0.9m (3 ft.)	
<b>05</b> = 1.5m (5 ft.)	
<b>07</b> = 2.1m (7 ft.)	
<b>10</b> = 3.1m (10 ft.)	
<b>15</b> = 4.6m (15 ft.)	
<b>20</b> = 6.1m (20 ft.)	

# MapIT® G2 Smart Fiber Enclosure

The MapIT G2 Smart Fiber Enclosures are an industry first in intelligent infrastructure management. Available in both MTP to LC plug and play and LC to LC field terminated versions, the enclosures feature on panel intelligence and a combination of LEDs and a backlit LCD to guide technicians. The LCD can be used to display patch cord trace and connectivity diagnostic information. It can also be used to troubleshoot network issues, which can drastically reduce downtime and increase productivity. Also, since it is actively connected to your database, you could even use it as a virtual label, dynamically displaying panel and port information directly from the MapIT IM and PLM software.

**High Performance** — Available in 40 and 100Gb/s-ready OM4 MTP plug and play versions as well as multimode and singlemode LC field-terminated connectivity

**Smart** — on panel intelligence tracks fiber jumper connections and drives LCD/LEDs for tech guidance

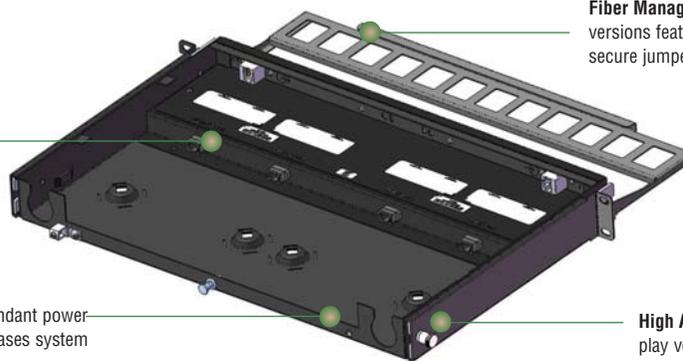


**Green** — MapIT G2 uses 78% less power than competing systems and run cool for reduced heat generation

**High Density** — Up to 48 fibers in a single 1U space

**Scalable** — MapIT G2 Smart Enclosures can support systems ranging from small, two enclosure remote sites to large 1000 + panel data centers

**Plug and Play** — Multi-fiber MTP connectivity provides ultra-fast deployment in mission-critical data centers



**Fiber Management** — MTP plug and play versions feature integrated fiber managers for secure jumper routing

**Reliable** — Resilient redundant power and communications increases system reliability

**High Accessibility** — Plug and play versions feature sliding drawer for easy access to connectivity

## MapIT® G2 Smart Fiber Enclosures

### MTP to LC Plug and Play Fiber Enclosure - SMTP

- M-SMTP-LC5V48(XX) .....MapIT G2 LC 48-fiber MTP to LC Smart Fiber Enclosure, black, Multimode, OM4  
Includes 2 MTP adapters, 24 duplex MM, LC adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels
- M-SMTP-LCSM48(XX) .....MapIT G2 LC 48-fiber MTP to LC Smart Fiber Enclosure, black, Singlemode, OS2  
Includes 2 MTP adapters, 24 duplex SM, LC adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

### LC to LC Fiber Enclosure - SFE

- M-SFE-LC48-(XX) .....MapIT G2 LC 48-fiber Smart Fiber Enclosure, black, Multimode  
Includes 24 duplex MM, LC adapters, cable ties, panel ground lug, fiber management clips, label holder and labels
- M-SFE-LC48-(XX)C.....MapIT G2 LC 48-fiber Smart Fiber Enclosure, black, Singlemode  
Includes 24 duplex SM, LC adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

Use (XX) to specify software option:  
01 = 24 IM software port licenses included  
NS = software sold separately



## MapIT G2-Ready Fiber Enclosures

### MTP to LC Plug and Play Fiber Enclosure

- M-MTP-LC5V48-01.....MapIT G2-Ready MTP to LC Enclosure, black, Multimode, OM4  
Includes 2 MTP adapters, 24 duplex MM/LC adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

### LC to LC Fiber Enclosure

- M-FE-LC48-01\*.....MapIT G2-Ready Enclosure, black, Multimode\*  
Includes 24 duplex LC adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

### Upgrade Kit for MapIT G2-Ready Fiber Enclosures

- M-SFE-PCBA-24 .....MapIT G2 Upgrade Kit for MapIT G2 Ready Fiber Enclosure  
(Upgrade kit includes PCB with built-in sensor pads, LED's and LCD display, new front panel cover, additional mounting hardware and components with instructions), software sold separately

\*Singlemode available, contact Customer Service for more information

# MapIT® G2 Fiber Systems

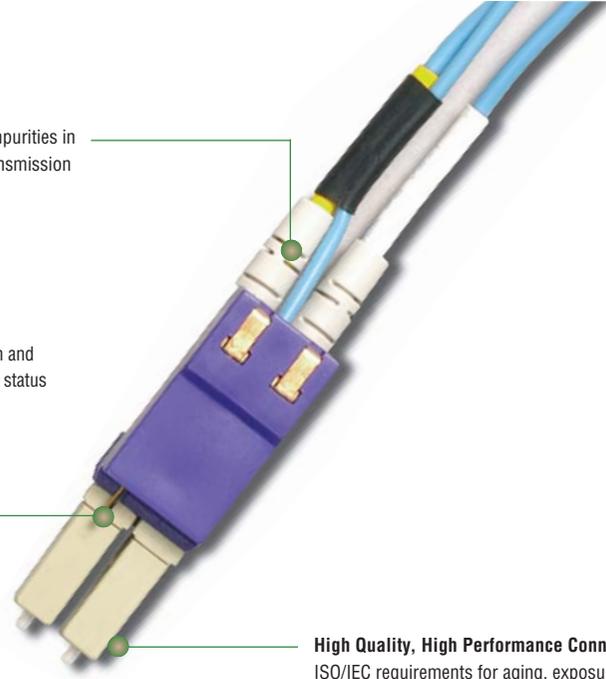
## MapIT G2 XGLO® Jumpers

XGLO MapIT G2 jumpers are built to be the best. These assemblies are constructed with premium fiber that meets IEEE, IEC and TIA specifications for 10 Gigabit Ethernet serial transmission. These advanced cords feature patented MapIT sensor technology — gold-plated sensor pins retained in robust molded connector clips. These jumpers enable tracking of port connections between MapIT G2 fiber enclosures and LAN equipment.

**XGLO Laser Bandwidth Optimized Cable** — Reduces impurities in the core of fiber, ensuring robust 10 Gigabit Ethernet transmission

**Reliable Integrated Sensor Connections** — 1 sensor pin and copper wire per each duplex connector tracks connectivity status

**High Quality, High Performance Connectors** — Jumpers exceed TIA and ISO/IEC requirements for aging, exposure to humidity, temperature extremes, impact, vibration, coupling strength, and cable resistance to stress and strain



## Ordering Information

### MapIT G2 XGLO Multimode Duplex Jumpers:

M-J2-LCLC(XX)-(XX) . . . . . LC-LC duplex jumper, MapIT G2 XGLO 50/125 laser optimized multimode fiber, aqua jacket

Fiber Type	Length
5L = OM3	01 = 1 m (3.3 ft.)
5V = OM4	03 = 3 m (9.8 ft.)
	05 = 5 m (16.4 ft.)

### MapIT G2 XGLO Singlemode Duplex Jumpers:

M-J2-LCULCUL-(XX) . . . . . LC-LC duplex jumper, MapIT G2 XGLO OS1/OS2 singlemode fiber, yellow jacket

Length
01 = 1 m (3.3 ft.)
03 = 3 m (9.8 ft.)
05 = 5 m (16.4 ft.)