# Sensor Technology Comparison

HDIR technology significantly surpasses known boundaries of IR sensor technology. Extending the capability of IR to new levels of accuracy through a combination of patented sensor hardware and logic algorithms. The power behind this innovation originates from a proprietary 8-element pyros infrared element that eclipses current competitive sensor logic technologies. Eight-Hundred and Sixty-Four (864) optical view patterns are achieved, delivering unmatched sensitivity for minor motion events like hand and finger movements. Paired with ultrasonic technology for a complete solution designed to meet the demands of Title 24 and ASHRAE 90.1.

<table>
<thead>
<tr>
<th>#</th>
<th>Element Orientation</th>
<th>Detection Area</th>
<th>Description</th>
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</table>
| 8 Element IR of PerfectSense PS-HDTC24-R | ![Sensor Optical View Pattern](image) | ![Sensor Optical View Pattern](image) | - 864 optical view patterns, each cluster of 8-element pattern makes detecting very fine body movement possible.  
- 360-degree coverage with circular area, good repeatability.  
- Detect movements 20 degree across the optical zone. |
| 4 Element IR of Ordinary Product | ![Sensor Optical View Pattern](image) | ![Sensor Optical View Pattern](image) | - 224 optical view patterns.  
- Detection coverage is not full circle.  
- Many blind spots. |
| 2 Element IR of Ordinary Product (Industry Standard) | ![Sensor Optical View Pattern](image) | ![Sensor Optical View Pattern](image) | - 62 optical view patterns.  
- An ellipse shape detection coverage, not full circle.  
- Detect movement 40 degree across optical zone. |