SmartStruxure™ Lite Solution

MPM Series
Wireless Manager (MPM-GW)

SmartStruxure Compatible
Site and zone managers providing 100% wireless integrated control solutions for HVAC, lighting, and metering, as well as remote management via StruxureWare™ Building Expert.

SmartStruxure Lite solution Wireless Manager Features

Multi-Purpose Management devices (MPM) enable the control, monitoring, and management of entire sites via StruxureWare Building Expert. They can also be used for wired and wireless zone control in larger buildings.

Control features
• Wireless control of EnOcean end-devices (optional, 49 points per MPM)
• Wireless control of ZigBee Pro end-devices (optional, 30 peripherals per MPM)
• Programmable via StruxureWare Building Expert
• Points visible through BACnet®, EcoStruxure® Web Services (EWS) and oBIX®
• Real-time response to scripting/graphical programming

Applications
The MPMP-GW has an aesthetic look, similar to a router, allowing for in-room deployment. It supports control and gateway functionality for wireless peripherals for the following applications:
• HVAC room and zone control (actuators, thermostats, sensors)
• Lighting room and zone control (switches, relays, sensors)
• Access (keycard readers and occupancy sensors)
• Wireless meters and sub-meters

Networking Between Units
• Wireless: ZigBee Pro wireless mesh network (self-forming/healing, 25 nodes per network)
• Wired: Daisy chain
• IP/Ethernet: Ethernet port

Embedded gateway
• EnOcean (wireless) to BACnet IP/oBIX/EWS
• ZigBee Pro (wireless) to BACnet IP/oBIX/EWS
• Modbus to BACnet IP/oBIX/EWS

StruxureWare Building Expert
All MPM models have an embedded web server hosting Building Expert, a web-based intelligent building management system that allows complete configuration and management of small sites. Building Expert offers dashboards, maps, graphical programming, scripting, scheduling, trend logging and more. It is the perfect mini-iBMS for small and medium buildings. It can also be integrated with other SmartStruxure solutions.
## SmartStruxure Lite solution Wireless Manager Specifications

### Power

- **Voltage**
  - 24VAC ± 15%; 50/60HZ
  - 24VDC ± 10%

- **Typical consumption**
  - 5 VA + Output (VAC), 1.6 W + Output (VDC)

- **Battery**
  - CR1220 3v Lithium Coin Cell Battery

### General

- **Processor**
  - ARM9 32-bit, 400MHz

- **Memory**
  - 64MB flash

- **Storage**
  - 4GB flash for local storage

- **Real-time clock**
  - Battery backed (10,000 hours)

- **Communication**
  - ZigBee Pro, EnOcean, BACnet CANbus (125-500 Kbps)
  - Ethernet (10/100 Mbps)

### Enclosure

- **Material**
  - Rigid ABS

- **Dimensions**
  - 116mm (4.57 in) x 191mm (7.52 in)

- **Rating**
  - UL94V0-5VB

- **Mounting**
  - Din-rail, wall or ceiling mount

### Environmental

- **Operating Temperature**
  - 0°C (32°F) - 60°C (140°F)

- **Storage Temperature**
  - -20°C (-4°F) - 60°C (140°F)

- **Relative Humidity**
  - 0 to 90% non-condensing

### EnOcean (optional)

- **Frequency**
  - 2400 – 2483.5MHz, 16RF channels

- **Data rate/Mod.type**
  - 250Kbps

- **Receiver Sensitivity**
  - -101dBm/-105dBm (amplified)

- **Nominal Output Power**
  - 8dBm/18dBm (amplified)

- **Range**
  - Recommended to MPM: 150ft/50m
  - Line of sight to MPM: 300ft/100m
  - Recommended to peripherals: 50ft/17m
  - Line of sight to peripherals: 100ft/30m

### ZigBee Pro (optional)

- **Frequency**
  - 315MHz, 868MHz, or 902MHz

- **Receiver Sensitivity**
  - -95dBm

- **Conducted Output Power**
  - 5dBm

- **Range**
  - Recommended: 45ft/15m
  - Line of sight: 100ft/30m

### StruxureWare™ Building Expert

- **Software type**
  - Embedded web interface

- **Local installation**
  - None necessary

- **PDA/Tablet/Smartphone compatible**
  - Yes, using compatible browsers

- **Browser compatibility**
  - Firefox ESR
  - Internet Explorer 10 (only)
  - Google Chrome
  - Safari (Mac only)

### Agency approvals

- CE
- Japanese Radio Law
- RoHS

### Disclaimer

- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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**Disclaimer**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada licence-exempt RSS standards. Operation is subject to the following two conditions:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d’Industrie Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :

- L’appareil ne doit pas produire de brouillage.
- L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

Changes or modifications not approved by the manufacturer could void the user’s authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
SmartStruxure Lite solution Wireless Manager

Ordering information

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<tr>
<th>Part numbers</th>
<th>Manager</th>
<th>EnOcean*</th>
<th>ZigBee Pro</th>
<th>I/O</th>
<th>VAV</th>
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*EnOcean: Contact EnOcean for the latest information about the frequency in your country.
315MHz: Americas, Hong Kong, India, Japan, Thailand, Taiwan
868MHz: Europe, China, Malaysia, Singapore, Vietnam, New Zealand
902MHz: USA has transitioned to 902 MHz in 2013. Other countries may do so as well.

Unlike MPM-GW models, the MPM-NW-000-5045 comes with dark casing. This model is only used as a gateway with CANbus networking capabilities. It has no wireless communication capabilities.