## Technical Data

- **Doppler Shift Radar & Active Infrared Reflection Technology**
- One Sensor Provides Complete Motion & Presence Detection
- 4 Presence Timer Settings
- Mounts Up To 10.5’ (3.2m)
- Electronic Depth Adjustment
- Quick-Connect Wiring Harness Included
- Four Frequency Settings
- 12V to 24V AC or DC Operation
- Form C Dry Relay Contact N.O., COM, N.C.
- Rain Cover Available

### Infrared Sensor

<table>
<thead>
<tr>
<th>Detection Method</th>
<th>Active Infrared Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Holding Time</td>
<td>0.5 seconds</td>
</tr>
<tr>
<td>Response Time</td>
<td>0.1 to 0.2 seconds</td>
</tr>
<tr>
<td>Presence Timer</td>
<td>2, 30, 60 seconds or infinity</td>
</tr>
<tr>
<td>Output Contact</td>
<td>7.5mA Max (Resistor Load), 55V DC Max Voltage, 50mA Max Current</td>
</tr>
</tbody>
</table>

### Microwave Sensor

<table>
<thead>
<tr>
<th>Detection Method</th>
<th>Doppler Shift Radar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Frequency</td>
<td>24.15 GHz</td>
</tr>
<tr>
<td>Output Holding Time</td>
<td>1.5 seconds</td>
</tr>
<tr>
<td>Response Time</td>
<td>0.1 to 0.2 seconds</td>
</tr>
<tr>
<td>Output Contact</td>
<td>Form C Relay, DC50V 0.1A Resistor Load</td>
</tr>
</tbody>
</table>

### Operation Indication

- **GREEN LED = Standby**
- **BLUE LED = Radar Detecting**
- **RED LED = IR Detecting/Radar and IR Detecting**
- **Orange LED= Detection row “ROW 1” (“ROW 2” when “Doorway Learn” is turned ON) is detecting door movement**
- **ORANGE Blinking (Fast) LED = Indicates a change of dip switch settings**
- **ORANGE Blinking (Slow) LED = Door Hold is turned ON (When dip switch Y4 is ON)**
- **GREEN/RED Blinking (Fast) LED = Internal Sensor Error**
- **GREEN/RED Blinking (Slow) LED = Reflected infrared signal from the floor is very low**

## Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>DHR3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Detection Method</strong></td>
<td>Doppler Shift Radar &amp; Active Infrared Reflection</td>
</tr>
<tr>
<td><strong>Max. Installation Height</strong></td>
<td>10.5 ft. (3.2m)</td>
</tr>
<tr>
<td><strong>Power Requirements</strong></td>
<td>12V to 24V AC or DC ± 10%</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>AC24V-2.5VA, AC12V-2.5VA, DC24V-65mA, DC12V-140mA</td>
</tr>
</tbody>
</table>

---

**SafePath Maximum Pattern Infrared (MPI™) sensors use more beams than other manufacturers—and provide a level of safety not found in other stand-alone infrared sensors.**

---

**Floor Reflection Method™ (FRM™) sensors with Maximum Pattern Infrared™ (MPI™) provide better safety than other infrared sensors.**

---

The DHR3 is designed for easy field installation and adjustment. The pattern width and depth are both mechanically adjustable. In addition, the depth can be altered electronically from 5 to 2 rows. All adjustments are available without the use of proprietary set-up devices.

The DHR3 is based on the most reliable microwave and active infrared (AI) technology available—Floor Reflection Method (FRM).
### SafePath™ DHR3
Combination Microwave Motion & Active Infrared Presence Sensor

#### Enclosure Rating
- IP54 (IEC60529)

#### Temperature Range
- -4°F to 140°F (-20°C to 60°C)

#### Weight
- Approx. 0.58 lbs. (0.28 kg)

#### Cover Color
- Black, Silver

#### Accessories
- Cable: 8.2 ft. (2.5m)
- Mounting Screws
- Mounting Template
- Installation Instructions

#### COVERAGE PATTERN

![Coverage Pattern Diagram](image)

(These detection patterns are approximate and will vary slightly. Walk-test the unit to assure the pattern desired.)

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

#### Maintenance
MS SEDCO recommends that all maintenance and adjustments be performed by an AAADM Certified Technician.

#### 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.

#### DIMENSIONS

![Dimension Diagram](image)

#### APPLICABLE STANDARDS
- American National Standards Institute (ANSI) - Building Hardware Manufacturers Association (BHMA) - ANSI/BHMA A156.10.
- Enclosure Rating IP54

#### APPROVALS
- CE

#### Installation

**SETUP AND ADJUSTMENT**
The DHR3 installs easily. Simple amp connectors make wiring fast. Pattern width is selected by dip switch, mounting and mechanical adjustment. The indicator LED is clearly visible with the cover on. Two multiple-position dip switches allow the installer to adjust presence timers, pattern depth, frequency, monitoring modes.

#### 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 authorized distributors.