NETWORK CONTROLLER

LMJA-8125-SM/LMJA-8300-SM

Provides global control of DLM segment networks and access to advanced features

Support for both Wired and Wireless DLM network Bridges

Runs Niagara N4.9 with DLM Segment Manager Station

Designed for and supports third party integration with BAS through BACnet/IP

Create, view and edit building schedules and scenes

Can support custom floor plans UI through 3rd party

Setup, enable and disable demand response

ioXt internet of secure things

ASHRAE BACnet®

DESCRIPTION

The LMJA-8xxx-SM is a Network Controller designed to communicate with Wired and Wireless DLM Network Bridges, for local in-room wired networks and/or LMCP panels. It provides control, monitoring, adjustment, and standard or Human Centric Lighting (HCL) scheduling functionality for networked DLM systems. The Network Supervisor is a PC server running similar software designed to coordinate control of multiple LMJA-8xxx-SMs and store historical data.

OPERATION

The LMJA communicates with DLM local in-room wired networks and panels over a BACnet MS/TP segment network. The LMJA-8xxx-SM can support two direct-connected MS/TP segment networks (with an additional two segment networks added via the LMJA-NPB-2X-485 option), or BACnet IP to LMBR/LMBC-650's as well as NB-ROUTERs.

The LMJA-8xxx-SM communicates with users over a TCP/IP connection. When using an LMJA-8xxx-SM with DLM Segment Manager Station, you can connect to any device running a compatible web browser, and is required for initial set up and configuration. For large sites with multiple LMJA units, Supervisor software may be used for centralized control of multiple segments. A BACnet BAS may communicate with an LMJA via BACnet/IP, accessing an Export Table that exposes a selection of application-specific BACnet objects. The LMJA-8125-SM supports up to 125 rooms, 200 devices, and 6250 points. The LMJA-8300-SM supports up to 340 rooms 2000 devices and 15000 points.

SCHEDULING, MONITORING & ADJUSTMENT

Using the Niagara 4 DLM Segment Manager station, users can easily monitor and manage DLM rooms and floors using the hierarchical building tree view to see load status. Configuration enables basic adjustment of DLM device parameters including occupancy sensor settings, load parameters, and dimming parameters. Normal hours and after hours parameters can be set or adjusted and users can create, view, and edit daily and weekly repeating event-based schedules.

APPLICATIONS

The optional LMJA-8xxx-SM with DLM Segment Manager Station and Niagara 4 Supervisor is an ideal solution for managing lighting and plug load energy use, and providing remote access to DLM local networks. Also projects that require automatic reconfiguration of device settings based on a schedule.

PROJECT		LOCATION/ TYPE	

FEATURES

- Communicates all DLM local network data and device information via the Wired or Wireless Room to Room (or Segment) Network
- Browser-based UI uses SSL industry standard communications and can be accessed via direct TCP/IP connection, local LAN or via the Internet
- Create standard and Blanco-based HCL lighting schedules. Schedules may be repeating seven day, calendar event based or astronomic control
- Integration with BAS standard BACnet objects to represent DLM
- Adjusts scheduling of normal and after hours
- Allows remote changes to occupancy sensor and daylighting sensor settings in real time
- Allows real time current monitoring of rooms and groups when using load controllers with current monitoring circuitry (e.g. LMRC-11x, LMRC-61x, LMPL-11x, LMPL-61x)

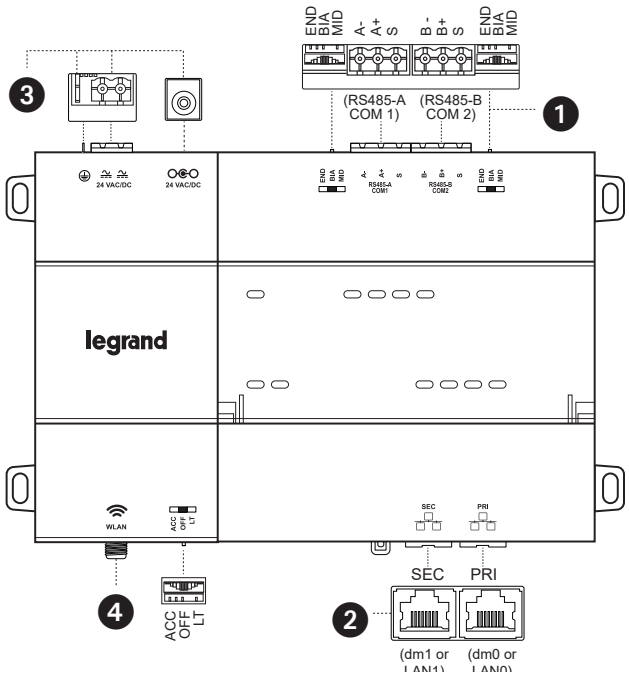
SPECIFICATIONS

- Operating Voltage: 24VAC (24VA dedicated transformer) required, with neither side of the transformer secondary tied to ground -OR- 24VDC capable of supplying at least 1A (50/60 Hz)
- Power: UL Listed Class 2, 24 VAC transform, rated @ minimum 24VA, or use with NB-PS1 (24VDC, 1A (24W) wall-mount AC power adapter with barrel connector plug (9.5mm L x 5.5mm OD x 2.1mm ID))
- Processor/RAM: TI AM3352: 1000MHz ARM® Cortex™-A8 / 1GB DDR3 SDRAM / Removable micro-SD card with 4GB flash total storage/2GB user storage
- Din Rail Mount: 35mm x 7.5mm with end clips
- Ports / Wiring Connections: 2 each Ethernet ports, 10/100-Mbit, RJ-45, 2ea. RS485 ports, Earth ground and 24V power input
- Dimensions, W x H x D: 4.6" x 10.3" x 2.4"
- Weight: 1.1 lb (499g)
- Ambient operating temperature: -4°F - 140°F (-20°C - 60°C)
- Storage temperature: -40°F - 185°F (-40°C - 85°C)
- Altitude limitations: Indoor use only, altitude to 6,562 ft. (2,000m)
- Certification: UL916, C-UL, CE, FCC, and RoHS
- Warranty: 1 year

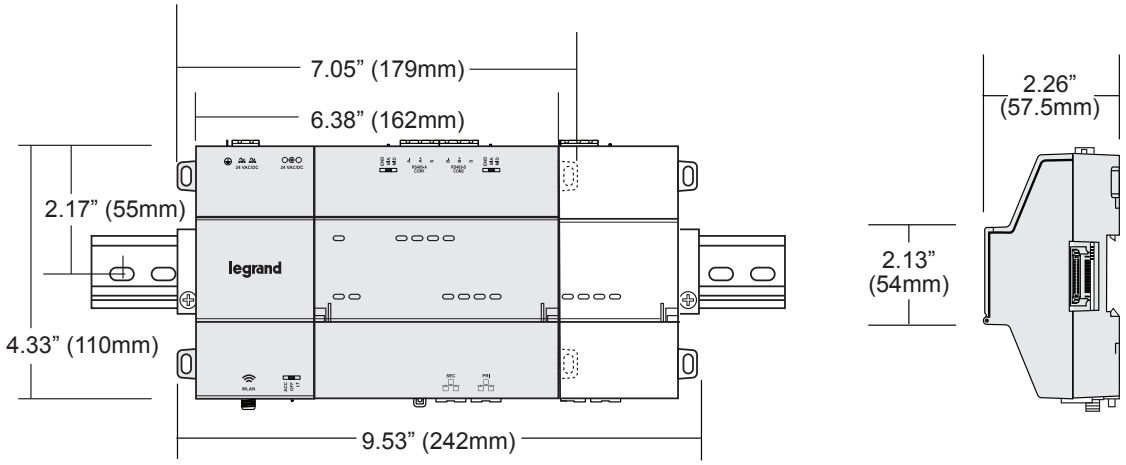
LMJA-8XXX-SM COMMUNICATION CONNECTIONS

Ports for field communications are shown on controller.

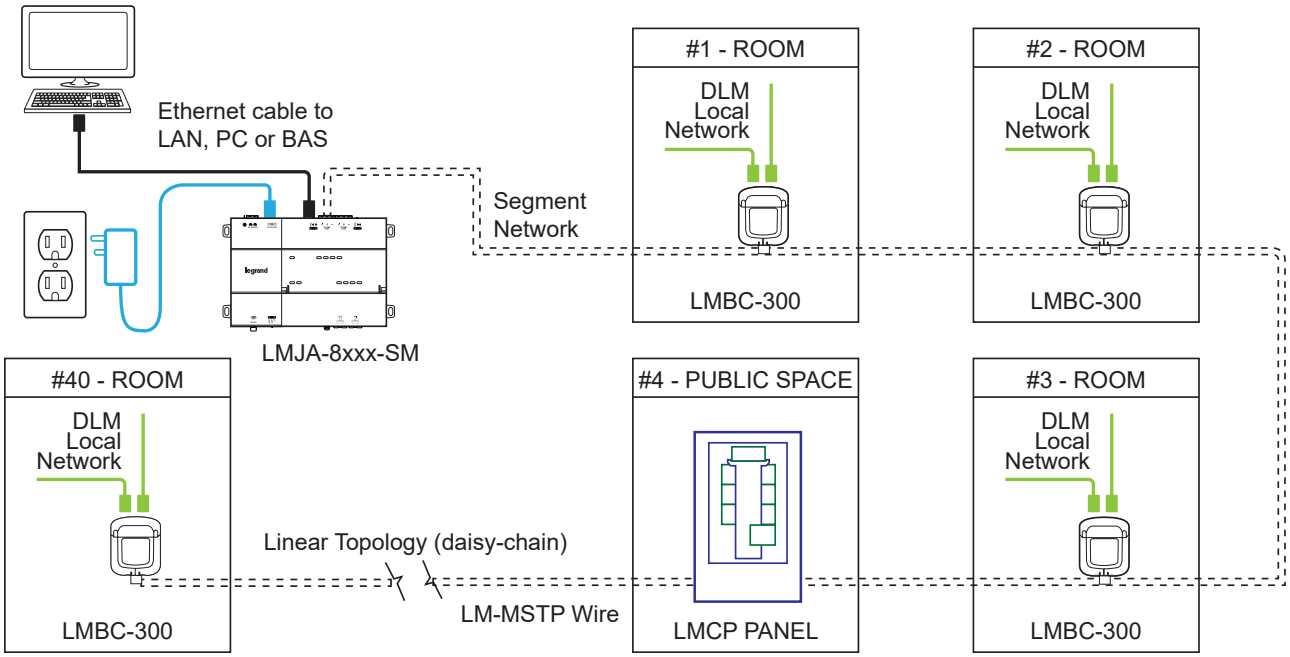
1. RS485 ports and bias switches
2. Ethernet ports, 10/100-Mbit, RJ-45
3. Earth ground and 24V power input
4. WLAN **is NOT** enabled



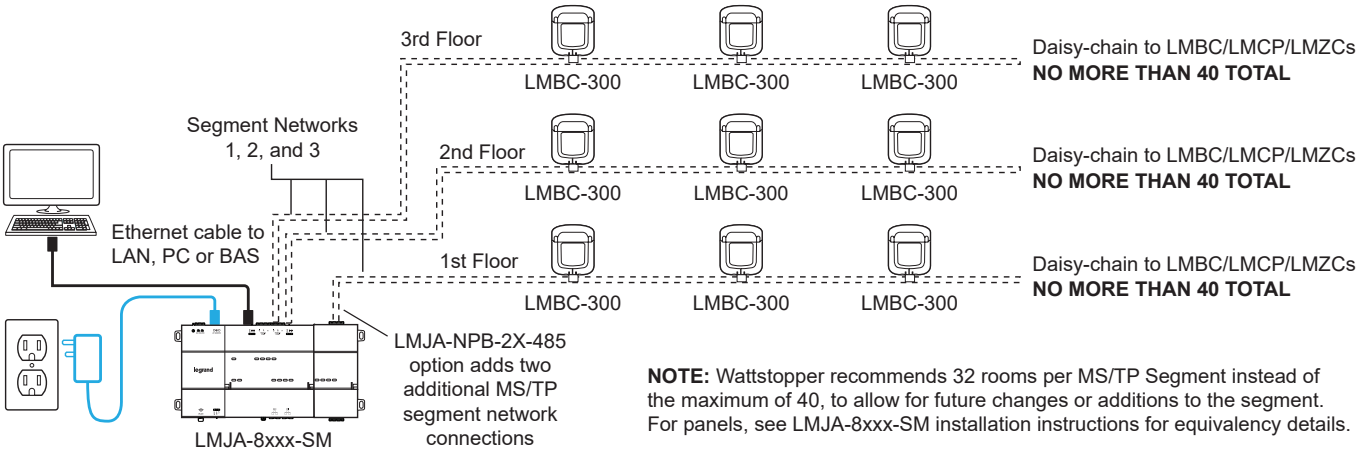
DIN RAIL MOUNTING DIMENSIONS



CONNECTION EXAMPLE:
SINGLE NETWORK SEGMENT WITH 40 OR FEWER ROOMS /COMMON SPACES



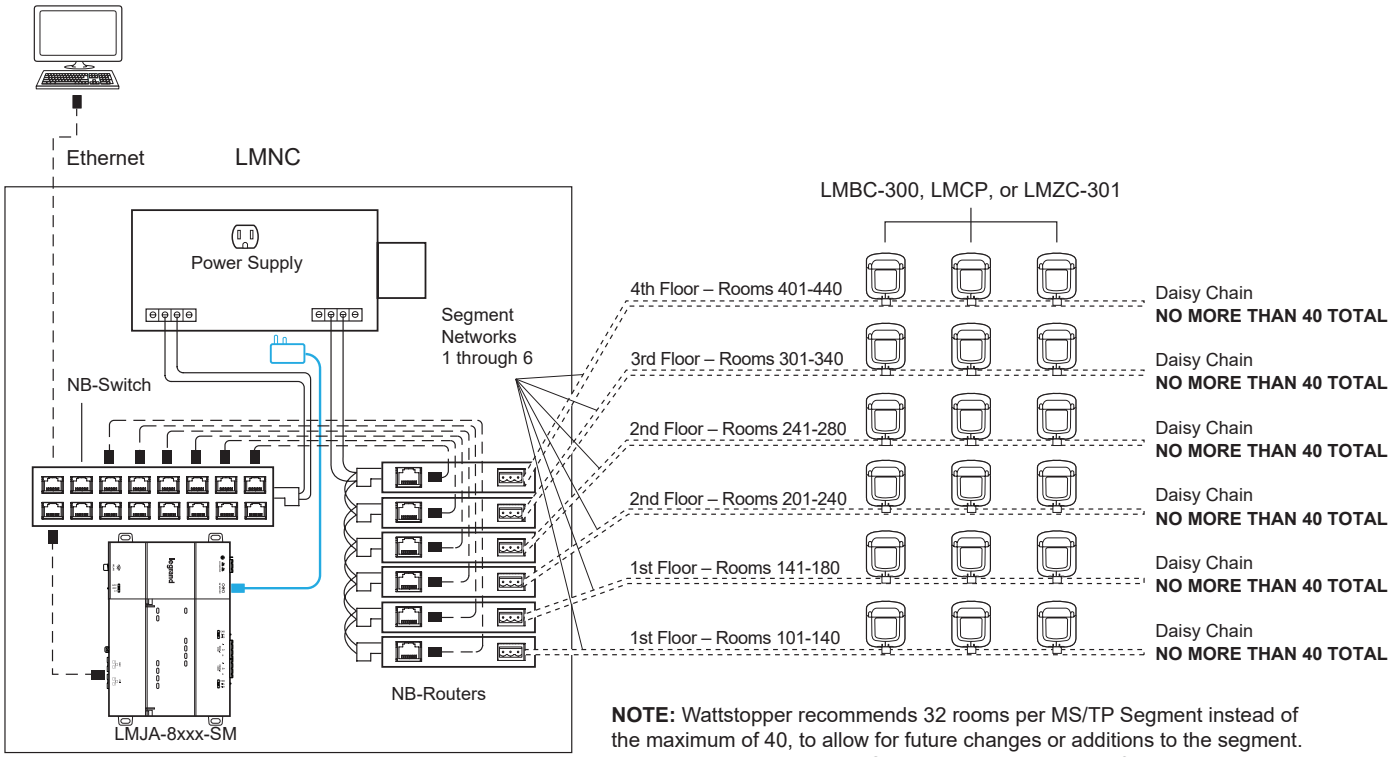
CONNECTION EXAMPLE: THREE STORY BUILDING WITH NO MORE THAN 40 ROOMS/COMMON SPACES PER FLOOR



NOTE: Wattstopper recommends 32 rooms per MS/TP Segment instead of the maximum of 40, to allow for future changes or additions to the segment. For panels, see LMJA-8xxx-SM installation instructions for equivalency details.

CONNECTION EXAMPLE: FOUR STORY BUILDING WITH SOME FLOORS HAVING MORE THAN 40 ROOMS/COMMON SPACES

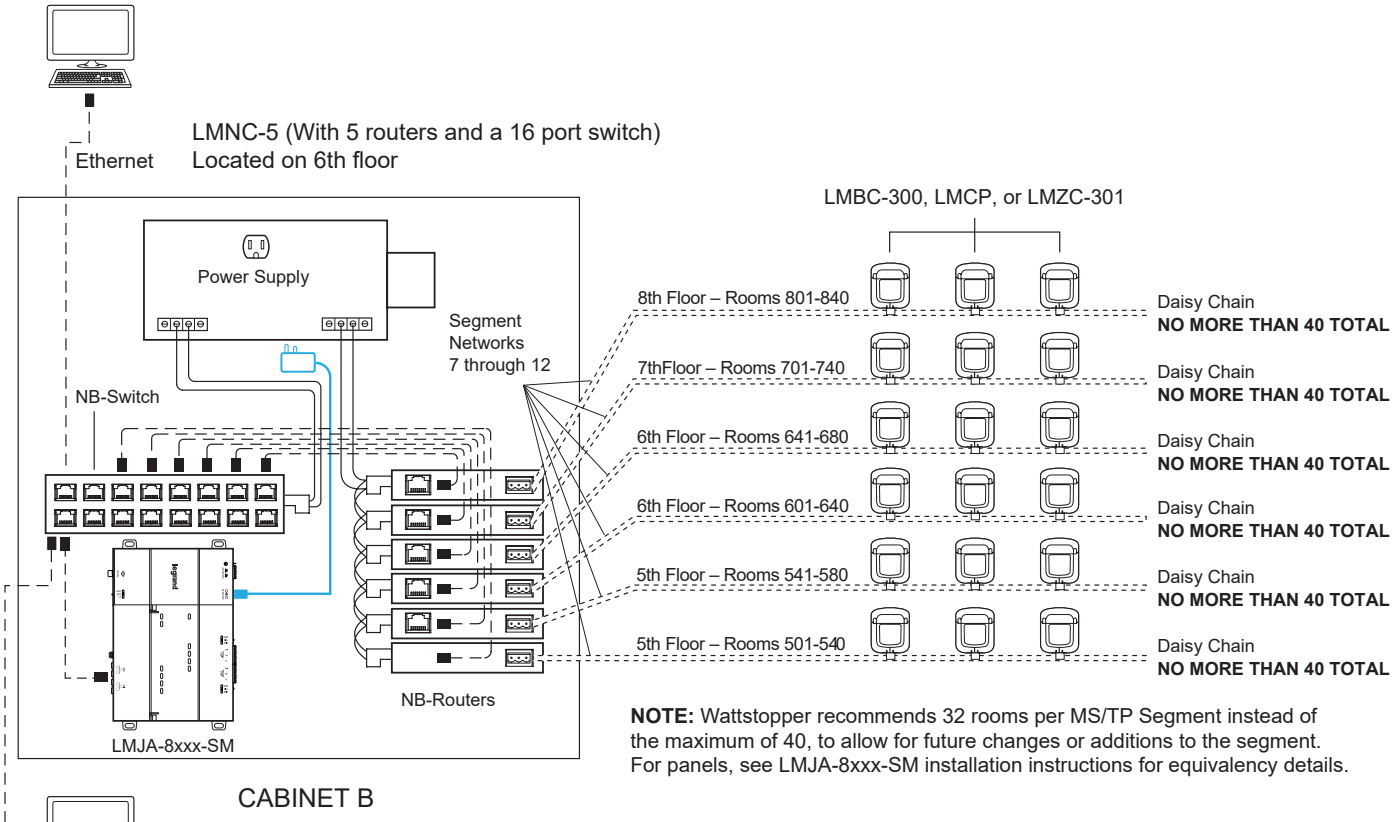
The LMJA-8xxx-SM can be used in conjunction with multiple NB-Routers and an NB-Switch. These components are usually housed inside an LMNC DLM Network Component Enclosure. Each router communicates with one segment. There is a maximum of 340 rooms/common spaces and 2000 devices controlled by a single LMJA-8300-SM, and the maximum of 40 per segment still applies. Therefore a typical application with close to 300 rooms/spaces (and up to 2000 DLM devices) might use between seven and nine routers, depending on how many devices are connected in each segment.



NOTE: Wattstopper recommends 32 rooms per MS/TP Segment instead of the maximum of 40, to allow for future changes or additions to the segment. For panels, see LMJA-8xxx-SM installation instructions for equivalency details.

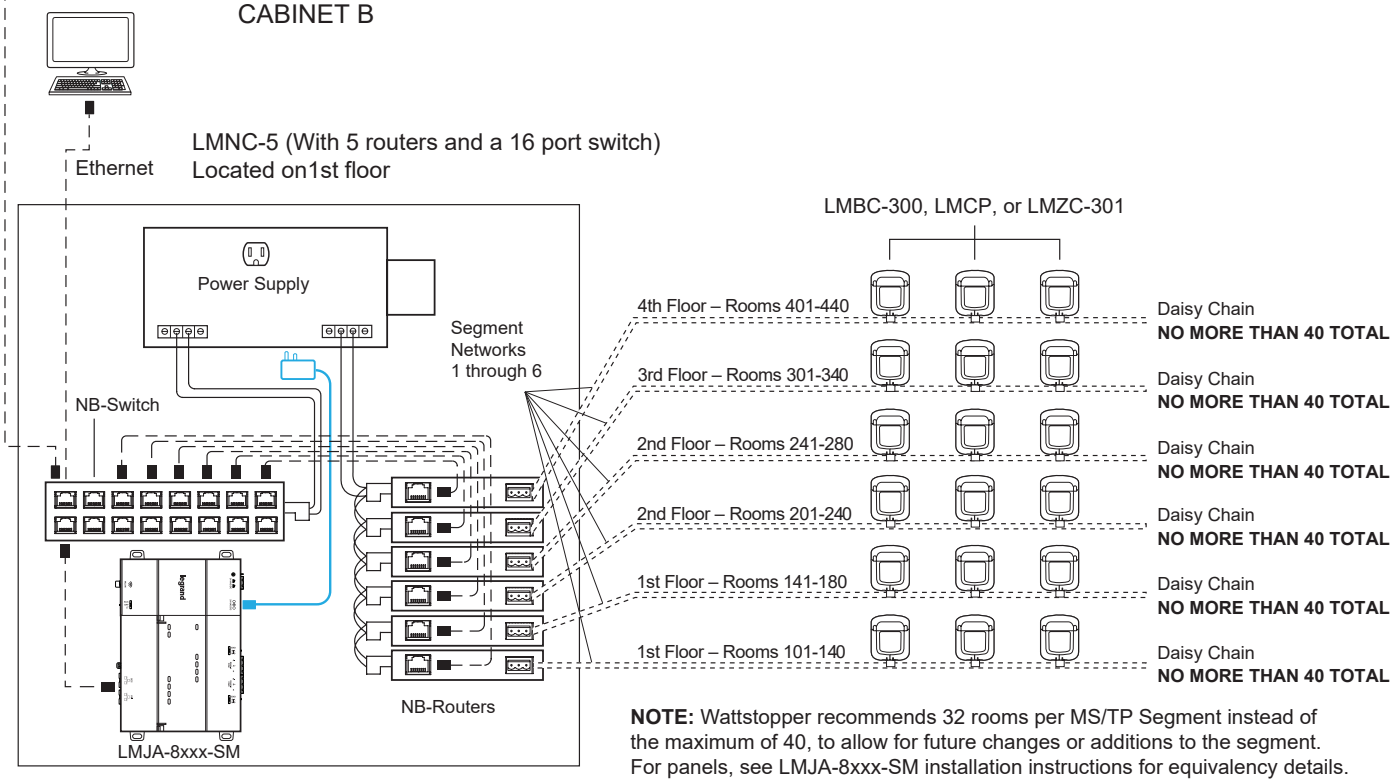
CONNECTION EXAMPLE: TWO LMJA-8000S - 10 STORY BUILDING WITH NO MORE THAN 40 ROOMS /COMMON SPACES PER FLOOR

In larger buildings with more floors and/or more than 300 rooms/spaces, multiple segment managers are used and connected via Ethernet.



NOTE: Wattstopper recommends 32 rooms per MS/TP Segment instead of the maximum of 40, to allow for future changes or additions to the segment. For panels, see LMJA-8xxx-SM installation instructions for equivalency details.

CABINET B

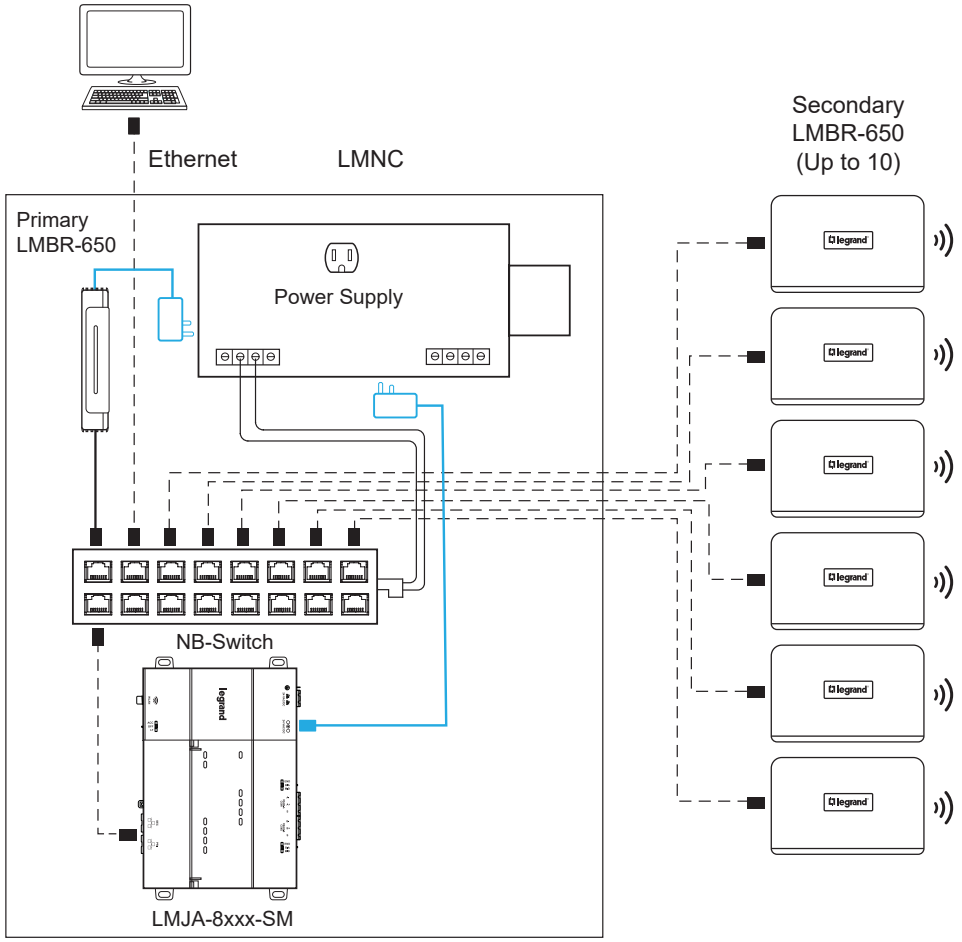


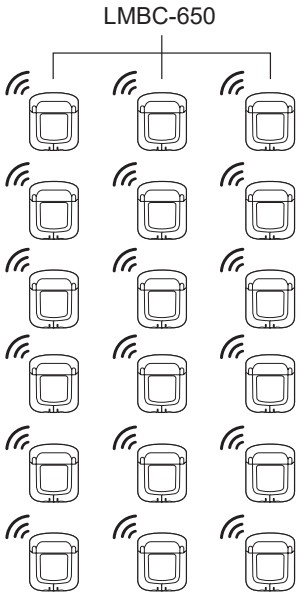
NOTE: Wattstopper recommends 32 rooms per MS/TP Segment instead of the maximum of 40, to allow for future changes or additions to the segment. For panels, see LMJA-8xxx-SM installation instructions for equivalency details.

CABINET A

CONNECTION EXAMPLE: WIRELESS 4 STORY BUILDING WITH NO MORE THAN 40 ROOMS /COMMON SPACES PER FLOOR

In larger buildings with more floors and/or more than 300 rooms/spaces, multiple segment managers are used and connected via Ethernet.

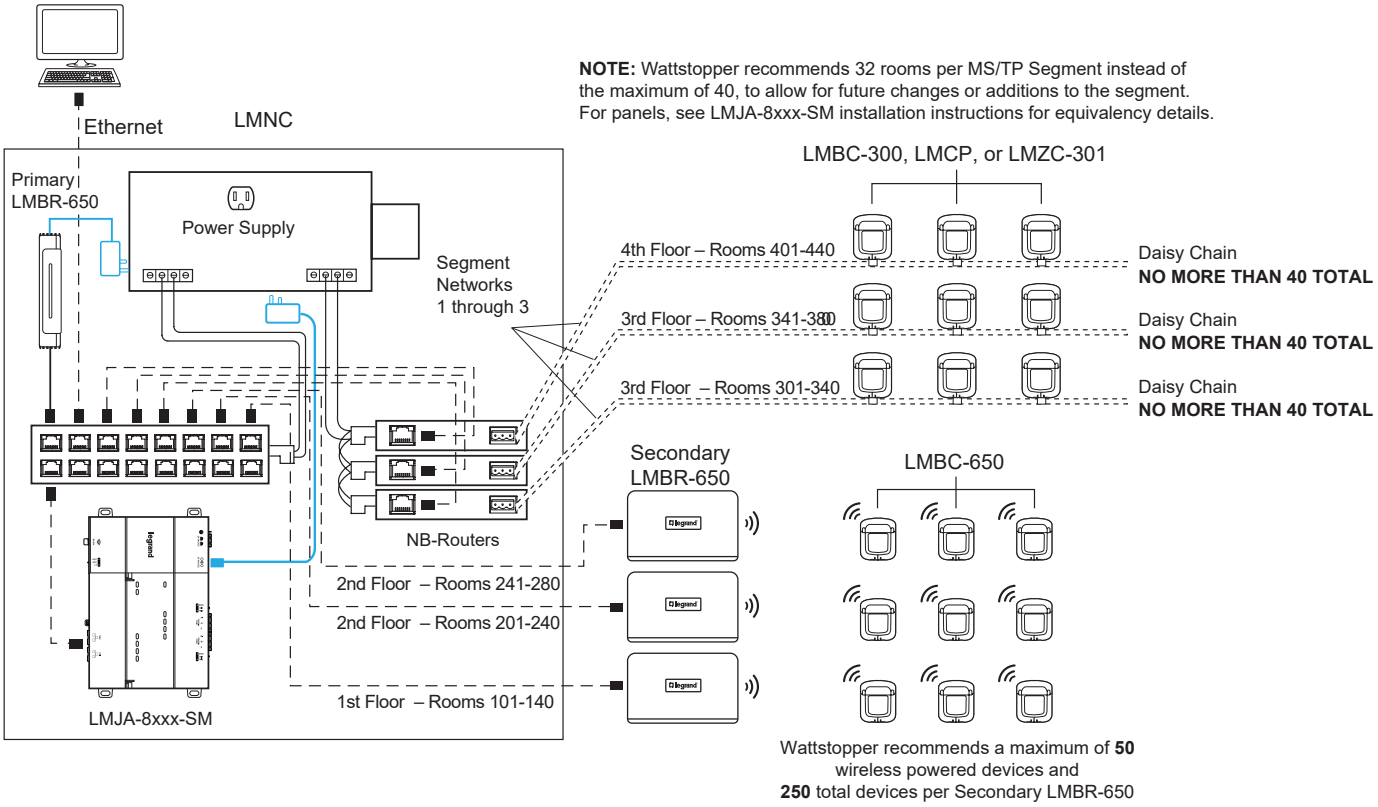




Wattstopper recommends a maximum of **50** wireless powered devices and **250** total devices per Secondary LMBR-650

CONNECTION EXAMPLE: HYBRID 4 STORY BUILDING WITH NO MORE THAN 40 ROOMS / COMMON SPACES PER FLOOR

In larger buildings with more floors and/or more than 300 rooms/spaces, multiple segment managers are used and connected via Ethernet.



DEVICE POINTS AND LIMITS

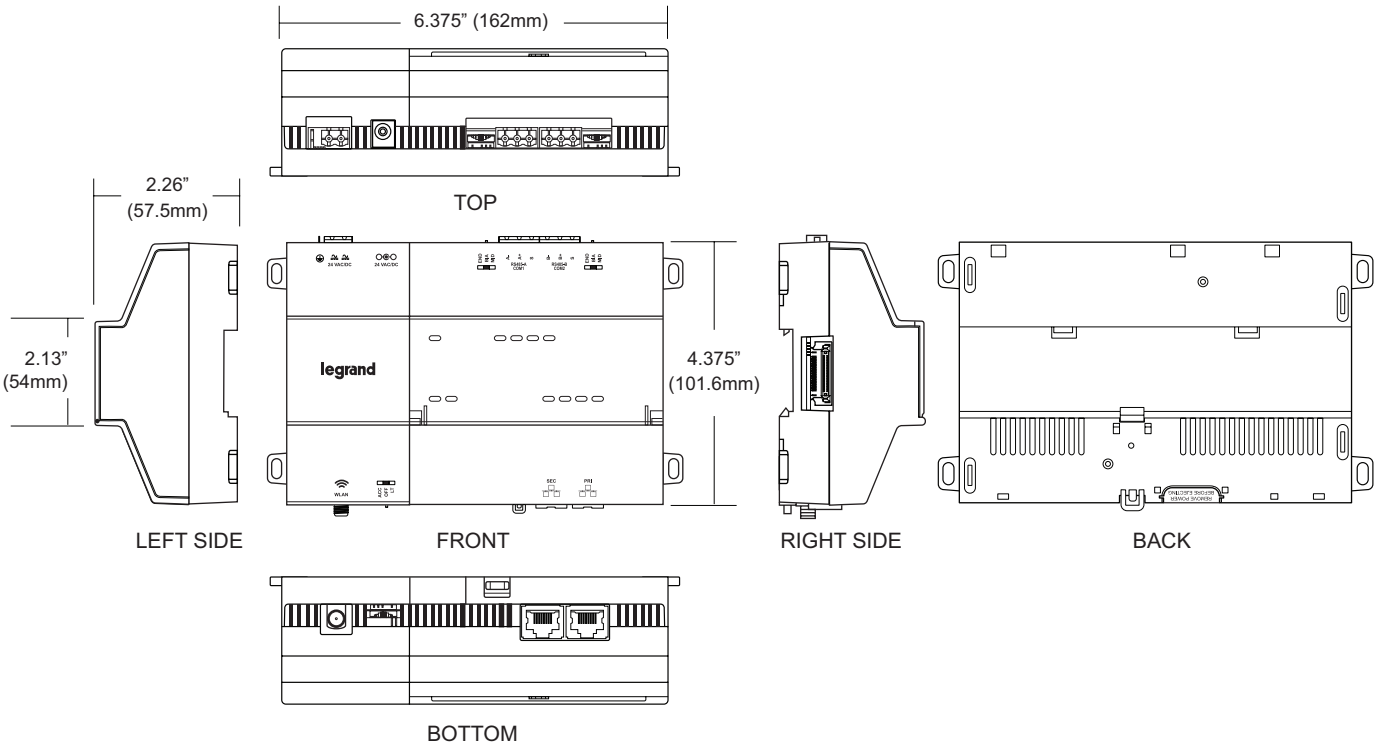
Device Points and Limits	LMJA-8125-SM	LMJA-8300-SM
Maximum # of Rooms/Bridges	125	300
Maximum Total # of Devices per LMJA-8xxx-SM	2000	2000
Maximum # of Wired MS/TP Segments	2	2
With LMJA-NPB-2X-485, the wired MS/TP Segments are expandable to:	4	4
Maximum # of LMBC-300 per Segment	40	40
Recommended # of IP Segments Using NB-ROUTER	6	6
Maximum # of Wireless IP LMBR's Segments per Primary LMBR	10	10
Maximum # of Devices per Segment	340	340
Maximum # of BACnet Points	6250	15000
Average # of BACnet Points per Room	50	50

END USER LICENSE AGREEMENT

"In order to enhance the security of our products, Legrand ships its products with all insecure ports closed and insecure protocols disabled. You are free to configure your device as needed, but in doing so note that you may be decreasing the security of your device and any information contained in the device. As you modify the device's default settings, keep in mind how this may impact the security of the device and your network. In addition, you should use caution in connecting your device to the Internet, especially if you have altered the default security settings. If you have any questions or concerns about how your modifications of the device may affect its security, please contact the Legrand customer service team at 1-800-879-8585.

https://www.legrand.us/support/wattstopper.aspx

MULTI-VIEW DIMENSIONS



ORDERING INFORMATION

Catalog #		Description
☐	LMJA-8125-SM	DLM N4.9 JACE8000 with DLM Segment Manager Station, Max 125 Rooms, 1-Year Software Maintenance Included
☐	LMJA-8300-SM	DLM N4.9 JACE8000 with DLM Segment Manager Station, Max 300 Rooms, 1-Year Software Maintenance Included
☐	NB-PS1	Wall Adapter Power Supply for LMJA-8xxx-SM
☐	LMJA-NPB-2X-485	LMJA-8xxx RS-485 Add-On Dual Port Module
☐	LMJA-SUP1-SMA-18	DLM N4 Supervisor Software 1 Network Connection + 18 Month SMA
☐	LMJA-SUP2-SMA-18	DLM N4 Supervisor Software 2 Network Connections + 18 Month SMA
☐	LMJA-SUP3-SMA-18	DLM N4 Supervisor Software 3 Network Connections + 18 Month SMA
☐	LMJA-SUP10-SMA-18	DLM N4 Supervisor Software 10 Network Connections + 18 Month SMA
☐	LMJA-SUP100-SMA-18	DLM N4 Supervisor Software 100 Network Connections + 18 Month SMA
☐	LMJA-SUPUNL-SMA-18	DLM N4 Supervisor Software Unlimited Network Connections + 18 Month SMA

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