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# Mx-OPUS-ML10V

## FIXTURE INTEGRATED 0-10V LIGHTING CONTROL FOR DIM-TO-OFF DRIVERS

### OVERVIEW:

Magnum's fixture integrated Mx-OPUS-ML10V node, when connected to 0-10V dim-to-off drivers, enables any lighting manufacturer to deliver simple, fully connected fixtures. The small and sleek form factor includes a digital PIR sensor and ambient light sensing for daylight harvesting applications as well as occupancy based control. When paired with a compatible dim-to-off LED driver, Mx-OPUS-ML10V eliminates the needs for extra relays and control devices. This reduces cost and complexity associated with creating an intelligent and granular lighting control network.

The input range of the Mx-OPUS-ML10V is 12-24VAC / 12-36VDC. The Mx-OPUS-ML10V allows for 0-10V dimming and dim-to-off functionality, providing continuous dimming control to conserve energy, simplify maintenance and personalize the lighting environment.

### DESCRIPTION:

The Mx-OPUS-ML10V is designed with a low profile, making it architecturally and aesthetically pleasing. This node easily integrates into lighting fixtures or customized housings. The Mx-OPUS-ML10V consist of a compact lens, allowing it to fit into small fixtures. Although configurable for advanced settings, the Mx-OPUS-ML10V is designed for plug and play applications. The Mx-OPUS-ML10V is flexible enough for both localized control as well as software driven functionality using Magnum's VenergyUI software (Mx-AP2). The Mx-OPUS-ML10V can also be integrated to BACnet through Magnum's gateway (Mx-EBOX).

### OPTIONS IN OPERATION:

**Local Control:** An on board microprocessor and memory allows for standardized operation at the fixture level, eliminating the reliance on software or network configuration. Mx-OPUS-ML10V can be utilized out of the box with default settings or configured for advanced operation through Magnum's AirConfig software tool ([download.magnumes.net](http://download.magnumes.net)). Preferences and behavior settings can be accomplished using simple drag and drop remote configuration in a localized fashion, even after installation is completed.

**Software Driven:** The Mx-OPUS-ML10V can also be used with Magnum's VenergyUI software, allowing users to control lighting with their mobile devices.

**Integration to BAS:** The Mx-OPUS-ML10V has the ability to communicate information through Magnum's eBox (Mx-EBOX) and into an existing building automation system. The convergence of lighting and building automation allows for granular information to be communicated to the BAS for improved operational efficiency.

\*Subject to change

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### FEATURES:

- Full digital passive infrared for occupancy sensing
- Powered from driver or any available 12-24VAC / 12-36VDC source
- Wireless communication
- Daylight harvesting
- Compatible with 0-10V, dim-to-off LED drivers
- Remotely configurable

### TECHNICAL DATA:

Part Numbers (Frequency Dependent)	M9-OPUS-ML10V (902 MHz - North America) M8-OPUS-ML10V (868 MHz - Europe and China) MJ-OPUS-ML10V (928 MHz - Japan)
Motion Sensing	Digital Passive IR
Detection Distance	>16.404 ft (5 m)
Detection Range (Horizontal x Vertical)	94° x 82°
Detection Zone	64 Zones
Ambient Light Sensing	0-94.8 FC (0-1020 LUX) Photo IC type
Operating Temperature	32° - 140°F (0° - 60°C) - Indoor use only
Input Voltage	12-24VAC /12-36VDC
Output	0-10VDC @ 30mA (sinking driver) 5mA (sourcing driver)
Standby Power	< 1W
Wireless Protocol	EnOcean Wireless Protocol
Wireless Range	150 ft (50 ft-150 ft typical) / 45.72 m (15.24 m - 45.72 m)
Certifications	DLC CE UL dry and damp rated
Dimensions	2.35" (59.79 mm) Long 1.23" (31.27 mm) Wide and 0.71" (18.034 mm) Tall
Knockout Size	0.875" (22.225 mm)

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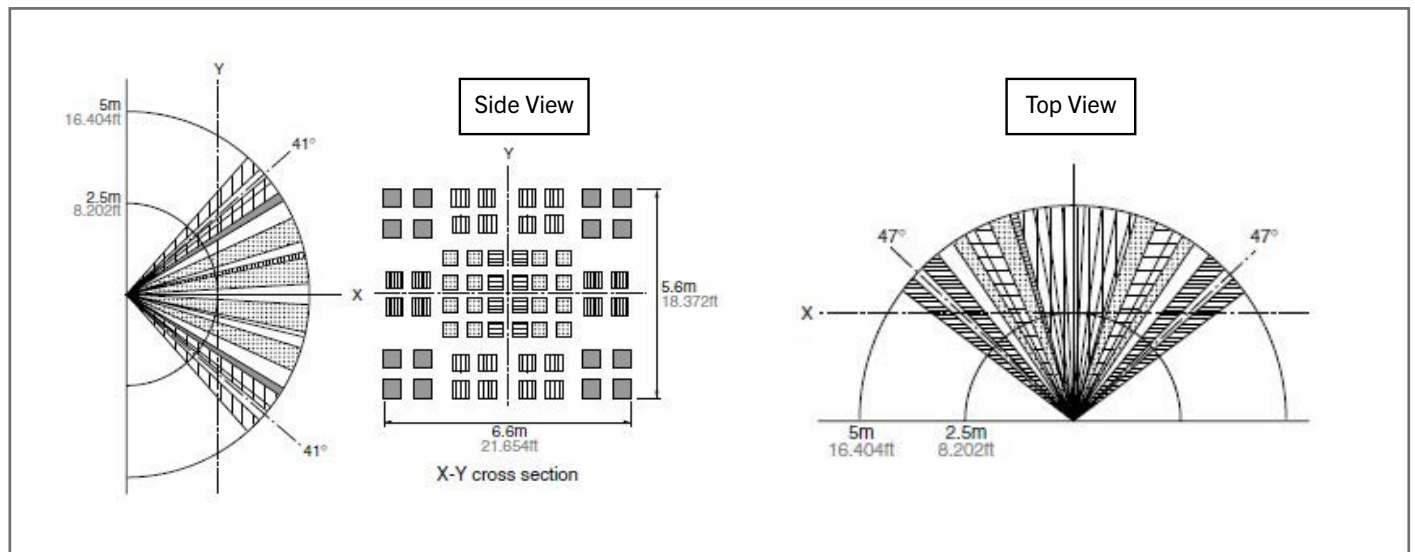
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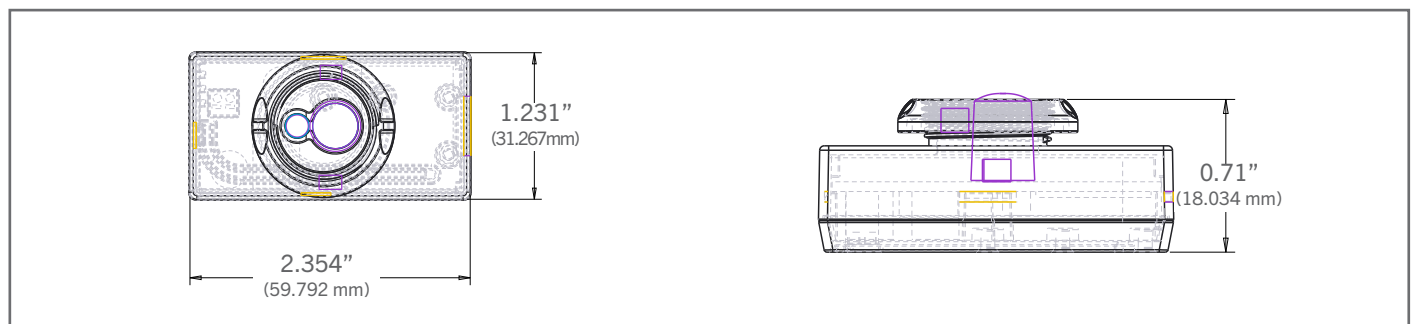
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## DETECTION PERFORMANCE:



## DIMENSIONS:



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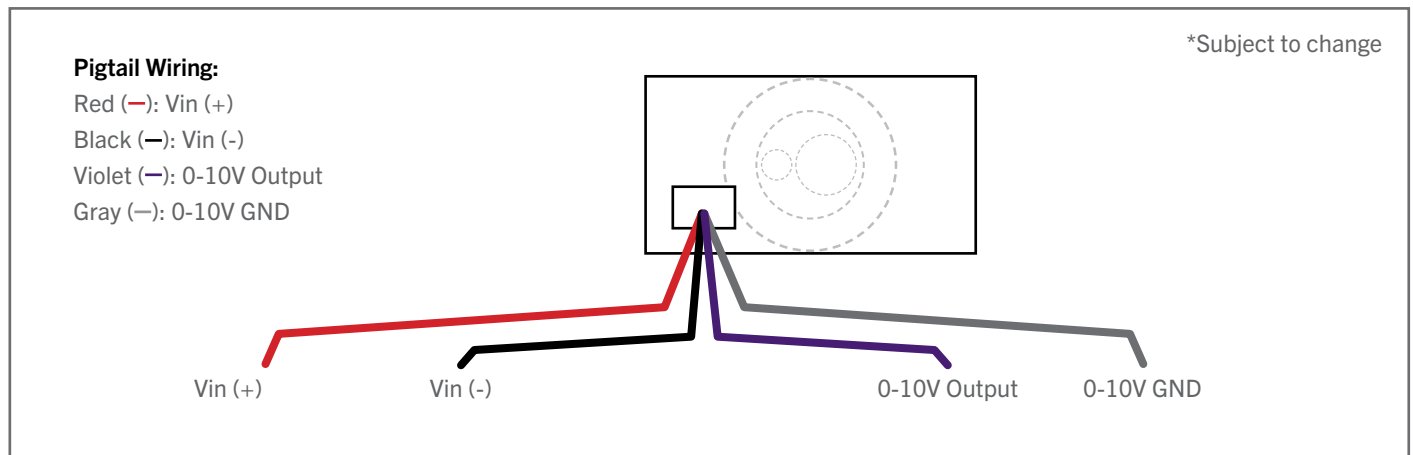
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## PIGTAIL WIRING DIAGRAM:



**NOTE: MES Wireless device antenna cannot be enclosed inside a metal box. Wireless range will be greatly limited with enclosed antenna.**

## ENVIRONMENTAL CONCERNS:

- Humidity degree: 15 to 85%Rh (Avoid condensation or freezing of this product)
- Pressure: 86 to 106KPa
- Overheating, oscillations, shocks can cause the sensor to malfunction.
- This sensor is not waterproof or dust-proof. Avoid use in environments subject to excessive moisture, condensation, frost, containing salt air or dust.
- Avoid use in environments with corrosive gases.

For tutorial videos regarding the OPUS product line, please visit MES on [YouTube](https://www.youtube.com).

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