



# **Next-Generation Infrastructure Management for your Physical Layer**

As your network infrastructure environments become ever more complex and diverse, the ability to effectively monitor, manage and protect your connections, no matter where they are, is more critical than ever. Siemon's MapIT® G2 has been developed to provide the ideal solution and integrates a powerful combination of innovative hardware and connectivity with next-generation software. It provides users with exceptional real-time tracking and reporting for their network-wide physical layer activity and provides them with an intelligent foundation that will scale with their ever-changing needs.

# Monitor, Manage and Protect Your Network. Wherever it is.





# **Monitor**

# **Detailed Network Views**

Hierarchical views map your entire network, from rack and cabinet infrastructure views, to work area and floor layouts - all with complete circuit diagrams, including active equipment. Circuit diagrams are also displayed locally on MapIT® G2's LCD-equipped Control Panels.

# **Database Accuracy**

All network information is stored in a software-driven database, which is automatically updated in real-time as moves, adds and changes are made, ensuring that the network condition is known at all times.

# **Reduced Downtime**

MapIT G2 circuit trace capability quickly identifies the location of a fault in a channel. Information can be displayed on MapIT panels to guide on-site staff, drastically reducing the time required to find and fix a network outage.



# Manage

# **Maximize Utilization of Networking Assets**

Detailed utilization reports, generated by our next-generation EagleEye Red™ software, allows users to see available switch or patch panel ports. End devices can be tracked by location, equipment type, manufacturer, service or other criteria, providing better visibility and utilization of these critical assets.

# Remote Site Management

MapIT G2 provides a real-time view of networks at remote offices, helping to ensure compliance with corporate IT policies and discouraging unauthorized changes to the network.

## **Streamline Work Order Processes**

EagleEye Red features an integrated work order module to ensure that orders are completed properly. Plus, our innovative Main Control Panels (MCP) and Smart Patch Panels (SPP) help to guide technicians on work order steps and indicate if an action is done correctly or not.

# **Protect**

#### **Real-Time Alerts**

EagleEye Red can send e-mail alerts to IT or security staff in real-time when unauthorized events occur on the network, such as detecting unauthorized devices attempting to connect to your LAN.

# **Regulatory Compliance**

EagleEye Red maintains an audit log of all network events, simplifying compliance with regulatory mandates, including: Sarbanes-Oxley, ITIL, HIPAA, FDA 21 CFR Part II, etc.

# **Improved Response Times**

EagleEye Red features a robust search engine, allowing users to quickly locate any item on your network, view its attributes and connection status and then action additional support if required.





# THE MAPIT® G2 DIFFERENCE

# **Powerful**

The Main Control Panel (MCP) collects data from all panels in the system and relays it to the MapIT database. This advanced device provides a large LCD screen and keypad to interface to the EagleEye Red™ software - eliminating the need for technicians to access the software directly.

# Interactive

Smart Patch Panels (SPP) and fiber enclosures feature a graphic LCD for patch cord tracing, displaying diagnostics and technician guidance. The LCD can also display dynamic labeling information pulled directly from the EagleEye database.

## Reliable

All MapIT G2 system components have been through extensive durability testing and exceed 20-year Mean Time Between Failures (MTBF) parameters. Our MCPs all feature built-in redundant power and Ethernet connections and the entire MapIT system is modular by design. The result is that in the unlikely event of component failure, they can be easily replaced or repaired without disrupting critical network connections and applications.

# **Efficient**

MapIT® G2 has been designed with energy efficiency in mind and uses up to 75% less power than other intelligent cable management systems. It also features timeout settings, which can reduce power consumption even further. MapIT G2 components are optimized to run cool in data center applications and generate virtually no heat and do not require cooling fans. The low profile 1U footprint for the patch panels and enclosures also means that they do not impede airflow within cabinets.

**CONSUMPTION, GREATER FLEXIBILITY** 

# Compact

MapIT G2's innovative design dramatically reduces the amount of rack space required for Automated Infrastructure Management (AIM) components. Because the intelligence is built into the Smart Patch Panels, MapIT G2 provides up to 80% better density than competing systems. For example, some systems require up to 60U to manage 20,000 ports, whereas MapIT G2 can achieve the same level of ports with only 7U of space required in your cabinets/racks.

## **Smart**

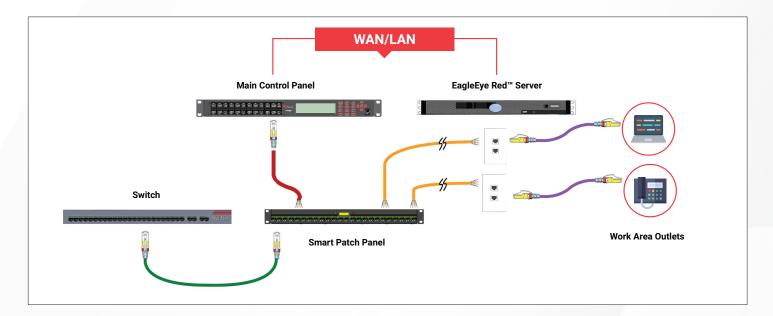
With intelligence built into the Smart Patch Panels and fiber enclosures, there's no need to run individual cable from a central analyzer or scanner to each panel, which dramatically reduces the amount of pathway space required to make your connections. For example, in even a medium size installation with about 2,000 managed ports, the cable required to connect MapIT G2 components require up to 76% less pathway space versus competing systems.

# ADAPTABLE TO YOUR ENVIRONMENT

# Interconnect Topology

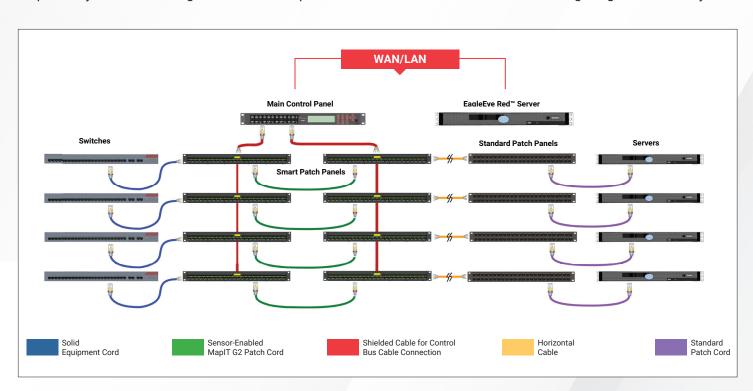
The interconnect topology allows patching directly from switch ports to MapIT G2 patch panel ports (copper and fiber). This reduces the number or panels required vs a cross-connect topology (panel to panel patching), reducing cost in increasing density.

Horizontal and work area connections use standard (non-MapIT) connectivity, making MapIT G2 system implementation simple and straightforward.



# **Cross-Connect Topology**

With the enhanced flexibility requirements of a data center, an additional layer of standard connectivity is added to the MapIT G2 system. This configuration allows MapIT G2 to monitor critical connections with a high degree of accuracy.



# MAPIT® G2 AUTOMATED INFRASTRUCTURE MANAGEMENT SYSTEM

Despite the benefits to network professionals, AIM systems have earned a reputation as difficult, and complicated to implement. As much as the management efficiencies and security capabilities of these systems provide a clear and immediate impact on network operations, their perceived complexity has been a barrier to some.

MapIT G2 was developed specifically to eliminate complexity. By bringing intelligence directly to the patch panel and fiber enclosure, systems are deployed faster with better functionality. These control panels then provide a central interface to the EagleEye Red™ software, providing a single connection to your entire network.

## **Control Panels**

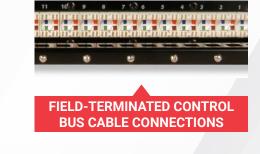
The MapIT G2 MCPs and Distribution Control Panels (DCPs) collect all network infrastructure data provided by the Smart Patch Panels and fiber enclosures, monitoring up to 2,880 ports in just 1U of cabinet/rack space. The MCP and DCPs feature an integrated LCD display and keypad, which provide technicians access to critical network architecture and diagnostic information. By providing this interactive interface locally within the patching zone, MapIT G2 virtually eliminates the need for technicians to carry mobile devices or directly access the EagleEye Red software. 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.



Part Number	Description
M-MCP-R2	Copper MapIT G2 main control panel, 24-port, 1U, Black
M-DCP	Copper MapIT G2 distribution control panel, 1U, Black*







REDUNDANT POWER & ETHERNET

# **Smart Patch Panels**

The MapIT® G2 Smart Patch Panel (SPP) is an industry first in Automated Infrastructure Management. The panel features on-panel intelligence including a combination of LEDs and a backlit graphic LCD which can be used to display patch cord trace and diagnostic information, which provides the ideal guide for technicians during MAC work, increasing accuracy and productivity. Since it is actively connected to your database, you could even use it as a virtual labeling system, dynamically displaying panel and port information directly from the MapIT G2 database.



MapIT G2 Flat Patch Panel

# **MapIT G2 Smart Patch Panel**

Part Number	Description
M-SPP(X)-K24ENS	MapIT G2 24-port modular smart patch panel, Accepts Siemon shielded and unshielded Z-MAX® keystone outlets and UltraMAX™ UTP 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



MapIT G2 Angled Patch Panel

## MapIT G2-Ready Patch Panel

Part Number	Description
M-SPP(X)-K24E-001	MapIT G2-Ready 24-port modular patch panel, Accepts Siemon shielded and unshielded Z-MAX Keystone outlets and UltraMAX UTP 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



MapIT G2 TERA® Patch Panel

# MapIT G2 TERA® Patch Panel

Part Number	Description
M-SPPA-T24K	MapIT G2 TERA panel, 24-port, Angled, Black, 1U, Sold with TERA outlets
M-SPPA-T24-01K	MapIT G2-Ready TERA panel, 24-port, Angled, Black, 1U, Sold with TERA outlets

#### **Patch Cords**

These advanced patch cords feature a 9<sup>th</sup> wire and gold-plated sensor pin contained in a robust over-molded boot. This embedded sensor technology enables effective tracking of connections between Smart Patch Panel ports.



MapIT G2 (RJ45) Sensor-Enabled Copper Patch Cord - Category 6A Shielded

# MapIT G2 (RJ45) Sensor-Enabled Copper Patch Cords

Part Number	Description
M-10GMCS-(XX)M(XX)L	Category 6A shielded, Double-ended, Stranded modular cord, Color-matching boot, T568A/B, LSOH

Use first (XX) to specify length: 01 = 1 meter (3.3 ft.), 02 = 2 meter (6.6 ft.), 03 = 3 meter (9.8 ft.), 05 = 5 meter (16.4 ft.) Use second (XX) to specify jacket color: 02 = White, 04 = Gray, 06 = Blue

Part Number	Description
M-MC6-(XX)-(XX)	Category 6 UTP, Double-ended, Stranded modular cord, Color-matching boot, T568A/B, CMG

Use first (XX) to specify length:

03 = 0.91 meter (3 ft.), 05 = 1.52 meter (5 ft.), 07 = 2.13 meter (7 ft.), 10 = 3.05 meter (10 ft.), 15 = 4.57 meter (15 ft.), 20 = 6.10 meter (20 ft.) Use second (XX) to specify jacket color: 02 = White, 04 = Gray, 06 = Blue

Part Number	Description
M-10GMC-(XX)-(XX)	Category 6A UTP, Double-ended, Stranded modular cord, Color-matching boot, T568A/B, LSOH

Use first (XX) to specify length:

03 = 0.91 meter (3 ft.), 05 = 1.52 meter (5 ft.), 07 = 2.13 meter (7 ft.), 10 = 3.05 meter (10 ft.), 15 = 4.57 meter (15 ft.), 20 = 6.10 meter (20 ft.) Use second (XX) to specify jacket color: 02 = White, 04 = Gray, 06 = Blue





MapIT G2 TERA Patch Cords - 2-Pair

MapIT G2 TERA Patch Cords - 4-Pair

# MapIT G2 TERA Patch Cords - 2-Pair

Part Number	Description
M-T2E2-(XX)M-B(XX)L	TERA to 5e screened RJ45 cable assembly, Ivory jacket, Colored boot, LSOH

Use first (XX) to specify cord length: 01 = 1m (3 ft.), 02 = 2m (6 ft.), 03 = 3m (9 ft.), 05 = 5m (16 ft.) Use second (XX) to specify boot color: 01 = Black, 02 = White, 03 = Red, 04 = Gray, 06 = Blue

# MapIT G2 TERA Patch Cords - 4-Pair

Part Number	Description
M-T4(X)-(XX)M-B(XX)L	Category 7A, S/FTP cable assembly, Ivory jacket, Colored boot, LSOH

Use (X) to specify plug type: Blank = TERA 4-pair to TERA 4-pair, A = TERA to Cat. 6A RJ45 T568B wired, B = TERA to Cat. 6A RJ45 T568A wired Use first (XX) to specify cord length: 01 = 1m (3 ft.), 02 = 2m (6 ft.), 03 = 3m (9 ft.), 05 = 5m (16 ft.) Use second (XX) to specify boot color: 01 = Black, 02 = White, 03 = Red, 04 = Gray, 06 = Blue

# **Smart Fiber Enclosures**

The MapIT® G2 Smart Fiber Enclosure (SFE) combines on-panel intelligence with high-performance fiber connectivity and user-friendly management features to deliver a best-in-class, truly intelligent solution. Similarly to the Smart Patch Panels, the SFE's integrated LCD screen can be used to display patch cord trace and diagnostic information, which provides the ideal guide for technicians during MAC work, increasing accuracy and productivity.





# MapIT G2 MTP-to-LC Smart Fiber Enclosure

Part Number	Description
M-SMTP-LC5V48NS	MapIT G2 48-fiber MTP-to-LC smart fiber enclosure, Black, Multimode, 0M4 Includes 24 duplex MM, LC adapters, Cable ties, Panel ground lug, Fiber management clips, Front management bar, Label holder and labels
M-SMTP-LCSM48NS	MapIT G2 LC 48-fiber MTP-to-LC smart fiber enclosure, Black, Singlemode, OS1/OS2 Includes 24 duplex SM, LC adapters, Cable ties, Panel ground lug, Fiber management clips, Front management bar, Label holder and labels

# MapIT G2 LC-to-LC Smart Fiber Enclosure

Part Number	Description
M-SFE-LC48-NS	MapIT G2 48-fiber smart fiber enclosure, Black, Multimode OM3/OM4 Includes 24 duplex MM, LC adapters, Cable ties, Panel ground lug, Fiber management clips, Label holder and labels
M-SFE-LC48-NSC	MapIT G2 LC 48-fiber smart fiber enclosure, Black, Singlemode OS1/OS2 Includes 24 duplex SM, LC adapters, Cable ties, Panel ground lug, Fiber management clips, Label holder and labels

# MapIT® G2-Ready MTP-to-LC Plug and Play Fiber Enclosure

Part Number	Description
M-MTP-LC5V48-01	MapIT G2-Ready MTP-to-LC enclosure, Black, Multimode OM4 Includes 24 duplex MM/LC adapters, Cable ties, Panel ground lug, Fiber management clips, Front management bar, Label holder and labels
M-MTP-LCSM48-01	MapIT G2-Ready MTP-to-LC enclosure, Black, Singlemode OS2 Includes 24 duplex SM/LC adapters, Cable ties, Panel ground lug, Fiber management clips, Front management bar, Label holder and labels

# MapIT G2-Ready LC-to-LC Fiber Enclosure

Part Number	Description
M-FE-LC48-01	MapIT G2-Ready enclosure, Black, Multimode OM3/OM4 Includes 24 duplex LC adapters, Cable ties, Panel ground lug, Fiber management clips, Label holder and labels
M-FE-LC48-01C	MapIT G2-Ready enclosure, Black, Singlemode OS2 Includes 24 duplex LC adapters, Cable ties, Panel ground lug, Fiber management clips, Label holder and labels

# **Fiber Optic Jumpers**

The MapIT G2 system includes a range of high-performance fiber optic jumpers. These utilize Siemon's premium XGL0® fiber that meets ISO, IEC and TIA specifications for 10G Ethernet transmission. These advanced cords feature patented MapIT G2 sensor technology, supported by gold-plated sensor pins housed in robust molded connector clips.







Interconnect Multimode Jumper







# **MapIT G2 XGLO Duplex Jumpers**

Part Number	Description
M-(XX)-(YYYYYY)-(ZZ)	LC-LC duplex jumper, MapIT G2 XGLO 50/125 multimode fiber, Aqua jacket LC-LC duplex jumper, MapIT G2 XGLO singlemode fiber, Yellow jacket

Use (XX) to specify jumper type: J2 = Cross-connect jumper, JE = Interconnect jumper
Use (YYYYYYY) to specify mode: LCLC5L = Multimode OM3, LCLC5V = Multimode OM4, LCULCUL = Singlemode OS2
Use (ZZ) to specify length: 01 = 1m (3 ft.), 03 = 3m (10 ft.), 05 = 5m (16 ft.)

Jacket is constructed of Riser equivalent materials but is not third party listed or certified. LSOH versions are available on request.

# **Accessories**

# Upgrade/Replacement Kit for MapIT® G2 SSP

Part Number	Description
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

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

# Upgrade/Replacement Kit for MapIT G2 TERA

Part Number	Description
M-SPPAT-PCBA-24	MapIT G2 TERA panel upgrade kit Includes PCB with built-in sensor pads, LED's and LCD display, New front panel cover, Additional mounting hardware & components with instructions

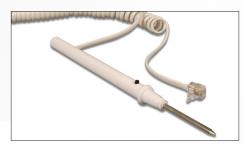
# **Upgrade/Replacement Kit for MapIT G2 Fiber Enclosures**

Part Number	Description
M-SFE-PCBA-24	MapIT G2 upgrade kit for MapIT G2 ready fiber enclosure Includes PCB with built-in sensor pads, LED's and LCD display, New front panel cover, Additional mounting hardware & components with instructions



# **Power Supply**

Part Number	Description
M-PS	6v, 3 amp power supply, Adapter/cord for MCP or DCP



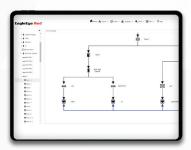
# Replacement Probe Pen

Part Number	Description
M-PEN	MapIT G2 probe pen, 7.62m (25 ft.) cord



# **NEXT-GENERATION NETWORK MANAGEMENT**

Siemon's MapIT® G2 Automated Infrastructure Management (AIM) hardware is supported by our innovative EagleEye Red™ software, which helps users better document and manage their IT network and devices. HTML5-based, EagleEye Red is a highly visual and intuitive software which provides a range of graphical views for rack and floor layouts and infrastructure node hierarchies. Its multi-tiered network discovery protocols allow users to easily scan and find all IP-based devices within their network and positions assets at their correct locations.



## **End-to-End Circuit Trace**

EagleEye Red allows users to view their end-to-end circuit layout, including cable and network devices, from the switch port to the end device.



# **Interactive Floor Diagrams**

Users can access an interactive view of their floor layout, allowing them to interact with different assets within the environment.



# **Comprehensive Rack View**

Users can view the front and rear of their rack elevations in 2D, allowing them to easily monitor in-rack connections.

# **Additional Features:**

# **Simple Management**

The real-time database with auto-discovery stores the status and location of all cabling and IT assets to minimize troubleshooting time and maximize equipment and rack utilization.

#### **Intuitive Documentation**

Real-time physical layer documentation and monitoring including discovery of IT devices, interactive floor images, rack elevations and end-to-end circuit traces.

#### Integration

EagleEye Red features a robust API, allowing for integration with a range of 3rd party applications - compliant with ISO/IEC AIM standards.

# **Detailed Analytics**

Users benefit from a wide range of out-of-the-box reports allowing them to unlock insights quicker.

# **Enhanced Security**

All network activity is detected and recorded in real time, 24/7. Instant alerts on unauthorized access or modification are provided into a single customized screen view making it ideal for NOC teams.

# **Streamlined Orders**

An intuitive 'work order module' automatically assigns, directs and tracks work orders. This improves accuracy, speeds up processes and maintains visibility of activity throughout the system.

Discover more about EagleEye Red at: www.siemon.com/eagleeye

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