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# Mx-OPUS-MLD

## FIXTURE INTEGRATED DALI LIGHTING CONTROL

### OVERVIEW:

Magnum's fixture integrated Mx-OPUS-MLD node, when connected to a Philips Xitanium SR driver, OSRAM Dexal or a DALI driver, enables any lighting manufacturer to deliver simple, fully connected fixtures. The small and sleek form factor includes a digital PIR and ambient light sensing for daylight harvesting applications as well as occupancy based ON/OFF control. Easy and seamless integration at the fixture level, Mx-OPUS-MLD eliminates the need for extra relays and control devices when paired with compatible LED drivers. This reduces the costs and complexity associated with creating an intelligent and individually addressable lighting scheme.

### DESCRIPTION:

The Mx-OPUS-MLD 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-MLD consists of a compact lens, allowing it to fit into small fixtures. Although configurable for advanced settings, the Mx-OPUS-MLD is designed for plug and play applications. The Mx-OPUS-MLD is flexible enough for both localized control as well as software driven functionality using Magnum's VenergyUI software. Magnum's EnOcean to BACnet gateway (Mx-EBOX) allows for seamless integration to any BACnet based building automation system. Light levels, occupancy status and data on the energy consumption of each fixture can be incorporated and utilized by the BAS.

### OPTIONS IN OPERATION:

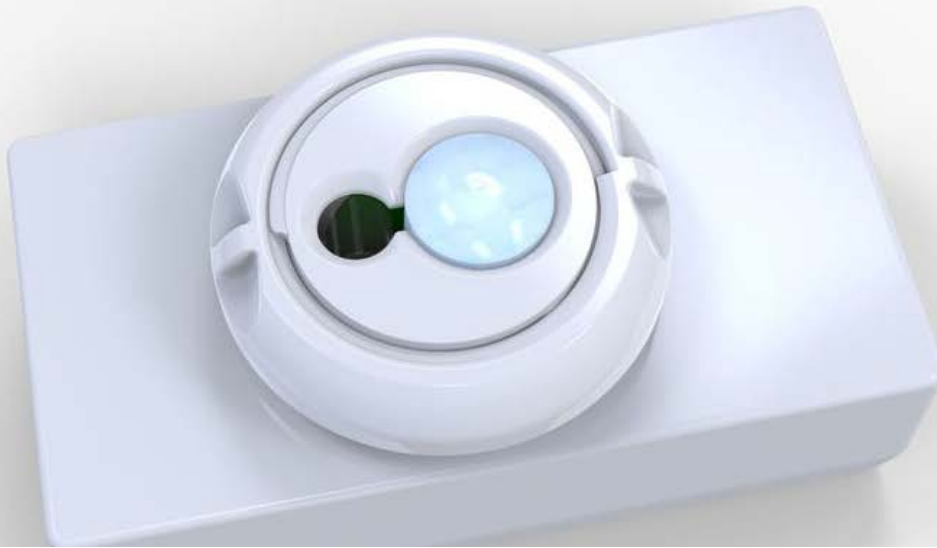
**Local Control:** An on board microprocessor and memory allow for standardized operation at the fixture level, eliminating the reliance on software or network configuration. Mx-OPUS-MLD can be utilized out of the box with default settings or configured for advanced operation through AirConfig commissioning software ([download.magnumes.net](http://download.magnumes.net)) by leveraging the Magnum wireless USB dongle (Mx-USB). Configuration can be done prior to the installation, during installation and even after installation is complete.

**Software Driven:** The Mx-OPUS-MLD can also be used with Magnum's VenergyUI software, allowing users to utilize mobile devices to connect to the lighting network to monitor and control lights remotely. VenergyUI includes macros, scheduling, demand response and real time energy reporting of each fixture.

**Integration to BAS:** The Mx-OPUS-MLD has the ability to communicate information through Magnum's eBox (Mx-EBOX) and into an existing building automation system (BAS). When driven by the Philips Advance Xitanium SR LED driver or OSRAM Dexal, the driver provides energy reporting data directly to the sensor unit. This data can then be communicated to the Mx-eBox and visualized in the BAS. 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
- Zone control
- Energy reporting at fixture level
- Powered from Xitanium SR, OSRAM Dexal or DALI power supply
- Light level / dimming
- Control up to 4 drivers
- Daylight harvesting
- Wireless communication
- Remotely configurable

### TECHNICAL DATA:

Part Numbers (Frequency Dependant)	M9-OPUS-MLD (902 MHz - North America) M8-OPUS-MLD (868 MHz - Europe and China) MJ-OPUS-MLD (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
Minimum Power Requirement	16V @24mA from Xitanium SR driver, OSRAM Dexal or DALI power supply
Standby Power	< 1W
Enclosure	ABS Plastic
EnOcean Profile	A5-38-08 central controller D2-29-06 status
Wireless Range	150 ft (50 ft-150 ft typical) / 45.72 m (15.24 m - 45.72 m)
Certifications	IEC 62386-101:2014 IEC 62386-103:2014 CE DLC UL
Dimensions	2.35" (59.79 mm) Long 1.23" (31.27 mm) Wide and 0.71" (18.034 mm) Tall

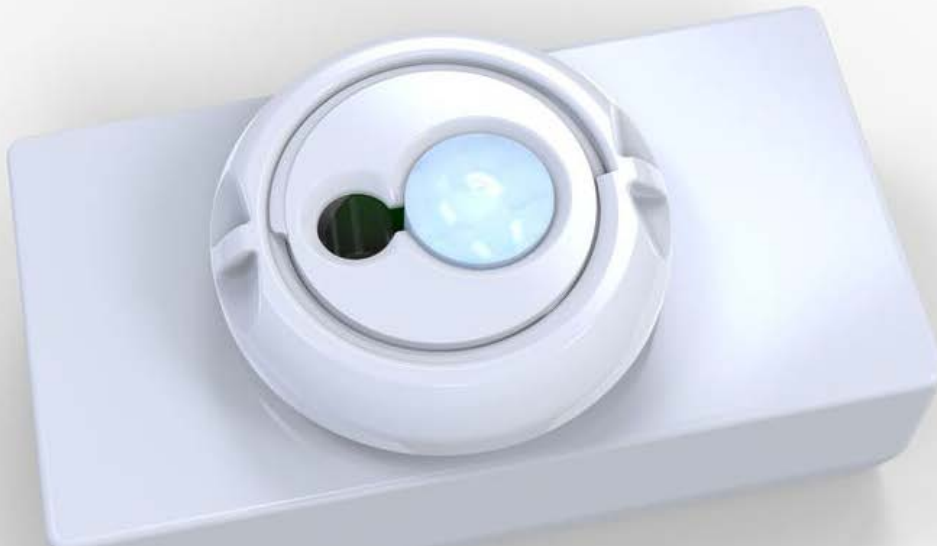


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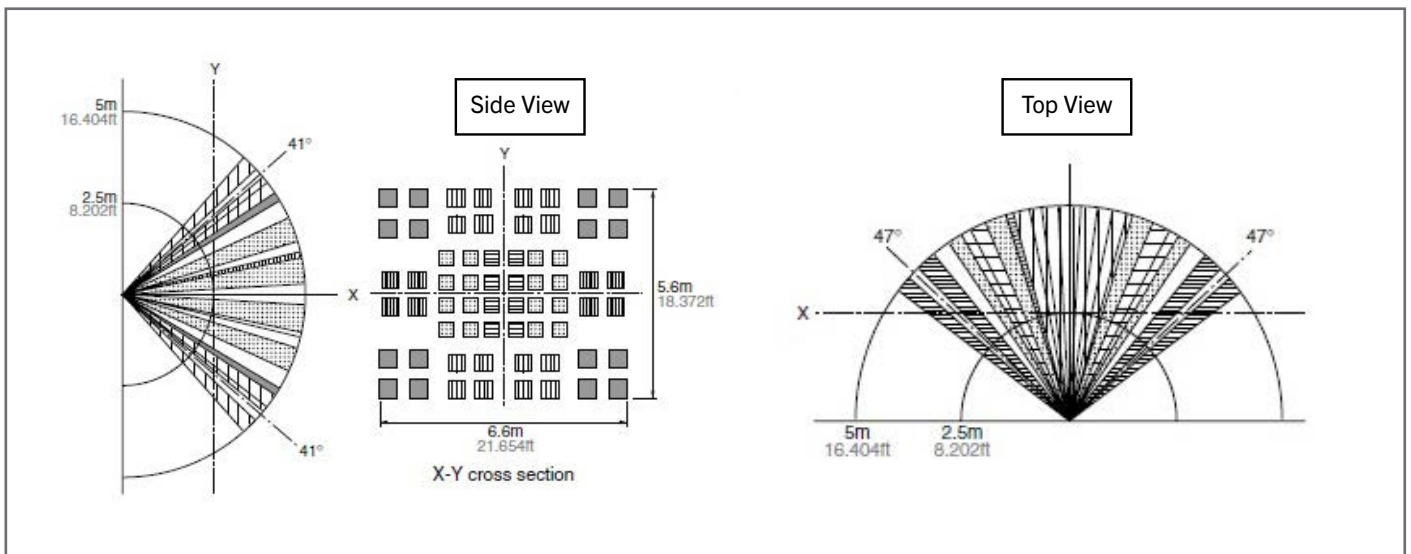
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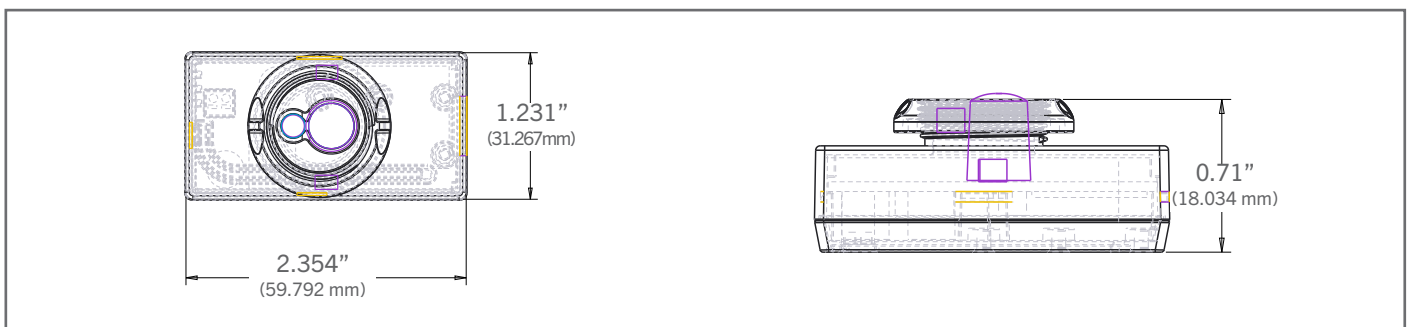
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### DETECTION PERFORMANCE:



### DIMENSIONS:

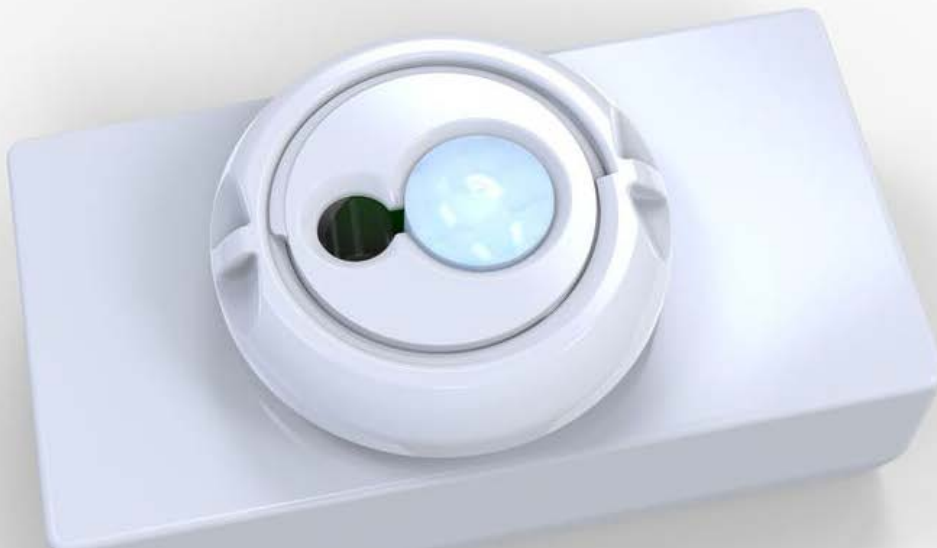


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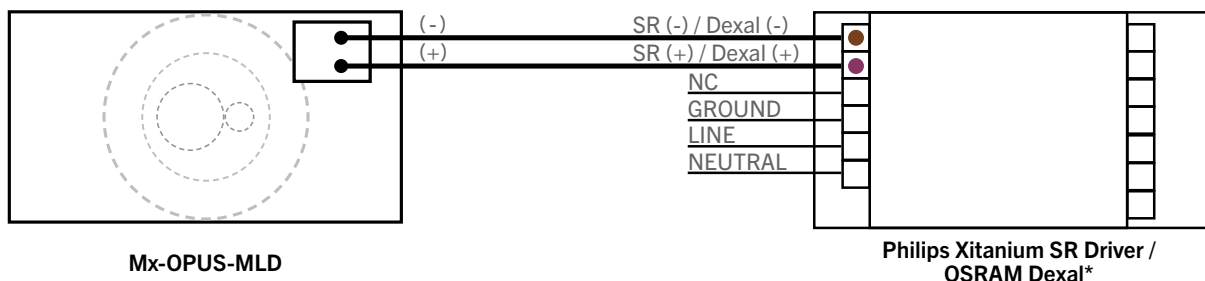
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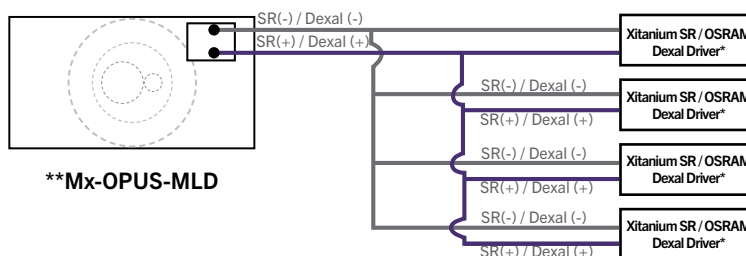
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WIRING DIAGRAM & ANTENNA NOTE:



\*When wiring the Mx-OPUS-MLD to a DALI driver other than the Philips Xitanium SR or OSRAM Dexal Driver, please refer to the connections labeled on the device to find the (-) and (+) receptacles.



\*\*Respect Xitanium SR / OSRAM Dexal bus polarity when more than one LED is connected in parallel.

**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 dustproof. Avoid use in environments subject to excessive moisture, condensation, frost, containing salt air or dust.
- Avoid use in environments with corrosive gases.