

S709-M-DR

Line Voltage Microwave High Bay Dimming Sensor



Fully adjustable standby and dimming time delays

Internal photodiode enables daylight harvesting for extra energy savings

Low cost & warrantied for 5 years



Microwave detector has excellent performance

Mounting height from 8 to 49 ft

Commissioning and adjustment via trimpots or IR remote control

PRODUCT OVERVIEW

Introduction

The S709-M-DR is a self-contained motion and light sensor with line voltage relay designed for installation on commercial and industrial lighting fixtures such as troffers, high bays, and shoeboxes. The sensor uses microwave sensing technology to accurately detect motion in its coverage area and automatically dim and/or turn off lights when persons have left the area, reducing energy usage. A built-in photodiode increases savings by permitting daylight harvesting operation.

Operation

The sensor provides power to connected lights when motion is detected. When the sensor no longer detects movement and the standby time delay expires, 0–10V dimming compatible lights are dimmed according to the set dimming level and will eventually be switched off after the dimming time delay expires (-D dimming models only). A set ambient light threshold can keep lights off if there is sufficient natural light, leading to additional energy savings.

Commissioning

Setup and sensor adjustments are performed via on-unit trimpots or IR remote control (included with -R models). The remote allows parameter changes to sensitivity of the microwave detector, standby and dimming time delays, dimming level, and ambient light threshold. All settings are stored in non-volatile memory in case of electrical fault.

Applications

This high bay sensor is designed for installation on a light fixture body, ideal for the following applications:

LOCATIONS

- Warehouses
- Factories
- Workshops
- Conference halls
- Sports complexes
- Covered parking areas

FIXTURES

- Canopy
- Troffer
- High bay directional
- Shoeboxes
- Floods
- Wall parks

FEATURES

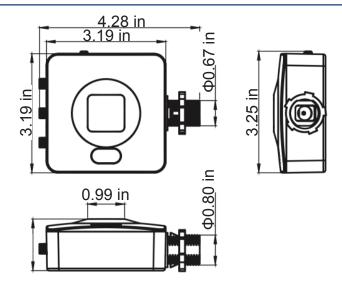
- Line voltage on/off control of lighting fixture(s)
- Microwave detector has excellent sensing performance across wide range of temperatures
- Up to 2,600 ft² coverage area at 49 ft mount height
- 0-10V dimming control compatible with dimmable LED drivers and fluorescent ballasts (-D models only)
- 10 seconds to 60 minutes standby time delay for a wide range of installation locations and applications
- 1 to 60 minutes dimming time delay for dimmed lighting
- Daylight harvesting functionality observes ambient light threshold set at measured or preset light levels
- Built-in quick installation testing mode
- IR remote control allows quick setup, settings adjustment, and manual on/off override
- UV resistant, flame retardant, impact resistant, and recyclable polycarbonate construction

SPECIFICATIONS

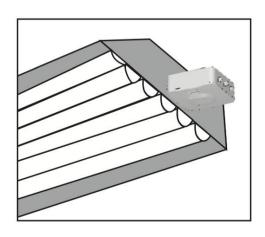
- Input Voltage: 120/208-240/277VAC @ 50/60Hz
- Relay Load Ratings: 800VA max @ 120VAC; 1000VA max
 @ 208-240VAC; 1200VA max @ 277VAC
- Standby Time Delay Periods: 10 secs, 1 min, 5 mins (default), 15 mins, 30 mins, 60 mins
- Dimming Time Delay Periods (-D models only): 1 min, 30 mins, 60 mins (default), off (dimming always on)
- Dimming Levels: 0%, 10%, 20% (default), 30%

- 0-10VDC Dimming Current: 100mA max (sink)
- Photocell Sensitivity Range: 1 to 185 fc
- Operating Temperature: -40 to +140 °F
- Operating Humidity: 20 to 90% non-condensing
- Weatherproof Rating: IP44 for indoor use only
- Safety Certifications: UL/cUL listed #E479515
- Regulatory Code Compliance: California Title 24

DIMENSIONS



MOUNTING

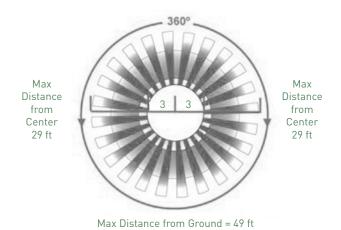


WIRING

Non-Dimming Driver Hot (Black) Power Sensor White Neutral (White)

Dimming Driver Hot (Black) Black ORAY (-) Dimming LED+ L E Driver Neutral (White)

COVERAGE PATTERN



ORDERING INFORMATION

Part Number	Color	Description
S709-M-DR	White	High Bay Mount, Microwave Sensor with 0–10V Dimming & IR Remote Control Capabilities
S709-M-D	White	High Bay Mount, Microwave Sensor with 0–10V Dimming Capability
S709-M-R	White	High Bay Mount, Microwave Sensor with IR Remote Control Capability
S709-M	White	High Bay Mount, Microwave Sensor
S-ACC-RC-D2	Black/White	Handheld IR Remote Control