WIRELESS NETWORK BRIDGE | LMBC-600

Dual internal antennas with diversity provide robust signal strength and reliable communication

Two RJ 45 ports for DLM Cat 5e communication and class 2 power

Includes secure out-of-box wireless AES 128-bit encryption

Connects any DLM room to an LMBR-600 border router and provides a secure self forming network

Plenum rated with mounting hardware for din-rail or surface mounting

Dual LED indicators to show wireless network health and DLM Cat 5e communication

Supports third party integration with BAS through BACnet IP

Description

The LMBC-600 Wireless Network Bridge provides a network connection for a room with Wattstopper Digital Lighting Management (DLM) devices. The wireless DLM platform simplifies room to room connectivity and installation, and eliminates potential start-up delays caused by wiring issues.

The DLM local room network must include at least one room/load controller. Once connected, the LMBC-600 can communicate to either the DLM Segment Manager or a third party system using BACnet and exposes the status and parameters of all room connected devices to the broader network.

Operation

The wireless LMBC-600 operates much like the wired LMBC-300 network bridge using Class 2 power supplied by a DLM local network from one or more DLM room controllers. It connects to the free-topology local network at any convenient

location using a standard LMRJ cable, and then securely communicates via encrpyted wireless protocol to a Border Router connected to a Segment Manager. The LMBC-600 monitors the DLM local network and automatically exposes all room devices, settings and calibrations to the Segment Manager. Incorporating a Network Bridge in each DLM local network also allows the individual local networks to respond as a group to schedules configured on a DLM Segment Manager.

Applications

The LMBC-600 is ideal for projects that require centralized monitoring, control or configuration, but prefer the flexibility and simplified installation of a wireless system. It enables wireless communication between DLM devices on the local network and front end hardware. This facilitates advanced sequences of operation including demand response, communication with other BACnet based systems and the ability to update firmware in any DLM device via LMCS software. An LMBC-600 is required for each local network in order to connect to an LMSM segment manager.
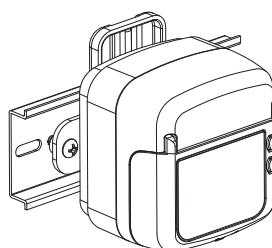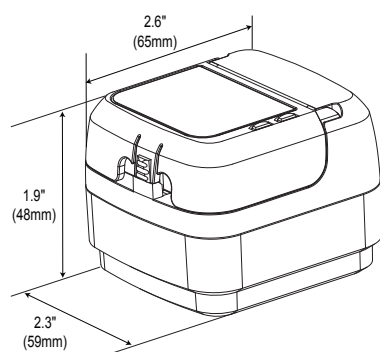
Features

- Component of Wireless Digital Lighting management integrated control systems
- Communicates all DLM local network data and device settings to a Segment manager and/or LMCS software
- 6LoWPAN wireless standard delivers reliable, long range, low latency wireless communication that is scalable for a single room or entire buildings with thousands of rooms
- Robust and reliable BACnet IPv6 Mesh Network based on open standards & protocols

- Mounting is similar to the wired network bridge (model LMBC-300)
- Dual internal, omni-directional antennas with diversity
- 2.4GHz band, Available channels: 11–26
- Two RJ 45 ports for DLM Cat 5e local network
- LED indicators to indicate wireless network health and local network communication
- Compatible with Wattstopper software: LMCS 4.6.2 and Segman 2.3.x

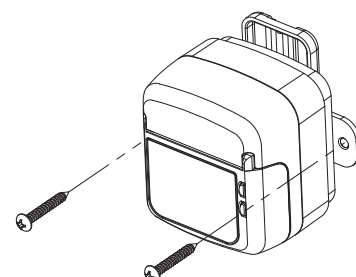| PROJECT		LOCATION/ TYPE	

Specifications

- Voltage: 24VDC
- Current Consumption: 20mA
- Power Supply: Wattstopper Room Controller
- Connection to the DLM Local Network: two RJ-45 ports
- Wireless
  - IEEE 802.15.4 , 2.4GHz
  - Available Channels: 11–26
  - Wireless Standard: 6LoWPAN
  - Dual internal, omni-directional antennas with diversity
  - Bandwidth: up to 156kbps
  - Range: Up to 100 ft. radius
- Five Year Warranty

- Security
  - AES 128bit Key Encryption
  - Preshared key (uncommissioned state)
  - Key rotation after commissioning
- Supported Standards:
  - BACnet
  - IPV6
  - Contiki
  - Routing Protocol for Low Power Networks (RPL)
  - Stateless Multicast Forwarding (SMRF)
- RoHS compliant
- UL 2043 Plenum Rated
- UL and cUL listed (E101196)
- Indoor Use Only

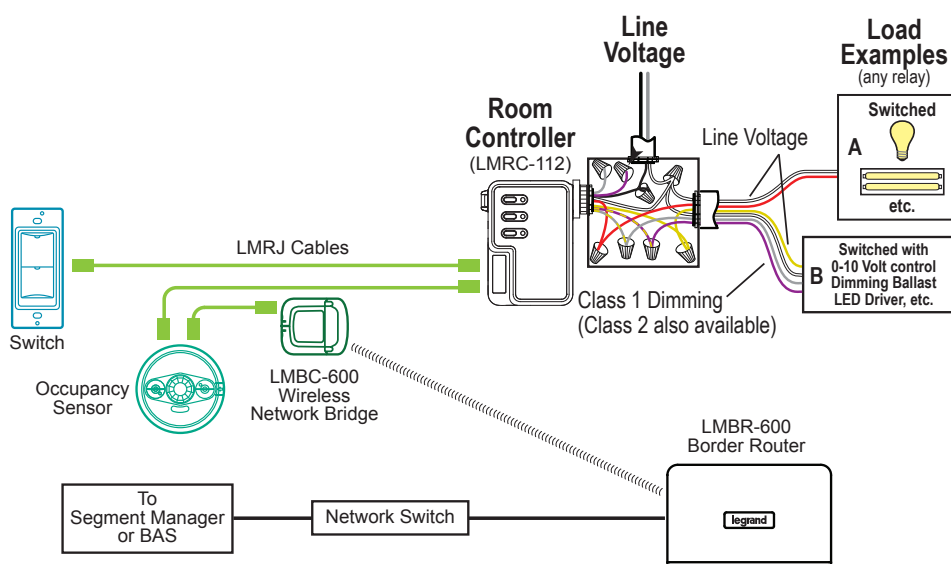## Dimensions and Mounting

2.6" (65mm)
1.9" (48mm)
2.3" (59mm)

Option 1: Attach to DIN rail

Option 2: Mount to wall

DIN Rail Clip used for both mounting methods is included

Typical Connection to DLM Local Network

Line Voltage

Load Examples (any relay)

Room Controller (LMRC-112)

Line Voltage

Switched
A

etc.

LMRJ Cables

Switch

Occupancy Sensor

LMBC-600 Wireless Network Bridge

Class 1 Dimming (Class 2 also available)

Switched with 0-10 Volt control Dimming Ballast LED Driver, etc.
B

LMBR-600 Border Router

To Segment Manager or BAS

Network Switch

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Ordering Information

Catalog #	Description
☐ LMBC-600	Wireless Network Bridge with BACnet and 6LoWPan