

Self-Powered. RF Wireless. Occupancy Sensor [M3-MS1]



BASIC OPERATION

The Wireless Occupancy Sensors (M3-MS1) have built-in solar cells that draw on available ambient light to power themselves and can operate for up to 48 hours in total darkness. Batteries are not required for continuous operation, however batteries can be added as an option for applications without available ambient light.

For improved detection, the sensors use an enhanced PIR element located directly behind a unique multi-zone optical lens. This exclusive Fresnel lens establishes twice as many zones of detection as traditional sensors. The zones can be configured (masked) to block out unwanted traffic zones (i.e. outside hallway traffic.) The M3-MS1 features superior detection for parallel and perpendicular motion. Innovative sensing technology detects motion moving directly towards the sensor.

The self-powered wireless sensor design also overcomes the placement and coverage challenges of traditional sensors. Self-powered wireless sensors enable flexible placement allowing sensors to be mounted wherever needed without the complexity of moving or installing new wiring.

APPLICATIONS

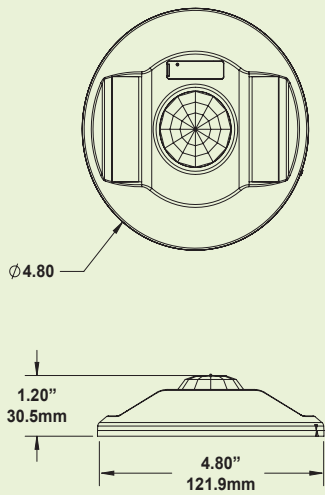
- Retrofits • New construction • Restrooms
- Conference rooms • Classrooms • Private
- Executive Offices • Daycare facilities

FEATURES

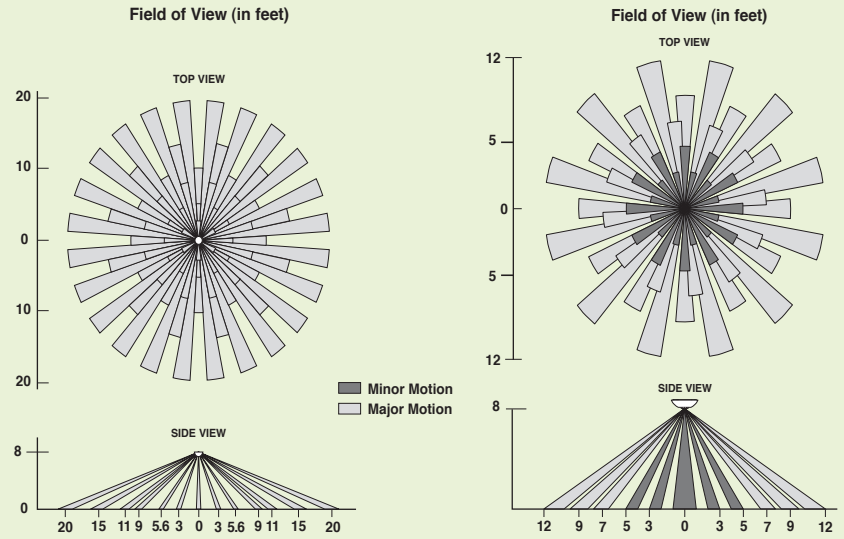
- Zero Power Consumption: solar power provides the energy to keep the device on and sensor technology turns the lights off eliminating additional expenses to the end user's energy bill
- Zero External Power Required: with no power wire limitations, this enables the installer to place the sensor in the optimal location of any application to capture minor motion and reduce false OFFs
- Self-Powered, Self-Charging: angled solar cells are optimal for light collection enabling the sensor to capture additional ambient light over flat solar cells – 100 LUX vs. 70-80 LUX
- Quick Charge Time to Operation: self-powered technology enables the sensor to be operational after a minimum charge time of 1 minute
- True Wireless: sensors are self-powered and communicates with all Magnum RF and EnOcean Receivers via radio frequency
- No Additional Wiring: self-powered wireless technology eliminates the need to pull additional wire making installation quick and easy and increasing labor savings with little to no impact to business during conversion
- No Batteries or External Power Required: exclusive "battery-less" technology significantly reduces callbacks and maintenance for additional savings
- Up to 48 Hours of Stored Power: solar panel provides up to 48 hours of power to the sensor when no ambient light is available (for extended "OFF" time, a battery option is available)
- Advanced Field-of-View: superior detection for parallel and perpendicular motion; innovative technology detects motion moving directly towards the sensor; 360° rotation to fine tune location of solar cells and
- Improved Aesthetics: blends seamlessly with ceiling décor and architecture
- Additional Energy Savings: wireless technology supports simplified daylight harvesting and manual override options with no additional wiring



DIMENSIONS



FIELD-OF-VIEW



SPECIFICATIONS

ENVIRONMENTAL	
Frequency	315MHz
Range	up to 100 feet
Transmission Interval	60 seconds
Minimum Light Required	4 FC (40 LUX)
Solar Cell Operating Range	4-100 FC (40-1000 LUX)
Minimum Charge Time to Begin Operation	1 minute @ 20 FC (200 LUX)
Maximum Charge Time	8 hours @ 20 FC (200 LUX)
Maintain Charge Time	3 hours per 24 hours @ 20 FC (200 LUX)
Optional Battery Life	10 years
Operating Temperature Range	32°F to 104°F (0°C to 40°C)
Storage Temperature Range	-4°F to 158°F (-20°C to 70°C)
Relative Humidity	0% to 95%, non-condensing
Usage	Indoors only
Mounting Height	8-12 feet

MATERIAL CHARACTERISTICS

Operating Temperature:	32° F to 122° F
Storage Temperature:	14° F to 185° F
Relative Humidity:	20% to 90% non-condensing

OTHER

Listings	CEC Title 24 Compliant, FCC Certified for wireless communication
Warranty	Limited 5- year

ORDERING INFORMATION

PRODUCT #	DESCRIPTION
M3-MS1-S	Magnum RF Self-Powered PIR Occupancy Sensor, 450SF
M3-MS1-L	Magnum RF Self-Powered PIR Occupancy Sensor, 1500SF

Related Products:



Magnum Power Strip



Venergy Thermostat



Window Sensor



Wireless Relay