



ENGINEERED FOR MOTION



# microStar™ M Microwave Motion Sensor with HPR™



## Product Name microStar™ M

Microwave Motion Sensor featuring  
Human Presence Radar™ (HPR™)

## Contact Information

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## Product Description

### BASIC USE

The microStar M is a flush-mount microwave motion sensor with Human Presence Radar™ (HPR™) for activating all types of automatic doors. The microStar M provides unparalleled protection to even the slowest moving pedestrians from doors closing prematurely.

The microStar M is the first motion sensor to feature an “installation mode,” which allows the installer to set the detection area without having to physically activate the door.

**Human Presence Radar™ (HPR™) sensors provide more safety than any other standalone microwave motion sensor.**

Like other conventional microwave sensors, for the microStar M to activate an automatic door, it utilizes Doppler shift radar to detect movements of at least 2” per second. However, once the door has been activated, the microStar’s second

level of detection — Human Presence Radar™ — is enabled. Now motion down to 1/4” per second can be detected. This means with HPR™ enabled, persons virtually standing still will continue to be detected anywhere in the detection zone.

Since conventional Doppler shift radar must initially activate the door before enabling Human Presence Radar™, there is no additional chance for false activation of the door because HPR™ alone cannot activate the door.

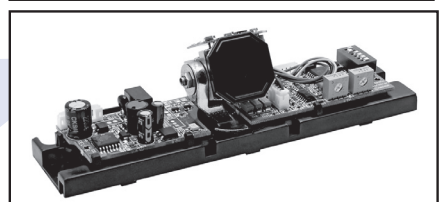
Human Presence Radar™ gives slow moving, elderly or disabled persons the confidence that once they have been initially detected, they can safely approach an automatic door at any speed without the door closing prematurely.

## Technical Data

- Human Presence Radar™ (HPR™) Provides Additional Level of Motion Detection After Initial Door Activation
- Unidirectional & Bidirectional, Narrow & Wide Patterns, and Variable Elevation, In One Unit
- Two Planar Antennas Included
- Can Be Mounted Up To 15 Feet Above Floor
- Easy To Install and Set-Up Without Proprietary External Devices
- Easy Sensitivity and Time Delay Adjustments
- Install Mode To Set Up Activation Pattern Without Physically Activating Doors
- Fits 1 3/4” Door Frames
- Bidirectional Pattern Adjustment (Left/Right, In/Out)
- Visible LEDs To Verify Activation In Normal Operating Mode
- UV Stabilized ABS Plastic Enclosure
- Rain Cover Available (MSRC)

## SPECIFICATIONS

|                      |   |
|----------------------|---|
| Model                | microStar™ M  |
| Frequency            | 24.125 GHz ± 50 MHz (K-Band)  |
| Detection Method     | Initial Detection: Doppler Shift Radar<br>Selectable Additional Detection: Human Presence Radar™ (HPR™) |
| Detection Pattern    | Selectable, wide or narrow  |
| Detection Angle      | Adjustable, 21° to 90°<br>±25° Left/Right   |
| Directionality       | Switch Selectable, Unidirectional or Bidirectional  |
| Range                | Adjustable (range pot.)   |
| Max. Mounting Height | 15' (4.5m)  |
| Power Requirements   | 12V to 24V AC or DC ± 10%   |
| Power Consumption    | 3.5W Maximum  |
| Output Contact       | Form C, Rated at 1 Amp  |
| Output Power         | 5mW Typical, 2mW Minimum  |
| Hold Time            | Adjustable, 1.5 to 5 Seconds  |
| Mounting             | Flush Mounted<br>Optional Universal Mounting Bracket (MS-BDB)   |
| Temperature          | -22°F to 158°F (-30°C to 70°C)  |
| Color                | Flat Black  |
| Weight               | <1 lb. (0.45kg)   |
| Size                 | 6 1/2”W x 1 7/8”H x 2 3/4”D<br>16.5cmW x 4.8cmH x 7cmD  |



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**APPLICABLE STANDARDS**

American National Standards Institute (ANSI) - Building Hardware Manufacturer's Association (BHMA) - ANSI/BHMA A156.10.

**APPROVALS**

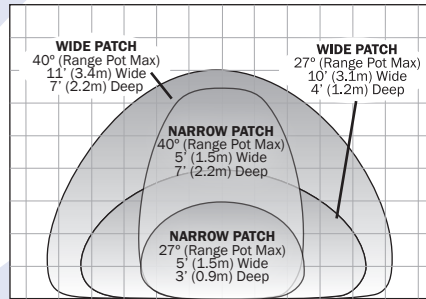
FCC, CE, IC

**Installation**

**SETUP AND ADJUSTMENT**

The microStar M installs easily. A self-stick template allows for easy prep for the sensor's backplate. Wires are then attached to the sensor via a harness. A clearly visible LED lights and indicates sensor state when power is applied. A four-position dip switch allows the installer to select bidirectional or unidirectional (either approach or depart) activation, set failsafe mode, and to deactivate Human Presence Radar™ (HPR™) if desired. An Install Mode allows for the detection to be set without activating the door. The planar antennas are interchangeable for wide and narrow patterns and may be adjusted to move the pattern in and out from the door, or left to right. A range potentiometer further adjusts the range, and a second potentiometer adjusts the time delay from 1.5 to 5 seconds. Once the appropriate range is reached, the installer finishes by attaching the cover

**COVERAGE PATTERN**



**Availability & Cost**

**AVAILABILITY**

Available internationally from manufacturer's authorized distributors; contact MS SEDCO for the location of nearest distributor.

**COST**

Cost information on MS SEDCO products is available from the manufacturer's distributors.

**Warranty**

A three year warranty is available from the manufacturer covering defects in materials and workmanship. Contact MS SEDCO for details.

**Technical Services**

MS SEDCO's staff of factory trained sales and service personnel offer design assistance and technical support. Local distributors are also available to assist in selecting appropriate devices for specific uses and to provide onsite installation.

**MS-BDB**

(Optional Mounting Bracket)



The MS-BDB is an optional mounting device that allows the installer to elevate and rotate the microStar-M for special configurations.

**MSRC**

(Optional Rain Cover)



**DIMENSIONS**

