# PASSIVE INFRARED SENSOR

**PS-520E (White/Silver/Bronze)**

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## Request-to-Exit Sensor

Designed for applications involving coverage at the threshold of a doorway, the TAKEX Passive Infrared Sensor detects the differential between a human body and the floor. It features several field selectable options and adjustments to make it the ideal choice for access control applications, door strike release, alarm system shunting and automatic door operation.

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<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>TOTALLY STABLE, TOTALLY RELIABLE</td>
<td>Dual pyroelectric for increased stability against external light. Special circuitry provides high immunity to RFI and other electrical noise.</td>
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<tr>
<td>ADJUSTABLE COVERAGE AREA</td>
<td>Adjust from straight downward 'blanket' covering the door to angles of 35° in front of door.</td>
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<tr>
<td>ADJUSTABLE SENSITIVITY</td>
<td>Increase or decrease to suit your site needs.</td>
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<tr>
<td>SINGLE OR DOUBLE DOOR COVERAGE</td>
<td>The two position mirror provides coverage of single and double doors.</td>
</tr>
<tr>
<td>OVERHEAD OR WALL MOUNT</td>
<td></td>
</tr>
<tr>
<td>ADJUSTABLE RELAY TIMER</td>
<td>0.25 to 60 second adjustment for relay hold time.</td>
</tr>
<tr>
<td>TWO RELAY OUTPUTS</td>
<td>Both normally open/normally closed.</td>
</tr>
<tr>
<td>HEAVY DUTY RELAY OUTPUT</td>
<td>Relays drive up to 1 amp of current for controlling door strikes and magnetic locks.</td>
</tr>
<tr>
<td>FAIL SAFE - FAIL SECURE</td>
<td>Selectable by DIP Switch.</td>
</tr>
<tr>
<td>COMPACT DESIGN IN BRONZE, WHITE OR SILVER</td>
<td></td>
</tr>
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</table>
The PS-520E detects the temperature differential between a human body and the floor. The unit can be precisely set for the detection area desired.

**DETECTION AREA**

The PS-520E detects the temperature differential between a human body and the floor. The unit can be precisely set for the detection area desired.

**INSTALLATION**

Select the mounting location and position of sensor (wall mount or overhead mount).

- **Wall Mount**: Mount the unit in the center of door.
- **Overhead Mount**: 2.5" (64mm) or more mounting depth

**TERMINAL CONFIGURATION**

[Terminal Arrangement Diagram]

- Power
- Output 1
- Output 2

**SPECIFICATIONS**

- **Product name**: PASSIVE INFRARED SENSOR
- **Model**: PS-520E (W), PS-520E (S), PS-520E (B)
- **Detection system**: Passive infrared

**Mounting height**

- 1.5" (4cm) Max

**Pattern**

- Single (Door)
- Double (Door)
- Selectable

**Adjustment range**

- Wall mount: Vertically 35° (8 steps)
- Overhead mount: Vertically 20° (5 steps)

**Power supply**

- 12 to 24VDC (Non-polar)
- 12 to 24VAC (50Hz / 60Hz)

**Power consumption**

- 40mA or less / DC
- 70mA or less / AC

**Output**

- Dry contact relay: One shot
- Hold time: Adjustable approx. 0.25sec to 60sec
- Contact capacity: 30V DC, 1A or less / 125V AC, 0.5A or less
- Selectable relay operation

**LED**

- Green: Operation - synchronous dry contact relay (LED disabled)

**Wire connection**

- Terminal

**Ambient temp range**

- +14°F to +122°F (+10°C to +50°C)

**Installation position**

- Wall, ceiling, or under frame (indoor)

**Weight**

- 5.95 oz (170g)

**Appearance**

- Cover (ABS resin): White, Silver, Bronze
- WINDOW (PE resin): White, Grey

**Accessories**

- Taping screw: 2 pieces
- Resistor (50Ω, 3W): 1 piece
- Cover fixing screw: 1 piece

Please note: This sensor is designed to detect intrusion and to initiate an alarm; it is not a burglary or a crime preventing device. TAKEEX is not responsible for damage, injury or losses caused by accident, theft, Acts of God (including inductive surge by lightning), abuse, misuse, abnormal usage, faulty installation or improper maintenance.

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