



GE Current WMZ10 Controls Wireless Controls Installation Guide

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GE current
a Daintree company



Installation Guide
WMZ10 | DT050
Daintree® Wireless
People Counting Sensor (WMZ10)



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BEFORE YOU BEGIN



Read these instructions completely and carefully.
Save these instructions for future use.



WARNING

Risk of electrical shock.

- Turn power off before inspection, installation or removal.

Follow all NEC and local codes.

- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- Wear safety glasses and proper aid during installation and maintenance.
- Install this kit only in the luminaires that has the construction features and dimensions shown in the photographs and/or drawings.
- Above ceiling access required.
- While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in an operating fixture.

WARNING

Risk of electrical shock. Disconnect power before service installation, or maintenance of the product

The WMZ10 is part of the Daintree Networked product portfolio, an open networked wireless controls solution to address evolving environmental regulations and transform spaces into intelligent environments for buildings of all sizes. The WMZ10 utilizes the Daintree Networked for dimmable light luminaire control, daylight harvesting, occupancy detection and non-camera based people counting. The WMZ10 is capable of advertising BLE beacons in the iBeacon format for enabling Indoor Positioning Solutions.

Save These Instructions

These instructions do not purport to cover all details or variations in components nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to GE Current, a Daintree company. GE Current, a Daintree company does not claim liability for any installation not performed according to a this guide or not by a qualified electrician.

CONTACT FACTORY for details and limitations when seeking to add this device to a luminaire being used with an emergency system other than Battery Backup.

WARNING

Risk of injury. Wear safety glasses and gloves during installation and servicing.

WARNING

Risk of fire. Follow all relevant IEC or UL instructions and local building codes.

Preparing Electrical Wiring



Electrical Requirements

In case of power supply miswiring, mains can be present on the device. Make sure all electricity is switch off before inspection.



Grounding Instructions

The grounding and bonding of the overall system shall be done in accordance with National Electric Code (NEC) Article 600 and local codes.

ESD Avoidance of Electrostatic Discharge

While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in an operating fixture.

IMPORTANT

To ensure the product warranty is valid, please ensure all installation instructions and environmental conditions for

storage and operation are complied with. Only Current trained contractors can install the product.

FCC/ IC Compliance Statements

This device complies with the part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operations.

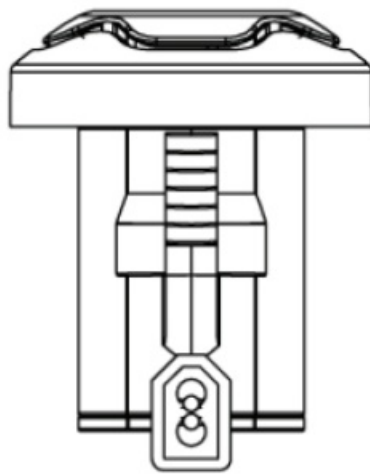
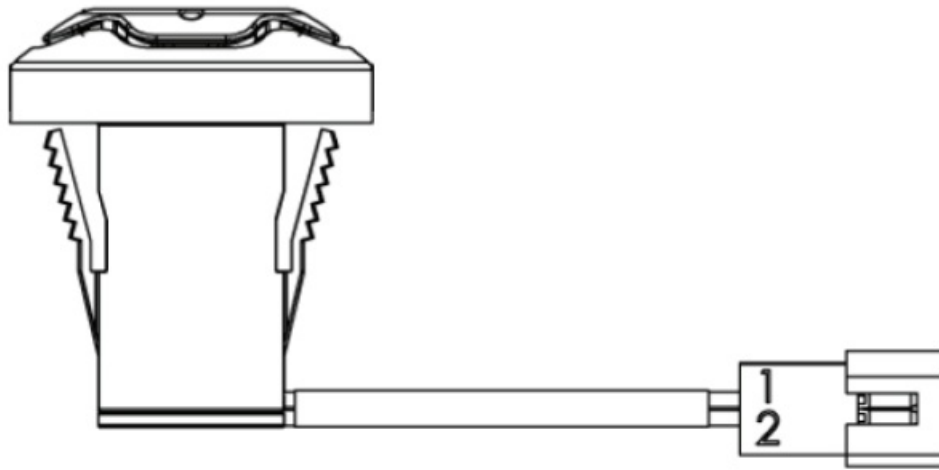
This device contains license-exempt transmitter(s)/receivers(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operations of the device.

To satisfy FCC-ISED RF exposure requirements a separation distance of 20 cm or more must be maintained between the antenna of this device and persons during operation.
Operation at closer than 20 cm is not permitted.

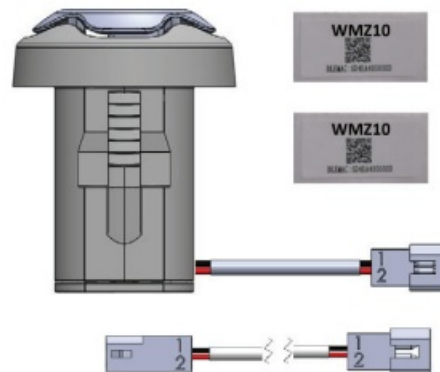
Installation/Mounting

- WMZ10 Can be mounted into a 7/8" hole directly in a drywall ceiling, or drop ceiling tile.
- Ribbed wings hold the sensor in place to the ceiling.
- Recommended Mounting Height is 9'-11'



WMZ10

- Daintree Networked People Counting Sensor
- CMP Cable
- Identification sticker labels



NOTE:

- All cables are CMP (Plenum) rated.
- Identification sticker labels are to be placed on or near luminaire and on a floor plan for mapping

Installation/Coverage

The sensor shall be installed and commissioned by a trained individual.

- Please note, that the sensor shall be installed with the arrow (on lens) facing North.
- It is important that the sensors are all oriented in the same direction to ensure optimal performance.

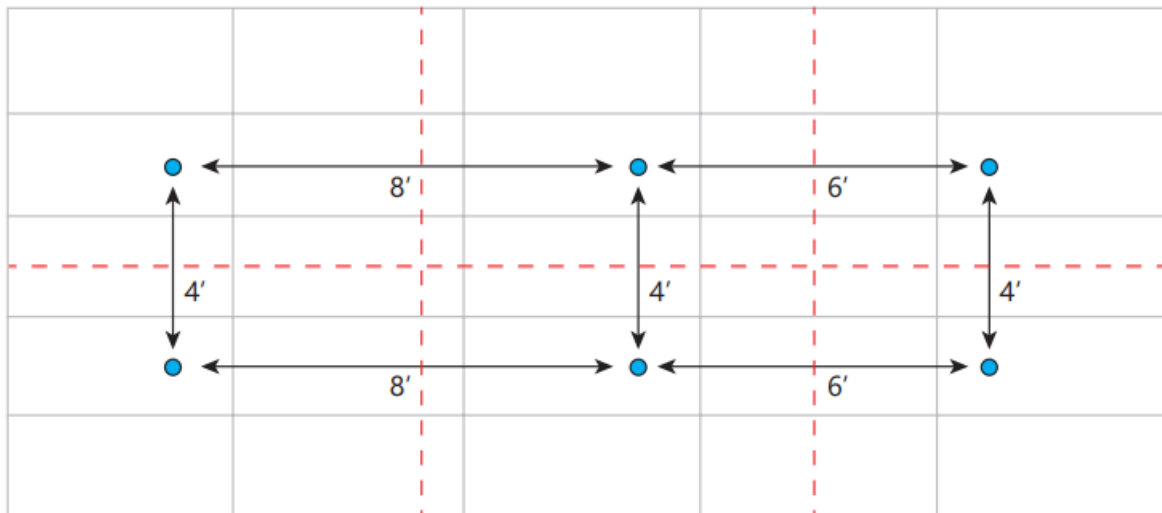
Mounting Height	Max. Coverage (sq. ft.)
9	64 (8 ft. x 8 ft. Square)
10	81 (9 ft. x 9 ft. Square)
11	100 (10 ft. x 10 ft. Square)

Installation/Spacing

In order to effectively count occupants in the room, the sensor must be spaced uniformly in a grid pattern. If working in a room with drop ceilings, the grid must correspond with the ceiling tiles.

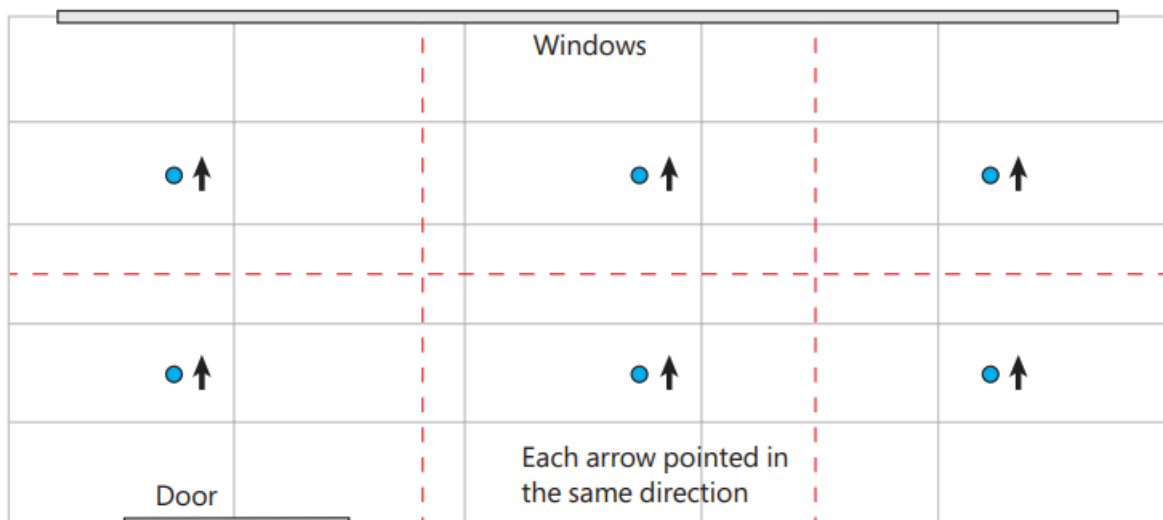
Each sensor has a 4' max field of view on each side. Distances between sensors and IEEE numbers must be recorded.

Ex. 2'x4' Ceiling Tiles



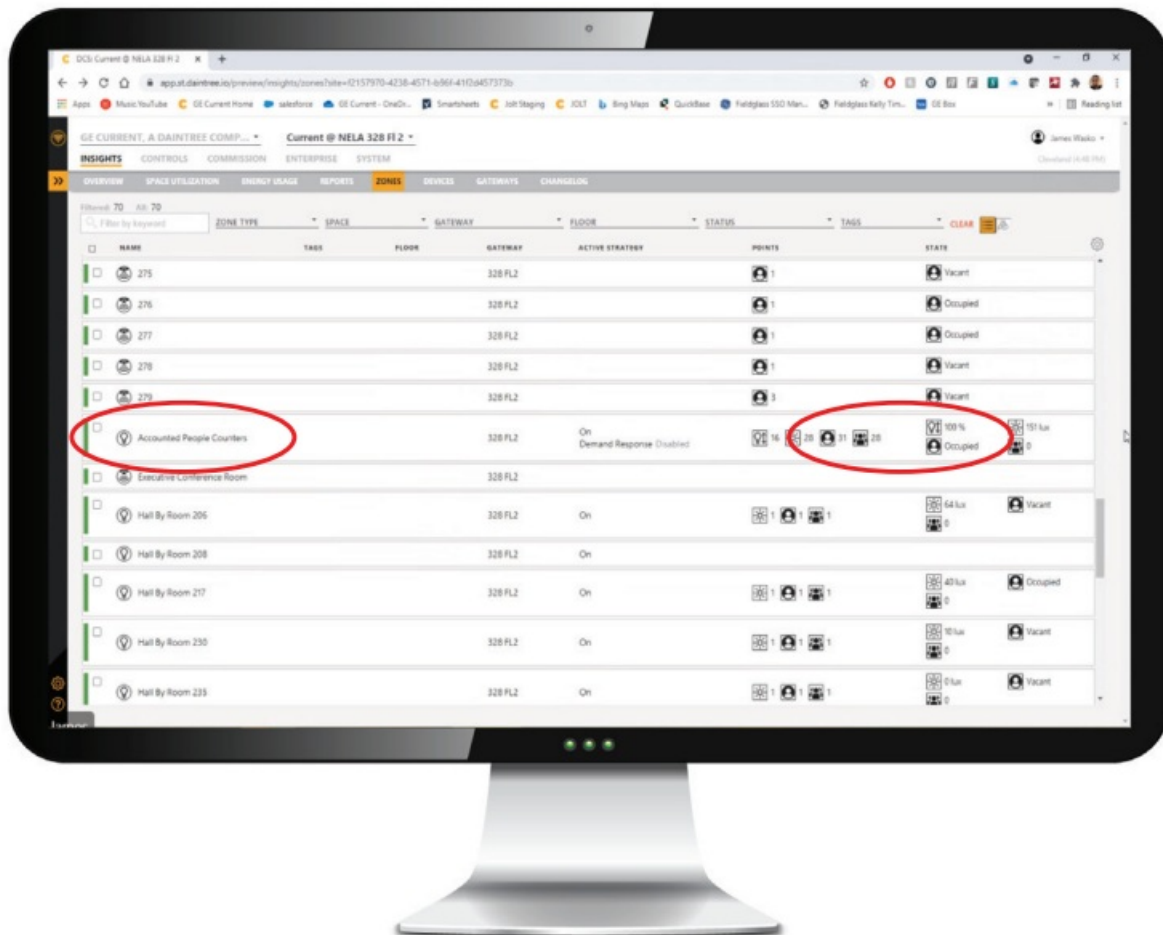
Installation/Orientation

- Each WMZ10 sensor has an arrow embossed on the sensor's face. This Arrow must be oriented in a known direction.
- We recommend the arrow on each sensor in a room be pointed AWAY from the wall with the door or entryway.

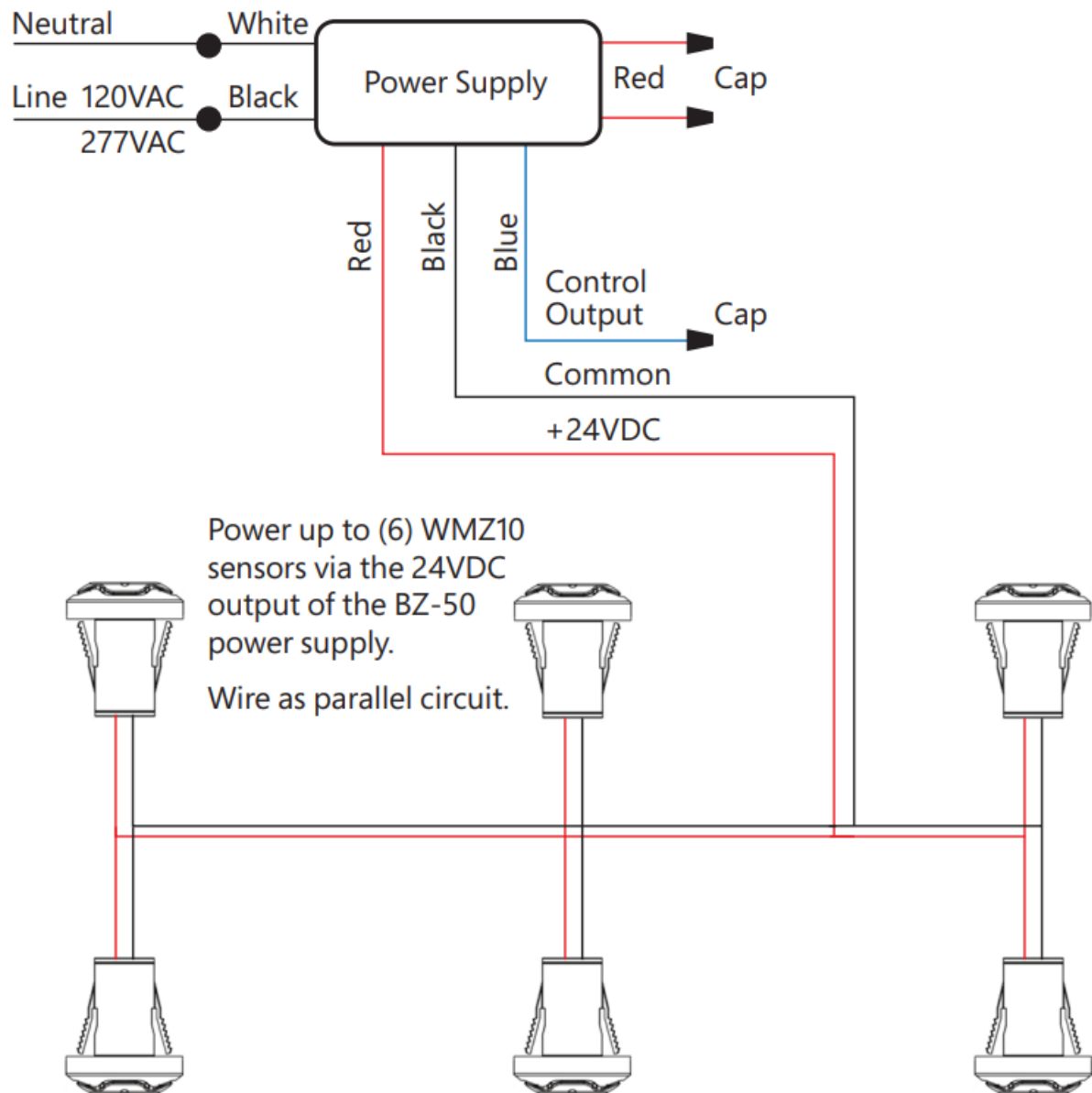


Reporting

- People Counting Reporting is provided in the Insights > Zones section of Daintree Controls Software (DCS) in the Daintree Networked Wireless Controls platform. For more information on DCS or Daintree Networked, visit gecurrent.com/daintree



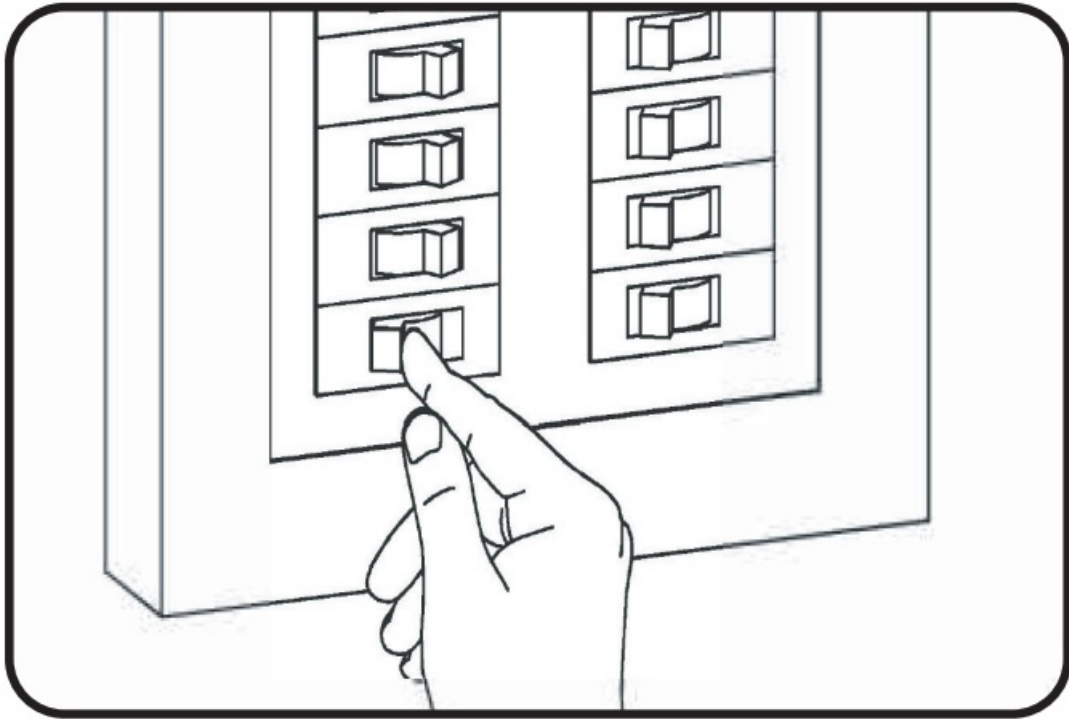
Wiring



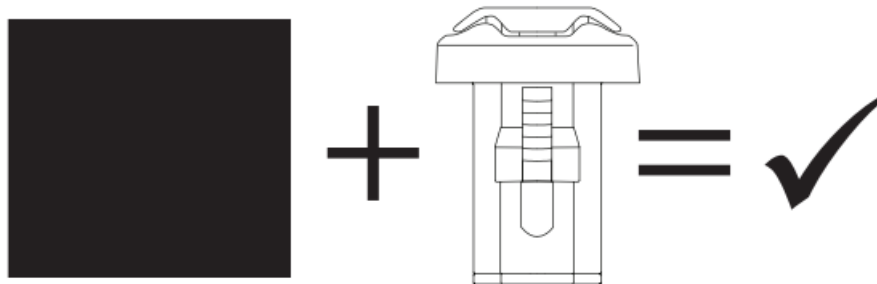
SENSOR ACCESSORY INSTALLATION STANDALONE UNIT (NO LED FIXTURE)

FOLLOW OPTION A OR B FOR NON ENCLOSED OR ENCLOSED INSTALLATION

A DISCONNECT POWER



B VERIFY POWER SUPPLY AND SENSOR ARE COMPATIBLE

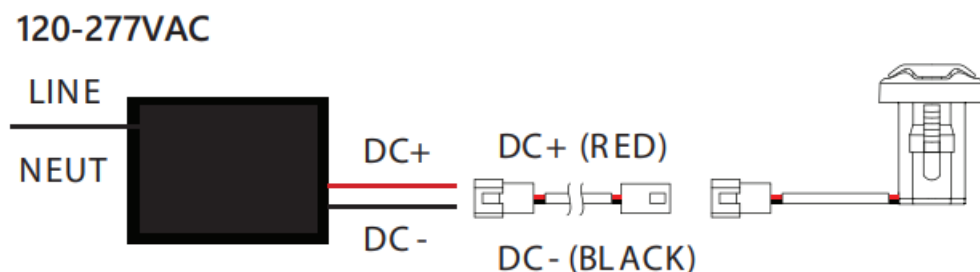


COMPATIBLE POWER SUPPLY (WMZ10 only) OR LCA KIT

To verify a compatible power supply, please refer to the Power Supply Compatibility List table on each device's spec sheet.

Note: Connect TM sensor to GE Lighting Solutions LLC LED drivers or control modules not capable of providing greater than 15VA power, including but not limited to models listed in Power Supply Compatibility List.

C MAKE ELECTRICAL CONNECTIONS



Connect wires from the power supply or LCA Kit to the sensor input wires. Connect the power supply input wires to the appropriate power source. Use only U.L. approved wire connectors for all electrical connections. Be sure to insulate unused leads INDIVIDUALLY to 600Vrms using U.L. approved wire connectors.

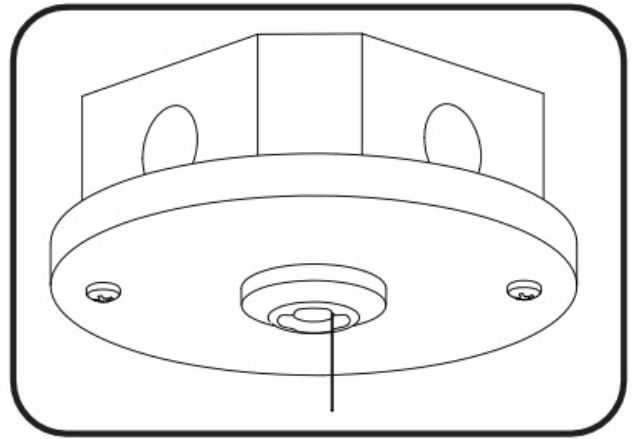
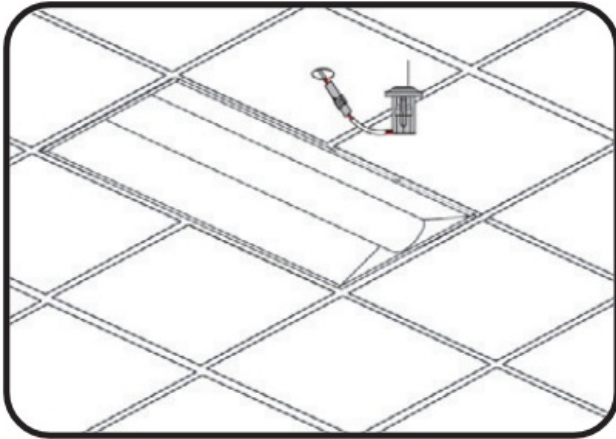
D CEILING INSTALLATION (SEE OPTION A OR B)

OPTION A

- Direct ceiling install (CMP cable used)

OPTION B

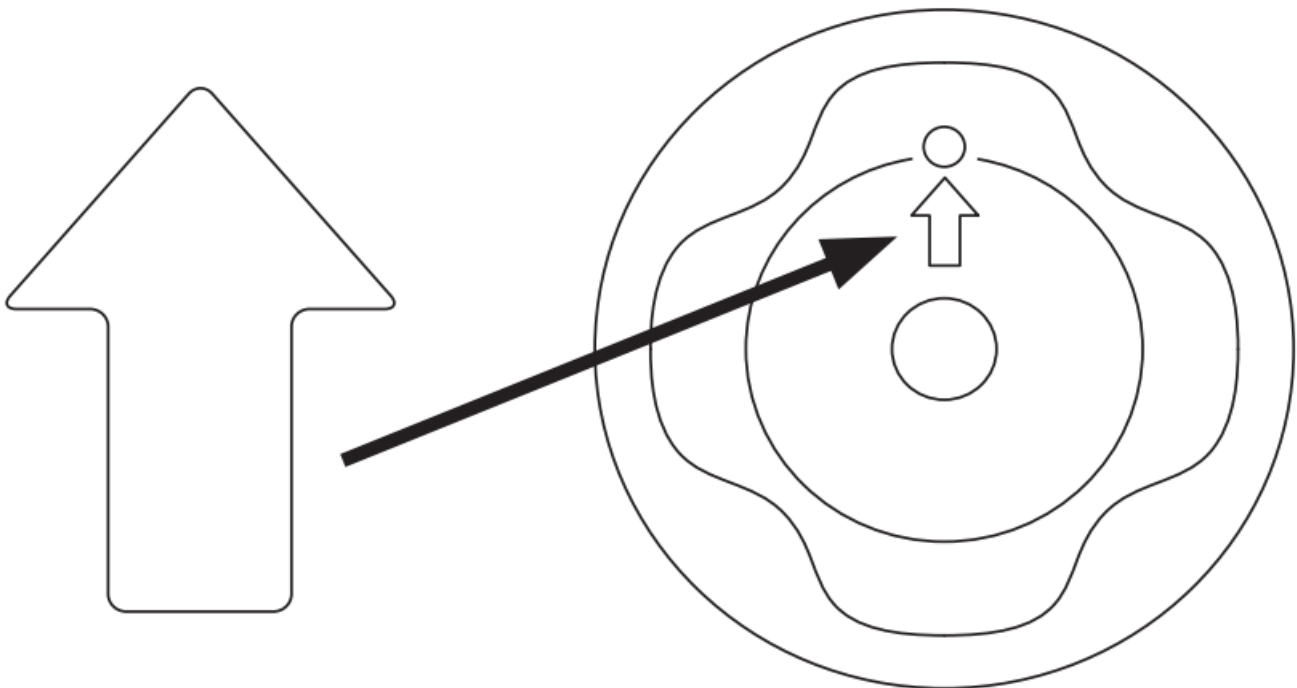
- Metal box/conduit install



Install the sensor unit into the ceiling following the same steps as mentioned in Option A or B of this installation guide.

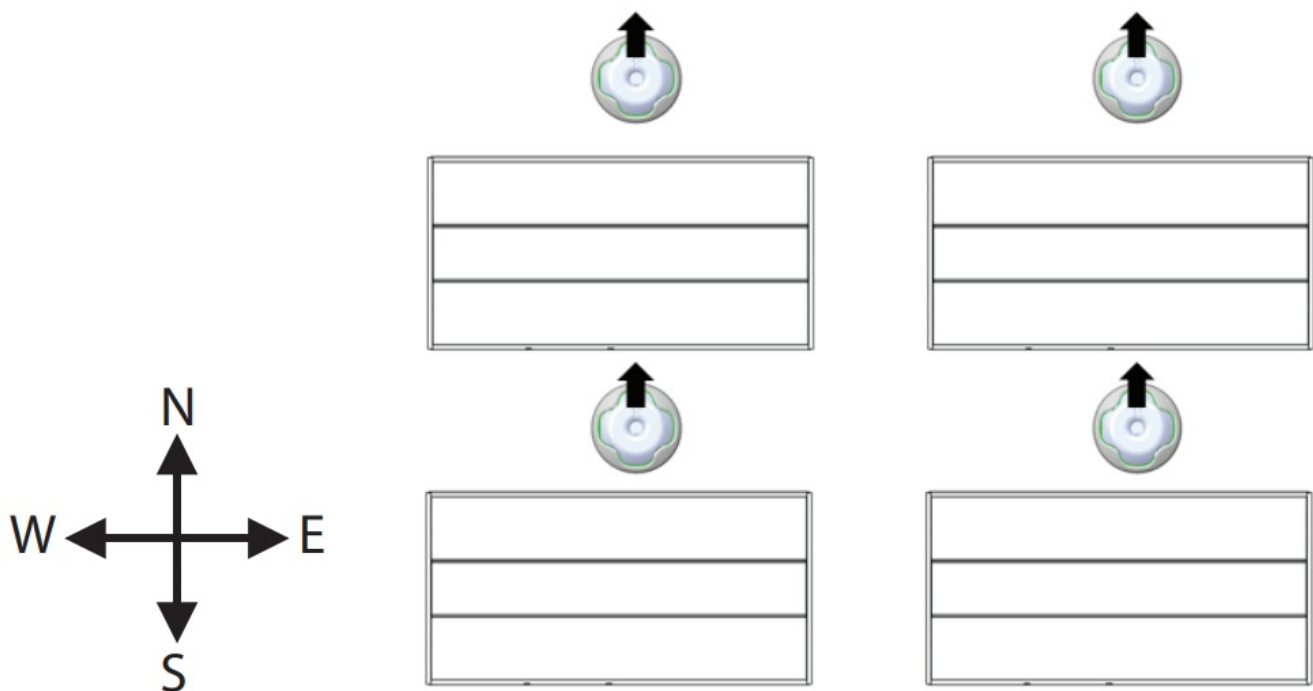
E TM MULTI-SENSOR ORIENTATION MARK

For the WMZ10 TM Multi-Sensor there is an arrow on the lens. This arrow is a mark or indicator for the direction of the sensor.



F TM MULTI-SENSOR ORIENTATION REQUIREMENT

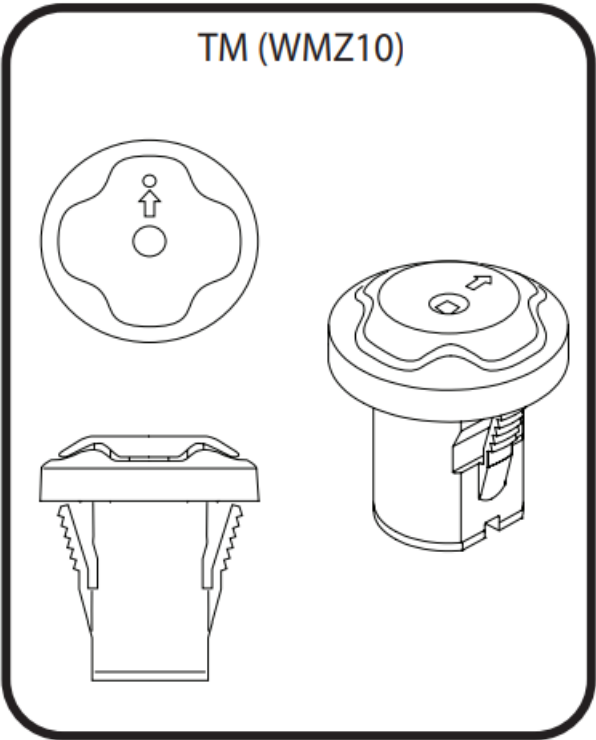
When the sensor is installed, all sensors should face the same direction. The arrow can be used to point all sensors in one direction. As a reference all sensors installed should have the arrow pointing North.



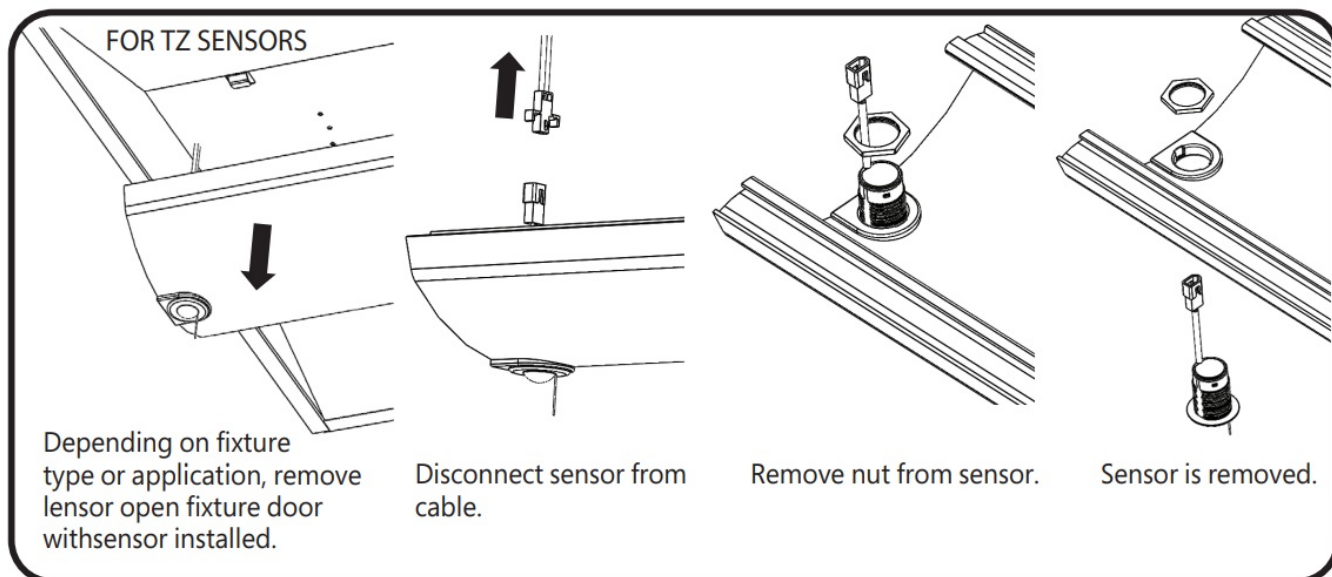
SENSOR PLACEMENT

IDENTIFY SENSOR MODEL INSTALLED Identify sensor model

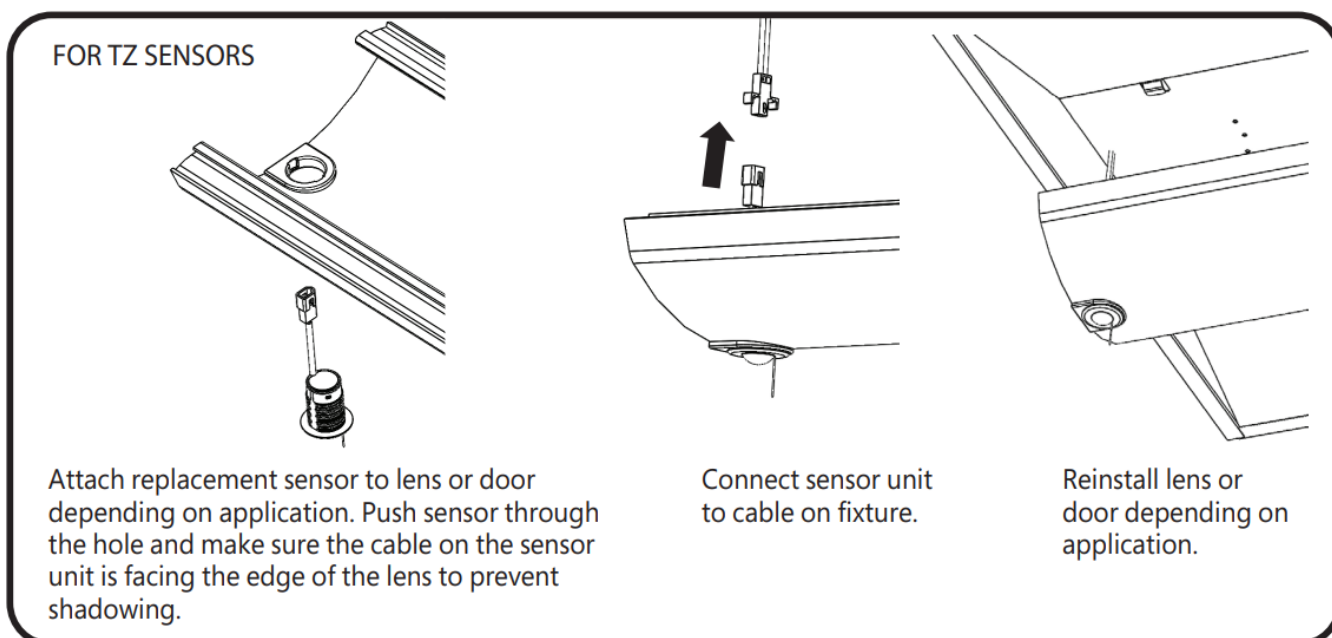
A Remove sensor from ceiling or LED



B installed



C Install replacement sensor Fixture



Note:

- Identification sticker labels are to be placed on or near luminaire and on a floor plan for mapping.

Troubleshooting – Planning Deployment

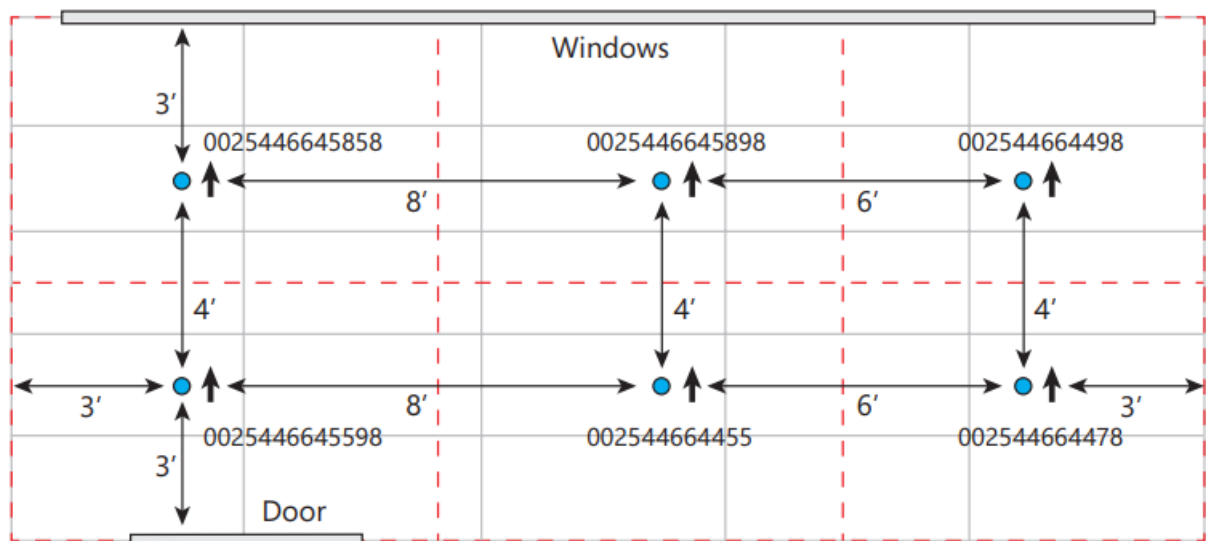
Obstacles to Avoid

Sprinkler heads, lighting, fire alarms, and HVAC registers must be designed around.



Troubleshooting – What to Document

- Locations and relative distance of sensors
- Orientation of sensors
- IEEE number of sensors



Technical Data

Product Specifications :

Sensor Type	People counting, occupancy
Dimensions	See dimensioned diagram
Weight	9.5-24 VDC, Class 2 (See note below)
Voltage Rating	9.5-24
Current Consumption	50mA
Operating Ambient Temperature Range	0-50°C (Indoor)
Status Indicator	LED pattern indicates network join status
Connections	See connection diagram
Mounting Hole	Installs within a 22mm (0.87") hole
Recommended Mounting Height	9-11 ft; Recommended to be spaced 8 ft apart on the x,y grid
Warranty	5 years

Note: Connect WMZ10 to Current LED drivers or control modules not capable of providing greater than 15VA power, including but not limited to models listed in the Power Supply Compatibility List (see page 3).

Additional Information:

Product Availability

SKU	Description	Model
93106832	Wireless People Counting Sensor	WMZ10

Product Certifications



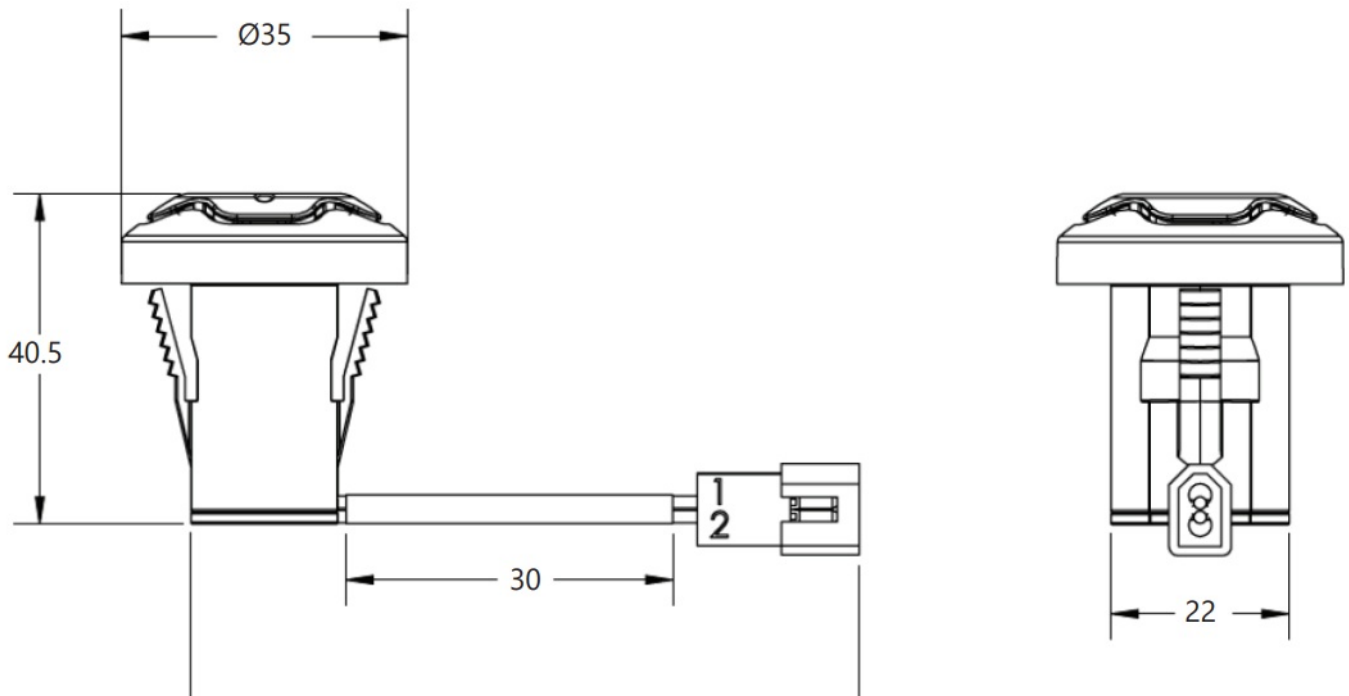
FCC ID: 2AS3F-WMZ10

IC: 25008-WMZ10

Purpose of the Control	Operating Control
Method of Mounting Control	Independently Mounted Control. Model WMZ10 intended for flush mounting into a recessed cavity
Type of Action and Additional Features	Type 1
Control Pollution Degree	2
Function/Software Class and Structure	Class A
Rated Impulse Voltage	330V

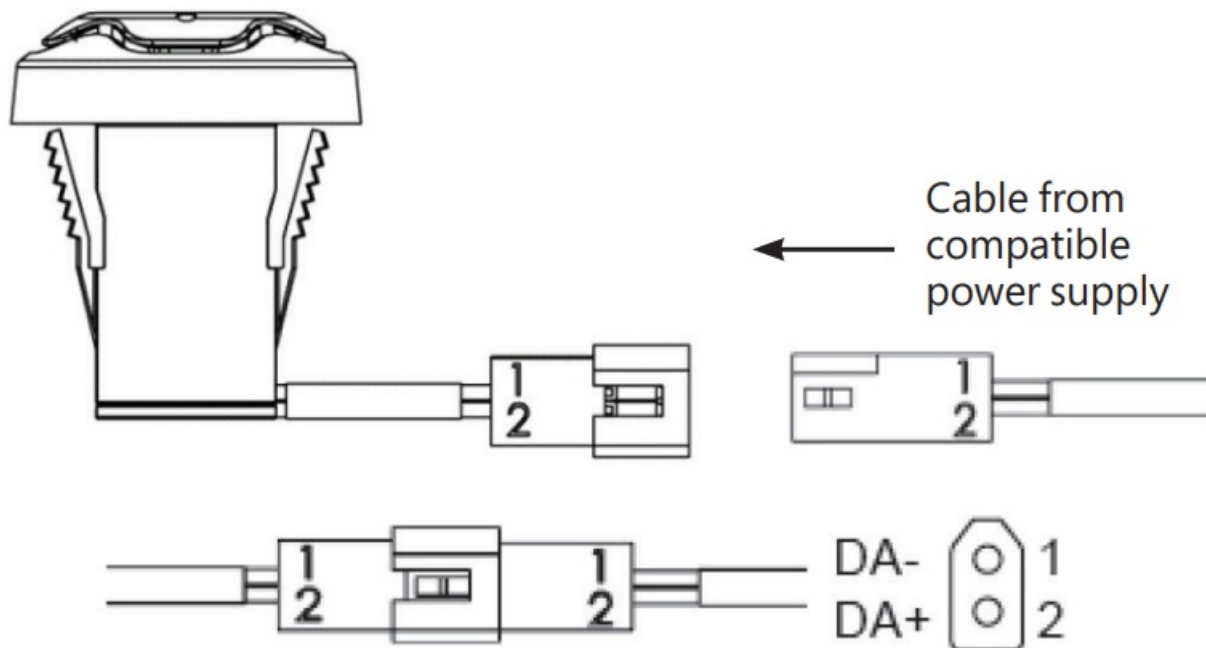
Note: Any external cables connected to devices not to exceed 30 meters length.

Product Dimensions



Wiring Diagram

Connect the WMZ10 Sensor to a compatible power supply using the provided connector. While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in a operating fixture.



Power Supply Compatibility List

Manufacturer	Manufacturer P/N	Input Voltage (V AC)	Output Voltage (VDC)	WMZ10
Current	WA100	120-277 VAC	24 VDC	Compatible
Current	WGA100	120-277 VAC	24 VDC	Compatible
Wattstopper	BZ-50	120-277 VAC	24 VDC	Compatible
Current	LCACBA0TWUNGALV	120-277 VAC	12-20 VDC	Compatible
Current	GEMOD/DB010	120-277 VAC	DA Output 16 VDC	Compatible
Current	GED22MCRP500	120-277 VAC	DA Output 16 VDC	Compatible
Current	GED90MCRP1750	120-277 VAC	DA Output 16 VDC	Compatible
Current	GED100MCC2P480	120-277 VAC	DA Output 16 VDC	Compatible

NOTE: Refer to power supply amperage rating to ensure the quantity of WMZ sensors does not exceed power supply amperage.

CAUTION

The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR STANDALONE SENSOR ACCESSORIES THE FOLLOWING STATEMENTS APPLY

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Note: This equipment has been tested and found to comply with the limit for a Class B digital device, pursuant to a part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to a radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To satisfy FCC/ISED RF exposure requirements a separation distance of 20 cm or more must be maintained between the antenna of this device and persons during operation. Operation at closer than 20cm is not permitted. These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to GE Current, a Daintree company.

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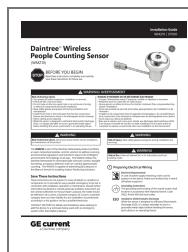
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Information provided is subject to change without notice.

All values are design or typical values when measured under laboratory conditions.

DT050 (Rev. 10/25/2021)

Documents / Resources



[GE Current WMZ10 Controls Wireless Controls](#) [pdf] Installation Guide

WMZ10 Controls Wireless Controls, WMZ10, Controls Wireless Controls, Wireless Controls

References

- [Daintree Wireless Controls - Wireless Lighting Controls | Current - GLI Brands](#)
- [Commercial Lighting and Lighting Controls | Current - GLI Brands](#)