

# **Mobile Access Portal Gateway Catalog Page**

TL-MAP1810-0Px, TL-MAP1810-0Sx

Code No. LIT-1900869 Software Release 4.0 Issued March 2016

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 Smart Equipment and Johnson Controls branded system controllers and thermostats. Small, lightweight, and easy to use, the MAP Gateway joins the rapidly expanding list of Johnson Controls® products that leverage the power of mobility and smart devices to improve daily operations.

The MAP Gateway can be used to see field bus devices on *Metasys*® systems, Facility Explorer systems, and Smart Equipment rooftop units (RTUs) with unit control boards (UCBs). The MAP Gateway supports Johnson Controls branded Field Controllers, including FEC, FAC, VMA, PCA, PCG, and PCV Series devices. It also supports the TEC3000 Series Thermostats.

Offering many-to-one, multi-client connectivity, the MAP Gateway gives you access to any Smart Equipment device that is on a connected BACnet® Master-Slave/Token-Passing (MS/TP) field bus. The MAP Gateway solution is conveniently sized and has a built-in wireless access point. The MAP Gateway provides an intuitive, browser-based user interface to access advanced features like alarms and point configuration.

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

The wireless connection on the MAP Gateway allows users to be up to 31 m (100 ft, line of sight) away indoors and up to 91 m (300 ft, line of sight) away outdoors while using a supported mobile device. The MAP Gateway may be used as a portable device that can be moved from site to site, or as a stationary device attached to a controller and mounted where needed, depending on the needs and workflow of field personnel. During use, the MAP Gateway is plugged into an SA bus or FC bus

Refer to the *Mobile Access Portal Gateway Product Bulletin* (*LIT-12011884*) for additional product application information.

If the MAP Gateway fails to operate within its specifications, replace the unit. For a replacement MAP Gateway, contact the nearest Johnson Controls representative.

Figure 1: Mobile Access Portal Gateway



# **Features and Benefits**

Features	Benefits
Multi-client Connectivity	Provides access to all identifiable devices connected to the BACnet® MS/TP trunk.
Browser-based Interface	Offers a local display replacement solution that allows you to access device information through any supported web browser.
Wi-Fi Connectivity	Lets you commission, configure, and access building automation equipment using Wi-Fi-enabled smart devices or laptops.
Advanced Features	Allow you to view alarms, events, and trends; modify schedules; and commission devices.
Browser-based Remote Building Management	Allows remote management of building systems.
Permanent Audit Log	Allows you to export and view a log file to review all user logins and transactions, along with logging any events generated from the controllers.
Portable Size and Mobility	Allows for options to permanently mount or carry the unit from site to site.
Configurable Home Pages for Devices	Allows you to customize your work processes using the Display Object in the Controller Tool.
Easy-to-use Intuitive User Interface	Uses color coded bars on point listings to enable you to quickly get the most important statuses from a long list of points.

# **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	Description
TL-MAP1810-0Px <sup>1</sup>	Portable MAP Gateway - includes MAP Gateway, RJ-12 cable, protective shell, and lanyard
TL-MAP1810-0Sx <sup>1</sup>	Stationary MAP Gateway - includes MAP Gateway, field bus adapter, mounting bracket, and AC power supply (Adapters for the power supply may vary by country.)

Last digit (x) represents non-US country requirements.

# **Accessories (Order Separately)**

# Table 3: Accessories

Product Code Number	Description
MP-PRTKIT-0P	Portable Kit - includes RJ-12 cable, shell, and lanyard.
MP-STAKIT-0	Stationary Mounting Cradle only - includes mounting bracket and field bus adapter.
MP-STAKIT-0H	Stationary Cradle Kit - includes mounting bracket, field bus adapter, and AC power supply.
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**

#### **Table 3: Related Documentation**

Table 6. Related Boodinentation		
For Information On	See Document	
Getting started with MAP Gateway	Mobile Access Gateway Portal Quick Start Guide (Part No. 24-10737-16)	
Installing and wiring MAP Gateway	Mobile Access Gateway Portal Installation Instructions (Part No. 24-10737-8)	
Understanding features and benefits of MAP Gateway, including FAQs	Mobile Access Portal Gateway Product Bulletin (LIT-12011884)	
Ordering MAP Gateway	Mobile Access Portal Gateway Catalog Page (LIT-1900869)	
Using MAP Gateway	Mobile Access Portal Gateway User's Guide (LIT-12011999)	
Installing and using private keys and security certificates	Mobile Access Portal Gateway Network and IT Guidance Technical Bulletin (LIT-12012015)	

# **Technical Specifications**

#### Table 4: MAP Gateway

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Product Code <sup>1</sup>	TL-MAP1810-0Px: Portable MAP Gateway - includes MAP Gateway, RJ-12 cable, bumper guard, and lanyard.
	TL-MAP1810-0Sx: Stationary MAP Gateway - includes MAP Gateway, field bus adapter, mounting bracket, and AC power supply. (Adapters for the power supply may vary by country.)
Power Consumption	From SA/FC bus: 15 VDC at 2.7 VA maximum
Ambient Temperature	Operating: 0 to 50°C (32 to 122°F)
Conditions	Operating Survival: -30 to 60°C (-22 to 140°F)
	Non-Operating: -40 to 70°C (-40 to 158°F)
Ambient Humidity Conditions	Storage: -40 to 70°C (-40 to 158°F); 5 to 95% RH 30°C (86°F) maximum dew point conditions
	Operating: 0-50°C (32 to 122°F); 5 to 95% RH, 30°C (86°F) maximum dew point conditions
Transmission Power (Typical)	Wireless Local Area Network (WLAN) Transmission Power:
	+14.5 dBm, 54 Mbps
	+12.5 dBm, 65 Mbps
WLAN Receiver Sensitivity (Typical)	-76 dBm, 10% packet error rate (PER ), 54 Mbps
	-73 dBm, 10% PER, 65 Mbps



#### Table 4: MAP Gateway

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Transmission Speeds	Wireless Communication:
	2.4 GHz ISM bands, 802.11 b/g/n, 11/22/54 Mbps
	Serial Communication (SA/FC Bus):
	9600, 19.2k, 38.4k, or 115.2k bps
	Ethernet Communication:
	10, 100 Mbps
Transmission Range (Typical)	Wireless Communication:
	30 m (100 ft) line-of-sight indoors
	91 m (300 ft) line-of-sight outdoors
	WLAN Range Performance:
	0 - 50 ft = Excellent
	50 - 100 ft = Good
	100 - 300 ft = Weakest, approaching out of range
Wireless Security	WPA2-PSK TKIP (Wi-Fi Protected Access Pre-Shared Key mode Temporal Key Integrity Protocol)
Network and Serial Interfaces	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)
Dimensions	Unit alone: 120 x 70 x 24.5 mm (4-23/32 x 2-3/4 x 31/32 in. when used vertically)
(H x W x D)	Unit in shell: 128 x 75 x 29.5 mm (5-1/32 x 2-61/64 x 1-5/32 in. when used vertically)
Housing	White Acrylonitrile butadiene styrene (ABS) bracket
	Black silicone shell
Weight	Unit alone: 0.10 kg (0.22 lb)
	Unit in shell: 0.15 kg (0.33 lb)
	Note: Weights do not include any peripheral components such as cables, lanyard, or an external power supply.
Web Browser Requirements	Computer:
for Computers and Handheld Devices	Windows® Internet Explorer® 10 and Windows Internet Explorer 11, Apple® Safari® 6.1 and later, or Google® Chrome™
	Handheld Device:
	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.
Compliance	United States 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
	Canada: Industry Canada IC: 279A-MAPWIFI
	ULC Listed File E365459, CAN/CSA-C22.2 No. 60950-1, Safety of Information Technology Equipment

<sup>1</sup> Last digit (x) represents non-US country requirements.

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, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.



Building Efficiency

507 E. Michigan Street, Milwaukee, WI 53202

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