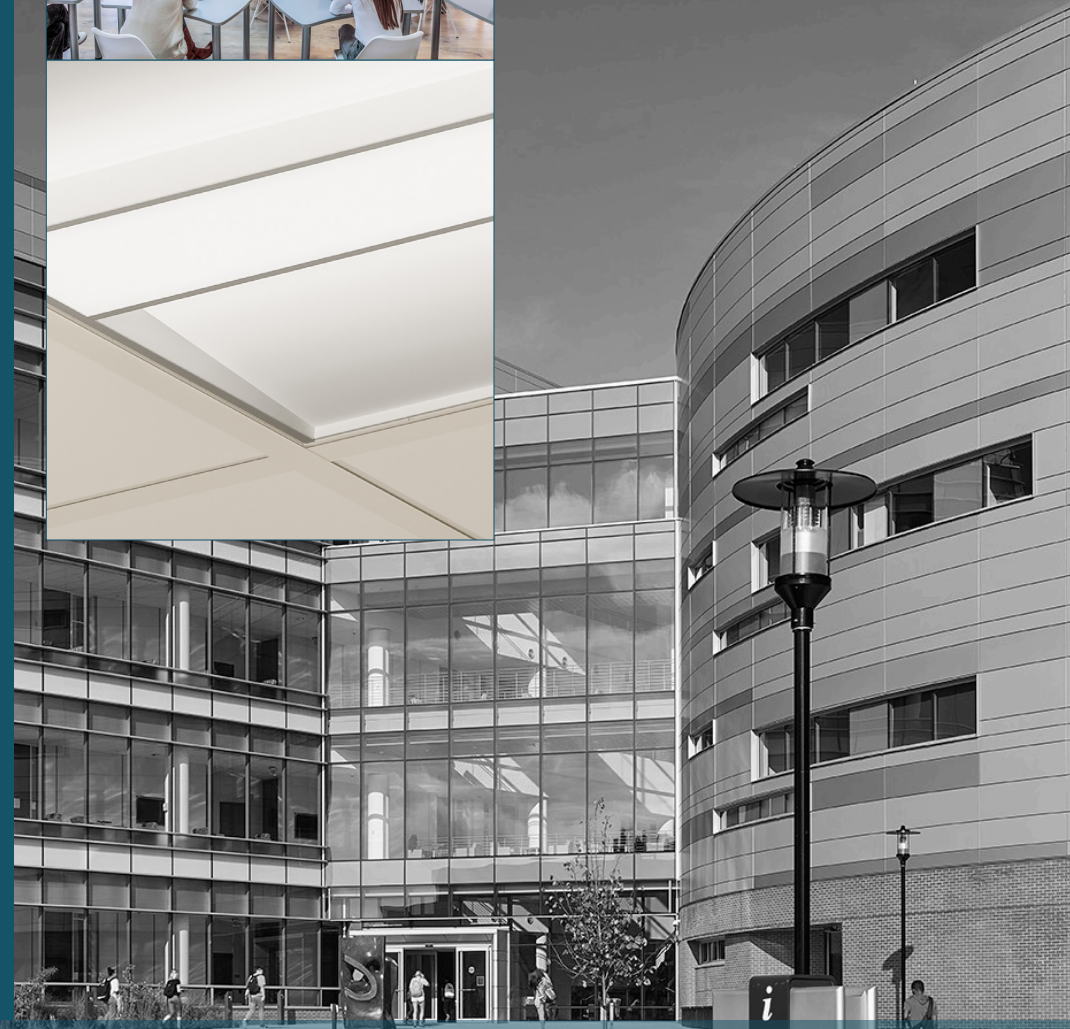


Classroom Spaces Guide

Featuring HPR-SL, HP-4 D & HP-2 WW

Comprehensive instructions for incorporating Finelite HPR-SL, HP-4 D, and HP-2 WW luminaires seamlessly with Wattstopper lighting controls.



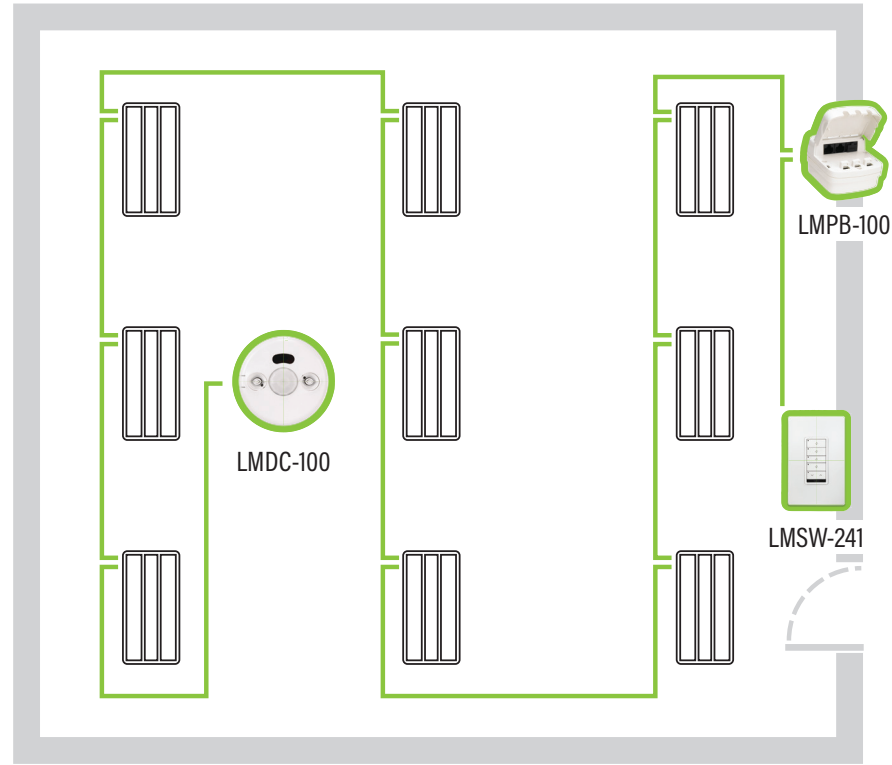
The goal of this guide is to equip you to design effective lighting solutions for various K-12 classroom projects. Inside, you'll find clear lighting and control diagrams that showcase control integration possibilities.

Wired - Stand Alone

Occupancy, Manual Control

Design Scenario:

- Each fixture is equipped with an LMFC-011 DLM in-fixture control device to provide luminaire-level lighting control in the space
- LMPB-100 provides power to in-fixture controls and other DLM devices.
- LMDC-100 provides occupancy sensing to automatically turn any lighting on or off.
- LMSW-241 provides manual on, off, and dimming control with scene control for quick adjustments to certain room states.



Classroom | HPR-SL 2x4

Finelite Luminaire Details



HPR-SL 2x4
High powered recessed streamline

+



Wattstopper LMFC-011 + LMFC-2RJ
Load controller

ORDER GUIDE EXAMPLE

Control Options

W011 - Wattstopper LMFC-011 & LMFC-2RJ

W601 - Wattstopper LMFS-601 Wireless Sensor

Wattstopper Control Details



LMPB-100
Power Supply for all devices
150mA limit per



LMSW-241
Dimmer to control all zones
Current consumption 7mA



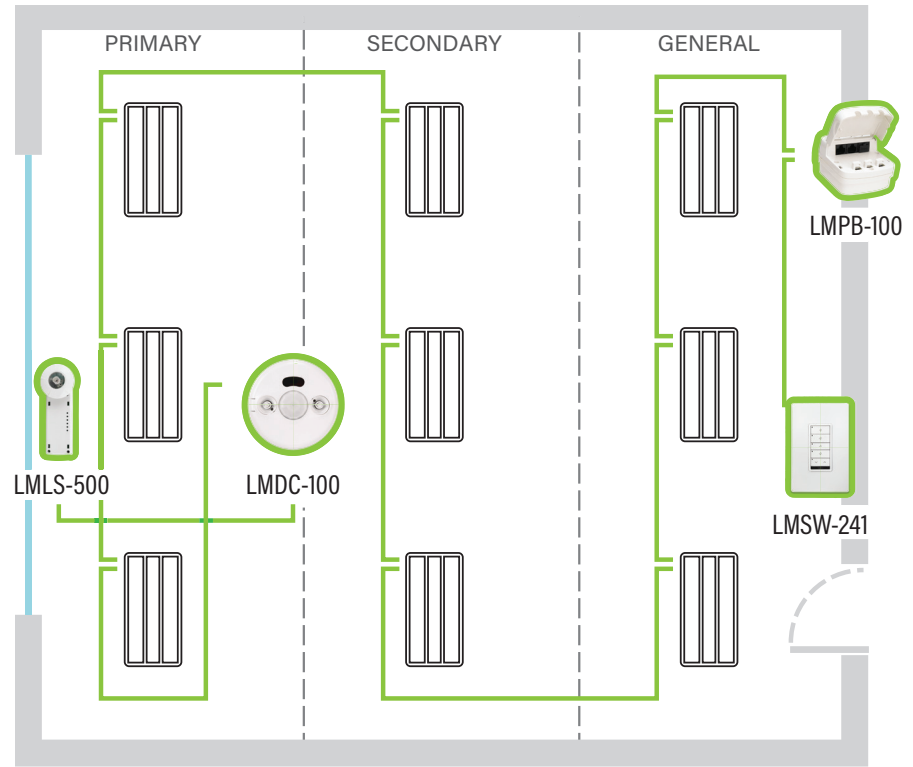
LMCT-100-2
DLM Hand Held Programmer

Wired - Stand Alone

Occupancy, Daylight, Manual Control

Design Scenario:

- LMLS-500 provides daylight reactive control by establishing up to three lighting zones using daylight harvesting. The example shown utilizes two zones (primary, secondary), with a third non-daylit zone.
- LMSW-241 provides a single-zone control experience while the LMLS-500 automates zone-based daylight harvesting without user interactions.



Classroom | HPR-SL 2x4

Finelite Luminaire Details



HPR-SL 2x4
High powered recessed streamline

+



Wattstopper LMFC-011 + LMFC-2RJ
Load controller
Current consumption: 7mA ea.

| ORDER GUIDE EXAMPLE | |
|----------------------------------|---|
| Control Options | |
| <input checked="" type="radio"/> | W011 - Wattstopper LMFC-011 & LMFC-2RJ |
| <input type="radio"/> | W601 - Wattstopper LMFS-601 Wireless Sensor |

Wattstopper Control Details



LMPB-100
Power Supply for all devices
150mA limit per



LMDC-100
Dual Tech Occupancy Sensor (1,000 sqft)
Current consumption: 20mA



LMSW-241
Dimmer to control all zones
Current consumption 7mA



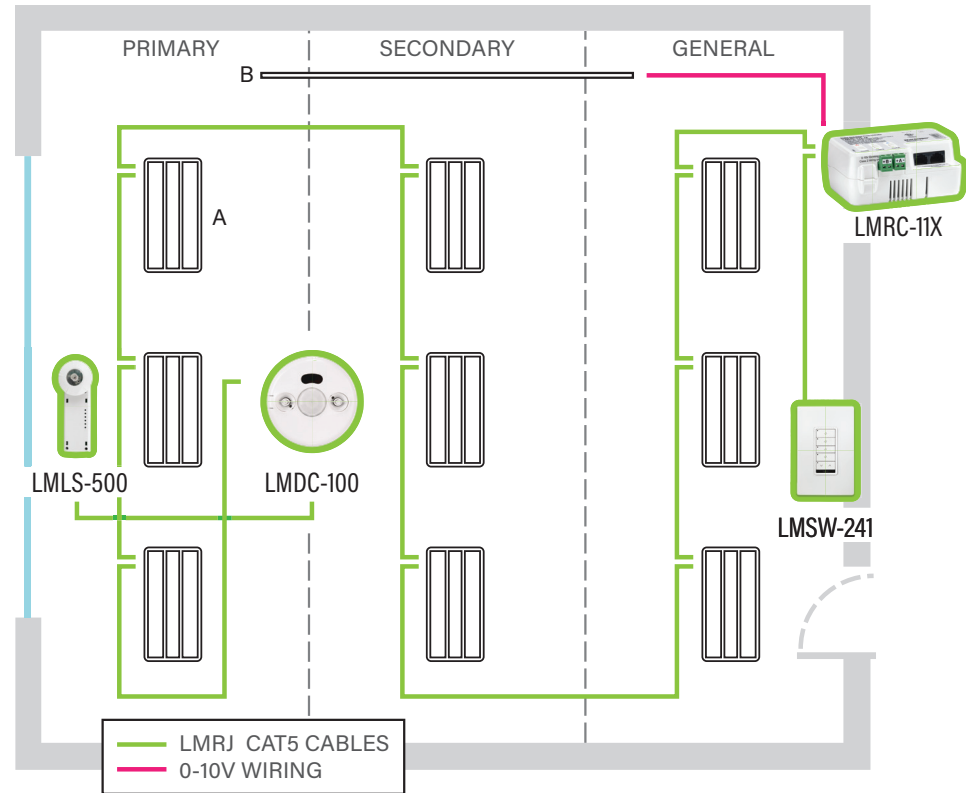
LMLS-500
Open loop daylight sensor

Wired - Stand Alone

Occupancy, Daylight, Manual Control

Design Scenario:

- When fixtures without LMFC-011 integrated controls are required, the LMPB-100 Power Booster may be substituted with an LMRC-11X Room Controller in order to integrate control of the fixture in the room.
- Any fixtures connected to an LMRC-11X Room Controller operate at the same output level and may be programmed to operate identically or differently than the LMFC-011 enabled fixtures in the space.



Classroom | HPR-SL 2x4, HP-2 WW

Finelite Luminaire Details



HPR-SL 2x4
High powered recessed streamline



HP-2 WW
High Powered 2" Wall WASH

+



Wattstopper LMFC-011 + LMFC-2RJ
Load controller
Current consumption: 7mA ea.

ORDER GUIDE EXAMPLE

Control Options

- W011** - Wattstopper LMFC-011 & LMFC-2RJ
- W601** - Wattstopper LMFS-601 Wireless Sensor

Wattstopper Control Details



LMRC-11X
Power Supply for all devices



LMDC-100
Dual Tech Occupancy Sensor (1,000 sqft)
Current consumption: 20mA



LMSW-241
Dimmer to control all zones
Current consumption: 7mA



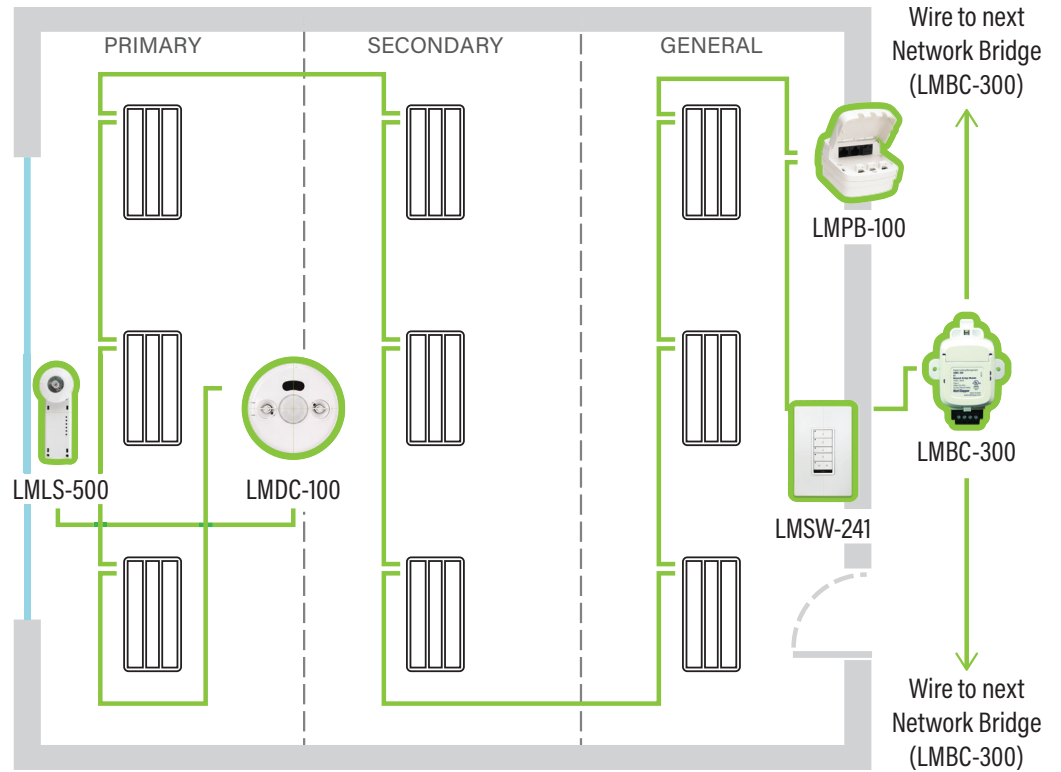
LMLS-500
Open loop daylight sensor
Current consumption: 20mA

Wired - Networked

Occupancy, Daylight, Manual Control

Design Scenario:

- When rooms of LMFC-011 enabled fixtures require more advanced functionality such as time clock or demand responsive control, rooms may be networked to each other and to a system manager device (LMJA-8000-SM) by adding an LMBC-300 Bridge Controller to each room.
- LMBC-300 bridges connect to each other via an RS-485 MS/TP daisy chain which ultimately connects to the LMJA-8000-SM for system network communications.



Classroom | HPR-SL 2x4

Finelite Luminaire Details



HPR-SL 2x4
High powered recessed streamline



Wattstopper LMFC-011 + LMFC-2RJ
Load controller
Current consumption: 7mA ea.

| ORDER GUIDE EXAMPLE | |
|----------------------------------|---|
| Control Options | |
| <input checked="" type="radio"/> | W011 - Wattstopper LMFC-011 & LMFC-2RJ |
| <input type="radio"/> | W601 - Wattstopper LMFS-601 Wireless Sensor |

Wattstopper Control Details



LMPB-100
Power Supply for all devices
150mA limit per



LMSW-241
Dimmer to control all zones
Current consumption: 7mA



LMBC-300
Wired Network Bridge
Current consumption: 20mA



LMDC-100
Dual Tech Occupancy
Sensor (1,000 sqft)



LMJA-8000-SM
Segment Manager (supports up to 300 rooms)



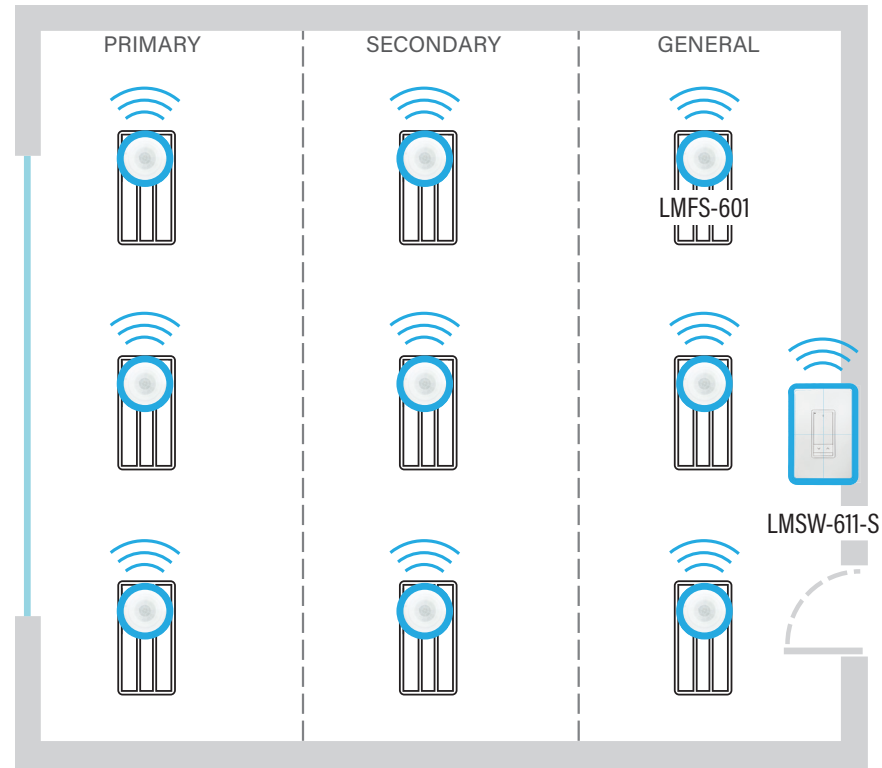
LMLS-500
Open loop daylight sensor
Current consumption: 20mA

Wireless - Standalone

Occupancy, Daylight, Manual Control

Design Scenario:

- Each fixture is equipped with an LMFS-601 DLM in-fixture control and sensor device to provide luminaire-level lighting control in the space.
- The LMFS-601's built-in occupancy sensor provides occupant sensing to automatically turn any lighting on or off at either an individual-fixture or group level.
- The LMFS-601's built-in daylight sensor provides daylight reactive control for each LMFS-equipped fixture within the same daylight zone.
- LMSW-641-S provides manual on, off, and dimming control with scene control for quick adjustments to certain room states while the LMFS-601 daylight sensor automates zone-based daylight harvesting without user interactions.



Classroom | HPR-SL 2x4

Finelite Luminaire Details

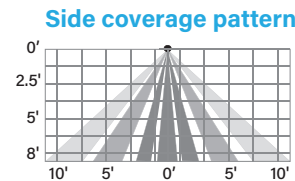
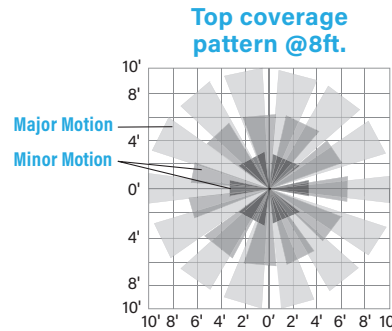


HPR-SL 2x4
High powered recessed streamline



Wattstopper LMFS-601
Wireless Sensor

| ORDER GUIDE EXAMPLE | |
|----------------------------------|---|
| Control Options | |
| <input type="radio"/> | W011 - Wattstopper LMFC-011 & LMFC-2RJ |
| <input checked="" type="radio"/> | W601 - Wattstopper LMFS-601 Wireless Sensor |



Wattstopper Control Details



LMSW-6XX-S
Dimmer to control all zones
Battery powered



LMFS-601 W
PIR Occupancy Sensor (300 sqft)
Daylight Sensor



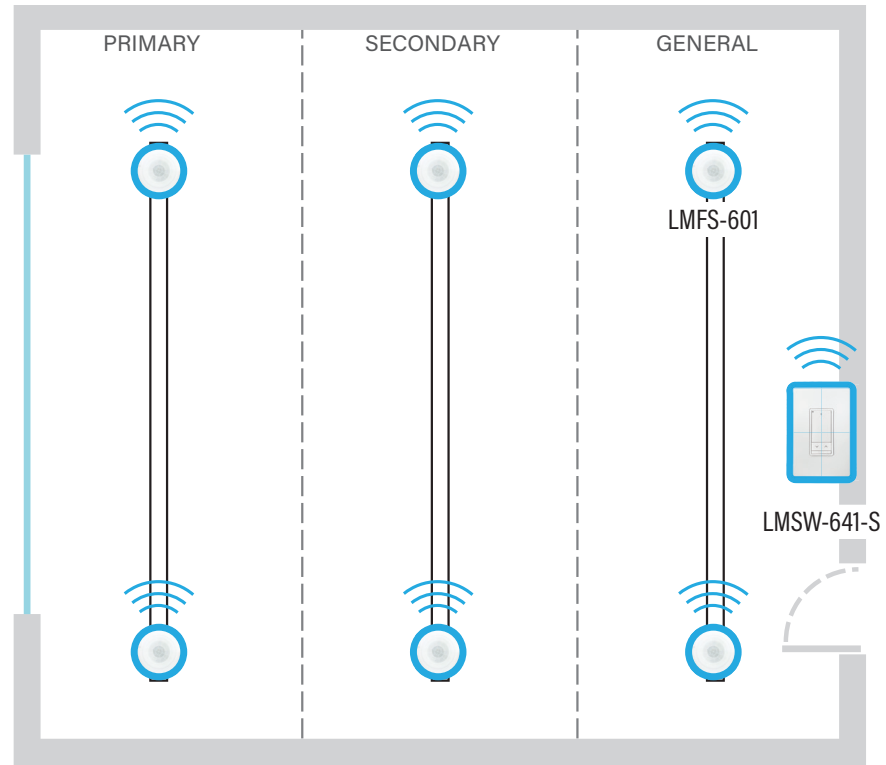
DLM Configuration App

Wireless - Standalone

Occupancy, Daylight, Manual Control

Design Scenario:

- Multi-channel fixtures that provide split control or individual control of uplight and downlight are supported by including additional LMFS-601 devices per-channel.
- The occupancy and daylight sensors in each LMFS-601 may be programmed in-field to interact with each other to provide complete control of each channel.



Classroom | HP-4 D

Finelite Luminaire Details

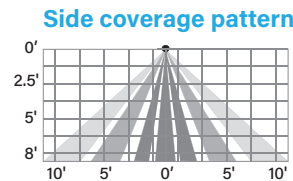
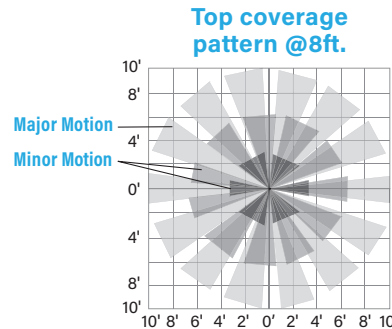


HP-4 D
High powered 4" Direct



Wattstopper LMFS-601
Wireless Sensor

| ORDER GUIDE EXAMPLE | |
|----------------------------------|---|
| Control Options | |
| <input type="radio"/> | W011 - Wattstopper LMFC-011 & LMFC-2RJ |
| <input checked="" type="radio"/> | W601 - Wattstopper LMFS-601 Wireless Sensor |



Wattstopper Control Details



LMSW-6XX-S
Dimmer to control all zones
Battery powered



LMFS-601 W
PIR Occupancy Sensor (300 sqft)
Daylight Sensor

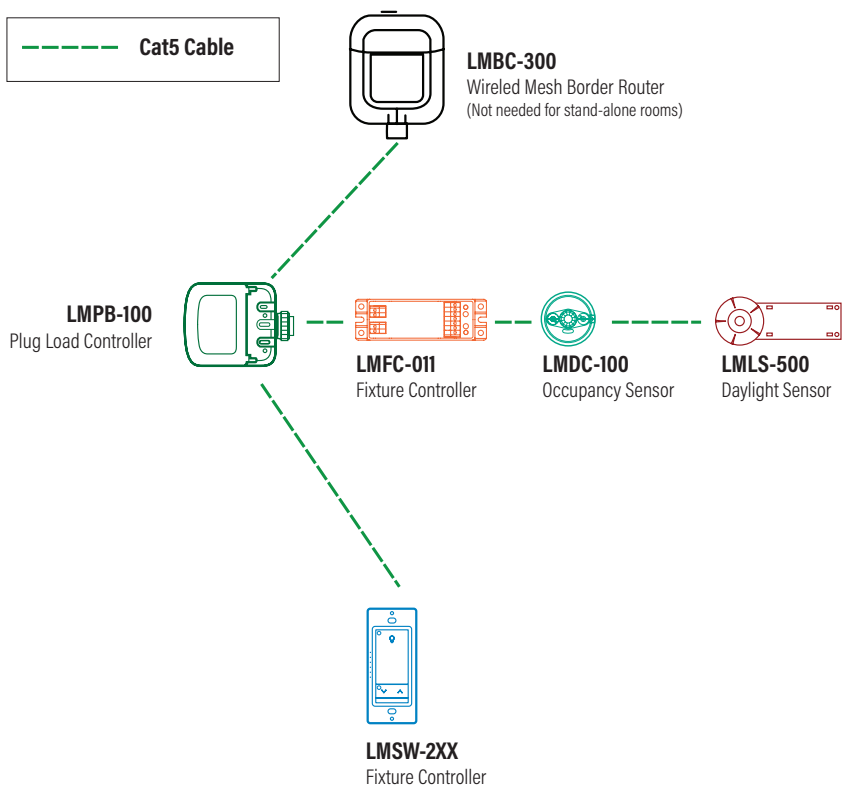


DLM Configuration App

Wireless - Networked

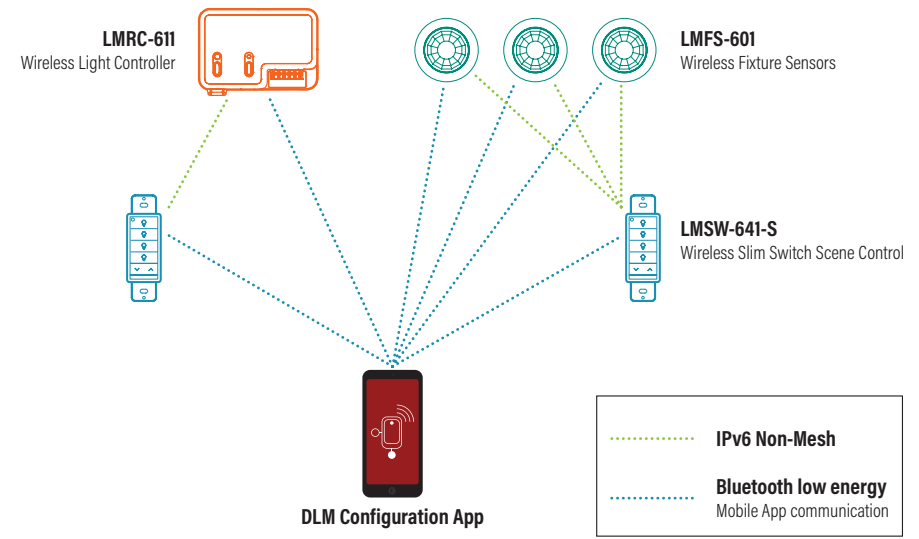
Encelium Networked Solution Coming Soon

Wired Controls Network Diagram



More information on wired DLM networks may be found in LMJA-8000-SM documentation

Wireless Controls Diagram Encelium Networked Solution Coming Soon



Ordering Information

Compatible Luminaires

| Luminaire Family | Style |
|-----------------------------|--------------------|
| Wired LMFC-011 Installed | |
| HPR-SL | 2x4, 2x2, 1x4 |
| Wireless LMFC-601 Installed | |
| HPR-SL | 2x4, 2x2, 1x4 |
| HPR | 2x4, 2x2, 1x4, 1x2 |
| HP2 | D, ID |
| HP4 | D, ID |
| HP6 | D, ID |
| HPX | D, ID |
| HPO | D, ID |
| S19 | All |
| S16 | All |
| S12 | All |

Wattstopper Wired Controls

| Catalog # | Product |
|-----------------------------|------------------------|
| Occupancy Sensors | |
| LMDC-100 | Dual Technology Sensor |
| LMPC-100 | PIR-Only Sensor |
| Wall Stations | |
| LMSW-211 | Single Zone Dimming |
| LMSW-222 | Dual Zone Dimming |
| LMSW-241 | Scene Control |
| Daylight Sensors | |
| LMLS-400 | Single Zone Sensor |
| LMLS-500 | Multi Zone Sensor |
| Power Supplies | |
| LMPB-100 | Wired DLM Power Supply |
| LMPL-111-20M | Plug Load Controller |
| LMRC-111 | Lighting Controller |
| Pre-terminated Cat5e Cables | |
| LMRJ | LMRJ Series |

Wattstopper Wireless Controls

| Catalog # | Product |
|-----------------------|----------------------|
| Wall Stations | |
| LMSW-611-S | Single Zone Dimming |
| LMSW-622-S | Dual Zone Dimming |
| LMSW-641-S | Scene Control |
| Accessory Controllers | |
| LMPL-611-20M | Plug Load Controller |
| LMRC-611-16M | Lighting Controller |