

Project		Catalog #		Type	
Prepared by		Notes		Date	



Greengate

MicroSet Dual Tech Sensor

Ceiling sensor with combination of Ultrasonic and Passive Infrared technologies

Typical Applications

Conference Rooms • Office Spaces • Common Areas • Storage Areas • Hallways • Other Indoor Office Spaces

Interactive Menu

- Order Information page 2
- Additional Resources page 2
- Wiring Diagrams page 3
- Connected Systems page 4
- Product Warranty

Product Certification



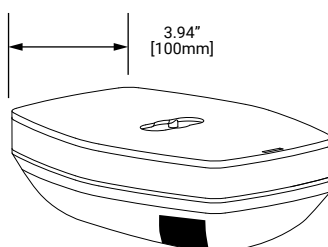
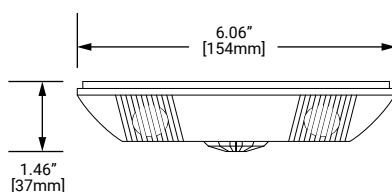
Product Features



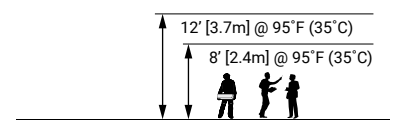
Top Product Features

- Exclusive Energy Saver Mode
- Complete no-gap coverage
- Self adjustable delay of 10 minutes to 30 minutes
- BAS compatible
- Manual ON/OFF feature when wired to a normally open momentary pushbutton (Greengate Model# AML Switch)
- Products tested to NEMA WD 7 - 2011
- Occupancy Motion Sensors Standard
- Options to meet Buy American Act requirements

Dimensional Details



Mounting Height



additional product diagrams

Order Information

Catalog Number

	Catalog Number	Maximum Room Size	Field of View	Features
	OMC-DT-0701-R	300 - 700 sq.ft.	One Way (180°)	w / BAS Relay
	OMC-DT-2000-R	700 - 2,000 sq.ft.	Two Way (360°)	w / BAS Relay

Notes

(1) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Product Specifications

Technology

- Passive Infrared (PIR) and Ultrasonic (US)

Mechanical

Size: 1-5/12"H x 3-3/4"W x 6-1/12"D (37mm x 100mm x 154mm)

Environment:

- Operating temperature:** 60°F to 90°F (15°C to 26°C)
- Relative humidity operating:** Less than 95%, non-condensing
- For indoor use only

Housing: Medium impact injection molded housing. ABS resin complies with UL 94V0. Paintable off-white.

Electrical

Power Requirements:

- Input
 - 10-30 VDC from Greengate Switchpack or Greengate system
 - Maximum current needed is 25mA per sensor
- Output
 - Open collector output to switch up to ten Greengate Switchpacks
 - Isolated Form C Relay in (-R) models.
 - Isolated Form C Relay Ratings: 1A 30 VDC/VAC

Hardware Specifications

LED Indicators:

- Red LED for PIR detection; Green LED for Ultrasonic detection

Controls and Performance

Time delays:

- Self-adjustable from 10 min. to 30 min.

Available Frequencies:

- 32 kHz

Standards/Ratings

- cULus Listed

Warranty

Five year warranty standard

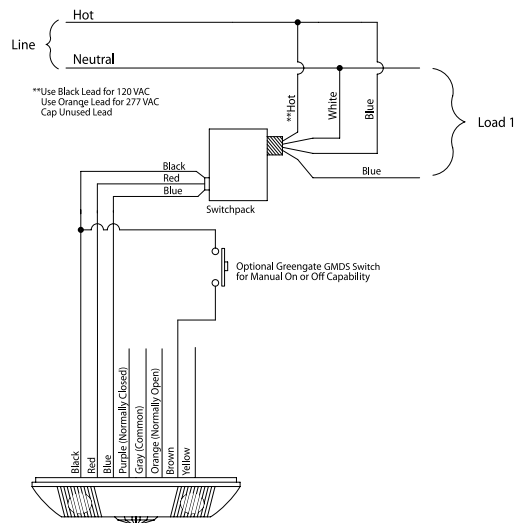
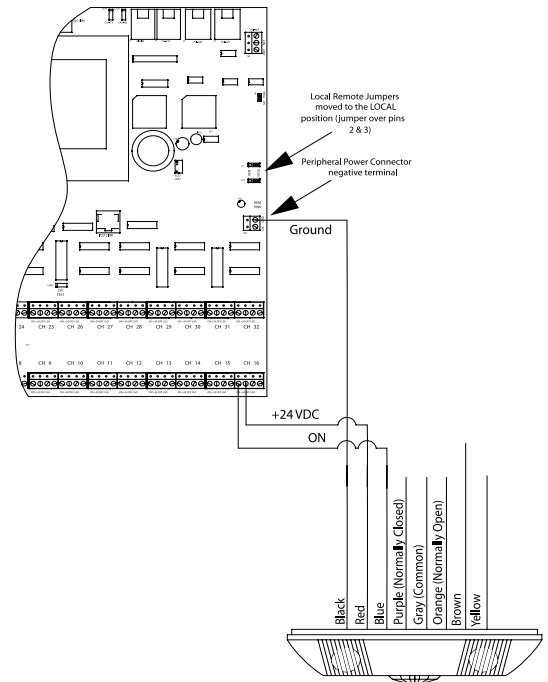
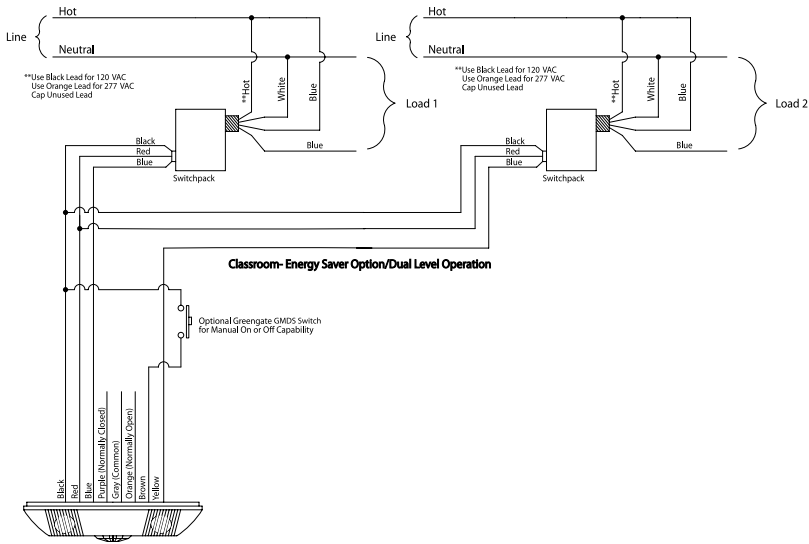
Overview

The MicroSet Dual Tech sensor's combination of Ultrasonic and Passive Infrared technologies offers the most complete sensing equipment available today. This pairing helps eliminate false activations or deactivations for additional energy savings. The OMC-DT sensors are also equipped with MicroSet technology which provides a revolutionary adaptive and airflow tolerant technology, making them ideal for spaces which have increased airflow due to higher occupant levels. MicroSet Dual Tech sensors drastically simplify and reduce a contractor's installation and adjustment time period. These self-adapting, dual technology sensors truly offer some of the most advanced technology available.

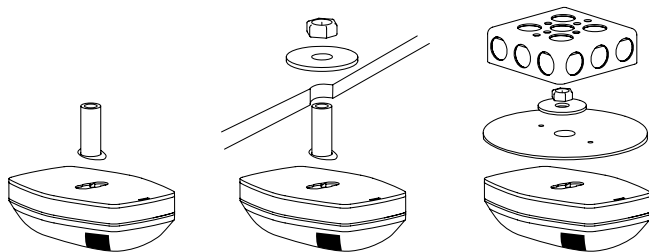
Technology

The MicroSet technology continuously monitors multiple sub-frequencies in the event that if a continuous Doppler shift occurs, such as those created by airflow from an air duct, the sensor will identify the noise as continuous and then block it out of view at a select sub-frequency. It will continue to monitor other sub-frequencies for human motion. This avoids a false-activation, while still maintaining the high level of sensitivity that is necessary for sensing minor motion in a changing environment. Separate concurrent time delays for both Passive Infrared and Ultrasonic technologies avoid false activations or deactivations. The MicroSet Dual Tech sensor is also equipped with our exclusive Energy Saver Mode, specifically designed for classrooms with 2 level lighting, which can be selected by a DIP Switch, ensures that when an occupant enters the room only one zone of lamps will turn ON (typically those farthest away from the windows). In order to switch the other lamps ON you use a low voltage switch on the wall that is connected to the sensor. The switch (Greengate model# AML switch) allows the user to toggle between the various settings and allows an override to OFF.

Wiring Diagrams



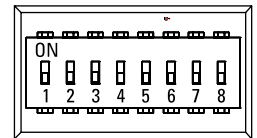
Mounting



DIP SWITCH SETTINGS

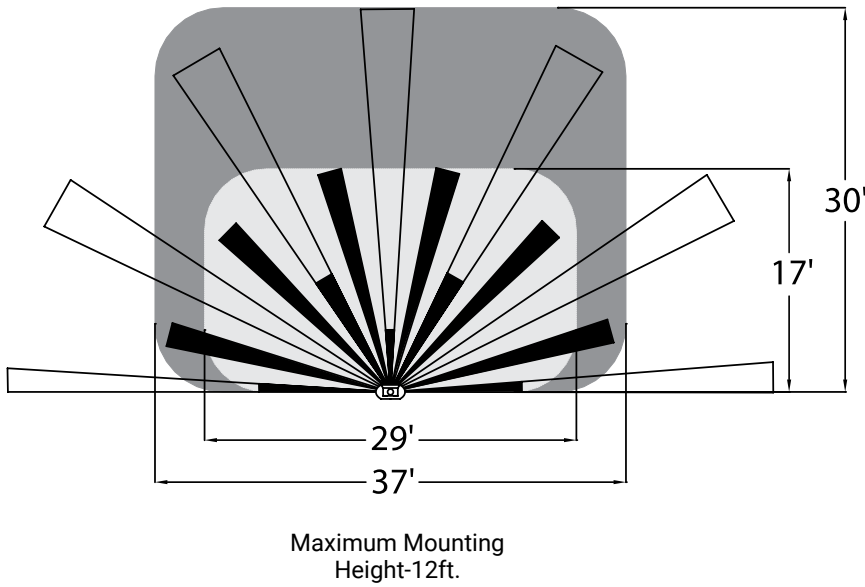
Factory Default Settings are: ↓

- 1 - Auto ON ↓ Manual ON ↑
- 2 - Lighting Sweep Off ↓ ON ↑
- 3 - Self-Adjust ↓ 30 Minute Lock ↑
- 4 - Normal ↓ Energy Saver ↑
- 5 - Not Used
- 6 - Normal ↓ Low Sensitivity ↑
- 7 - Either Mode ↓ Both Mode ↑
- 8 - Manual Override OFF/ON

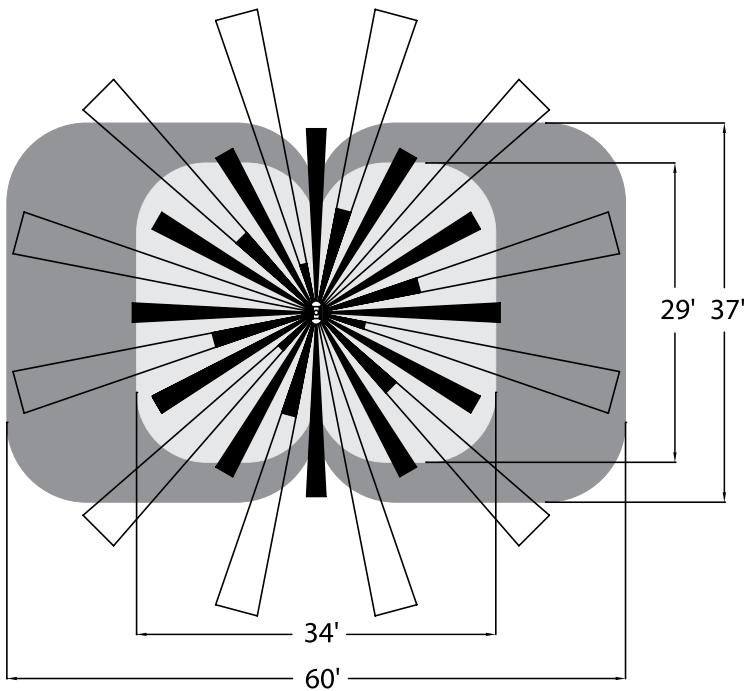



Coverage

OMC-DT-0701-R
300 - 700 sq. ft.



OMC-DT-2000-R
700 - 2,000 sq. ft.



 **Control Systems**
• Greengate