

# Mobile Access Portal Gateway Catalog Page

TL-MAP1810-0P, TL-MAP1810-0S, TL-MAP1810-0PE,  
TL-MAP1810-0PA

Code No. LIT-1900869  
Software Release 4.2  
Issued February 2018

Refer to the [QuickLIT website](#) for the most up-to-date version of this document.

The Mobile Access Portal (MAP) Gateway is a pocket-sized web server that provides a wireless mobile user interface to *Metasys*® Field Controllers, FX Field Controllers, CH Field Controllers, TEC3000 Series Thermostats, and Smart Equipment Rooftop Units (RTUs). The mobile user interface can be displayed in the browser of a phone, tablet, or computer.

The MAP Gateway ships from the factory with a base set of features that allow users to access, view, edit, and override key information from all devices connected on a common BACnet Master-Slave/Token Passing (MS/TP) field bus. The wireless connection on the MAP Gateway allows users to be up to 31m (100 ft line of sight) away indoors and up to 91 m (300 ft line of sight) away outdoors. The MAP Gateway can also be permanently mounted, powered with an optional separate power supply and connected to an Ethernet access point for use as remote connection to a MS/TP field bus of devices.

The MAP Gateway can be upgraded to Release 4.2 to provide a complete set of Commissioning and Wiring Validation functions targeted for use by electricians, commissioning contractors, and technicians. The Release 4.2 upgrade can be acquired from Johnson Controls internal portal pages or Authorized Building Controls System (ABCS) Contractor portal pages. These updates are complimented by a set of targeted videos that are available using the following link <https://jcpbublic.kzoplatform.com/containers/957891534378768109>.

The MAP Gateway **cannot** be used on Smoke Control systems or at Metasys for Validated Environment (MVE) sites.

Figure 1: Mobile Access Portal Gateway



## Features and Benefits

### Standard Release 4.0 Functionality from the Factory

- **Simple Broer-Based User Interface**—The MAP Gateway has a consistent, intuitive, menu-driven set of browser based views that allow you to quickly navigate between the connected devices and drill down into the point and feature data supported by each device type.
- **Secure Wi-Fi Connectivity to Multiple Platforms**—The MAP Gateway communicates securely using WiFi to smart phones, tablets or personal computers. The browser-based user interfaces automatically conforms to the size constraints of the connected platform
- **Carry with You or Leave on Site**—The MAP Gateway can be used as a basic, portable commissioning tool to view, adjust, or override the key points on the supported field controllers connected on an MS/TP network. When permanently mounted and connected to an MS/TP network, the MAP provides a secure local display option for the connected devices.
- **Access to Advanced Application Field Controller Schedules, Alarms and Trends**—The MAP Gateway allows you to view alarms, events, and trends, and modify the schedules created for an advanced application controller.
- **Permanent Audit Log**—Allows you to export and view a log file to review all user logins, transactions, and to log any events generated from the connected controllers.

### Release 4.2 Upgrade Functionality

- **Advanced Commissioning and Validation Framework**—A new framework for technicians, installers and balancers to setup and organize their tasks for each MS/TP network.
- **Tailored Summaries**—You can easily add attribute templates into your MAP Gateway to provide multi-point views for each device. While in this view, you can sort values and mass override points on multiple controllers.
- **Device Checkout**—This view allows an installer or technician to verify the point wiring for each controller in an organized manner, and provide a report that captures their verification steps.
- **Live Trend**—You can select up to 4 points on a controller and are presented with a live trend graph. During the trending session, you are allowed to command a setpoint, or override an output, to verify that control processes or end devices are functioning properly.
- **VAV Box Air Balancing**—A balancing contractor can quickly perform their tasks on any single duct, dual duct, or supply exhaust VAV Box configuration. A dual point balancing option is also available for use on critical space.
- **Reporting Options**—At the completion of a commissioning and validation session, all the steps performed can be captured and saved in report that is organized by the framework setup at the beginning of the session.
- **BACnet Router Setup for Tool Connections**—The BACnet Router setup has been updated to allow the MAP Gateway to easily connect to the Field Controller and System Tools through a WIFI connection to perform file transfers and commissioning functions.

## Ordering Information

Contact your Johnson Controls® representative to order the MAP Gateway or any related products. See [Table 1](#) for product code numbers and product descriptions.

**Table 1: Ordering Information**

Product Code Number	Country/Region	Description
TL-MAP1810-0P	US / Canada	Portable MAP Gateway - includes MAP Gateway, RJ-12 cable, protective shell, and lanyard
TL-MAP1810-0S	US / Canada	MAP Gateway - includes MAP Gateway, field bus adapter, mounting bracket, and AC power supply (Adapters for the power supply may vary by country.)
TL-MAP1810-0PE	Europe - All EU Countries	Portable MAP Gateway for Metasys, FX, and BCPro™ systems - includes MAP Gateway, RJ-12 cable, protective shell, and lanyard
TL-MAP1810-0PA	Asia - China, Japan, Australia, New Zealand, India, Singapore, Thailand, and Hong Kong	Portable MAP Gateway for Metasys, FX, and BCPro systems - includes MAP Gateway, RJ-12 cable, protective shell, and lanyard

## Accessories (Order Separately)

**Table 3: Accessories**

Product Code Number	Description
MP-STAKIT-0H	Stationary Mounting Cradle Kit - includes mounting bracket, field bus adapter, and AC power supply. <b>North America only.</b>
MP-PWRKIT-0D	MAP Universal Power Supply for Non-North America Markets
MP-PRTKIT-0P	Portable Kit - includes RJ-12 cable, shell, and lanyard.
MP-STAKIT-0	Stationary Mounting Cradle only - includes mounting bracket.
MP-STAFBA-0	Field Bus Adapter - RJ-12 to 4-position Terminal Block Adapter. Used for connecting directly to MS/TP Field Bus.

## Related Documentation and Videos

**Table 3: Related Documentation and Videos**

For Information On	See Document or Video
Getting started with MAP Gateway	<i>Mobile Access Gateway Portal Quick Start Guide (Part No. 24-10737-16)</i>
Getting started with MAP Gateway (Asia)	<i>Mobile Access Portal Gateway Quick Start Guide (Part No. 24-10737-164)(Asia)</i>
Getting started with MAP Gateway (Europe)	<i>Mobile Access Gateway Portal Quick Start Guide (Part No. 24-10737-148)(Europe)</i>
Installing and wiring MAP Gateway	<i>Mobile Access Gateway Portal Installation Instructions (Part No. 24-10737-8)</i>
Ordering MAP Gateway	<i>Mobile Access Portal Gateway Catalog Page (LIT-1900869)</i>
Using MAP Gateway	<i>Mobile Access Portal Gateway User's Guide (LIT-12011999)</i>
Installing and using private keys and security certificates	<i>Mobile Access Portal Gateway Network and IT Guidance Technical Bulletin (LIT-12012015)</i>
Using Commissioning Features	<i>Mobile Access Portal Gateway (MAP) training videos at <a href="https://jcpublish.kzoplatform.com/containers/957891534378768109">https://jcpublish.kzoplatform.com/containers/957891534378768109</a></i>

## Technical Specifications

**Table 4: MAP Gateway**

Product Code	<p><b>TL-MAP1810-0P, TL-MAP1810-0PE, TL-MAP1810-0PA:</b> Portable MAP Gateway - includes MAP Gateway, RJ-12 cable, bumper guard, and lanyard.</p> <p><b>TL-MAP1810-0Sx:</b> Stationary MAP Gateway - includes MAP Gateway, field bus adapter, mounting bracket, and AC power supply. (Adapters for the power supply may vary by country.)</p>
Power Consumption	From SA/FC bus: 15 VDC at 2.7 VA maximum
Ambient Temperature Conditions	<p><b>Operating:</b> 0°C to 50°C (32°F to 122°F)</p> <p><b>Operating Survival:</b> -30°C to 60°C (-22°F to 140°F)</p> <p><b>Non-Operating:</b> -40°C to 70°C (-40°F to 158°F)</p>
Ambient Humidity Conditions	<p><b>Storage:</b> -40°C to 70°C (-40°F to 158°F); 5 to 95% RH 30°C (86°F) maximum dew point conditions</p> <p><b>Operating:</b> 0°C to 50°C (32°F to 122°F); 5 to 95% RH, 30°C (86°F) maximum dew point conditions</p>

**Table 4: MAP Gateway**

<b>Transmission Power (Typical)</b>	<b>Wireless Local Area Network (WLAN) Transmission Power:</b> +14.5 dBm, 54 Mbps +12.5 dBm, 65 Mbps
<b>WLAN Receiver Sensitivity (Typical)</b>	-76 dBm, 10% packet error rate (PER ), 54 Mbps -73 dBm, 10% PER, 65 Mbps
<b>Transmission Speeds</b>	<b>Wireless Communication:</b> 2.4 GHz ISM bands, 802.11 b/g/n, 11/22/54 Mbps <b>Serial Communication (SA/FC Bus):</b> 9600, 19.2k, 38.4k, or 115.2k bps <b>Ethernet Communication:</b> 10, 100 Mbps
<b>Transmission Range (Typical)</b>	<b>Wireless Communication:</b> 30 m (100 ft) line-of-sight indoors 91 m (300 ft) line-of-sight outdoors <b>WLAN Range Performance:</b> 0 ft to 50 ft = Excellent 50 ft to 100 ft = Good 100 ft to 300 ft = Weakest, approaching out of range
<b>Wireless Security</b>	WPA2-PSK TKIP (Wi-Fi Protected Access Pre-Shared Key mode Temporal Key Integrity Protocol)
<b>Network and Serial Interfaces</b>	One SA/FC port (6-pin port; connects with 1.5 m [4.9 ft] RJ-12 field bus cable) One USB port (Micro-B port; 2.0; supports Open Host Controller Interface [Open HCI] specification)
<b>Dimensions (H x W x D)</b>	Unit alone: 120 mm x 70 mm x 24.5 mm (4-23/32 in. x 2-3/4 in. x 31/32 in. when used vertically) Unit in shell: 128 mm x 75 mm x 29.5 mm (5-1/32 in. x 2-61/64 in. x 1-5/32 in. when used vertically)
<b>Housing</b>	White Acrylonitrile butadiene styrene (ABS) bracket Black silicone shell
<b>Weight</b>	Unit alone: 0.10 kg (0.22 lb) Unit in shell: 0.15 kg (0.33 lb) <b>Note:</b> Weights do not include any peripheral components such as cables, lanyard, or an external power supply.
<b>Web Browser Requirements for Computers and Handheld Devices</b>	<b>Computer:</b> Windows® Internet Explorer® 10 and Windows Internet Explorer 11, Apple® Safari® 6.1 and later, or Google® Chrome™ <b>Handheld Device:</b> The handheld device must be running either Internet Explorer Mobile for Windows Mobile version 5 or version 6 operating system (OS); Apple® iPhone® and iPod touch® iOS version 7.0 or greater; or Android™ 4.0.3, 4.0.4, and 4.1+, or Google Chrome. Other web browsers may display the UI, but the functionality is not guaranteed.
<b>Compliance</b>	<b>United States:</b> UL Listed File E365459, ANSI/UL 60950-1, Information Technology Equipment; UL 2043 (Stationary version only), Suitable for Use in Other Environmental Air Space in Accordance with Section 300.22, (C) of the National Electric Code. Transmission Complies with FCC Part 15.247 Regulations for Low Power Unlicensed Transmitters Transmitter FCC Identification: OEJ-MAPWIFI FCC Compliant to CFR 47, Part 15, Subpart B, Class A <b>Canada:</b> Industry Canada IC: 279A-MAPWIFI ULC Listed File E365459, CAN/CSA-C22.2 No. 60950-1, Safety of Information Technology Equipment

*The performance specifications are nominal and conform to acceptable industry standard. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.*



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