High Precision Tracking And Intelligent Interior Behaviors Analysis For Retail Stores

High Precision Tracking
- Precise People Counting, Flow and Path Orientation (Entry/Exit in 4 Directions)
- Suspicious Activity Detection and Lower-Cost Loss Prevention
- Accurate Real-Time Customers Tracking w/o Privacy Concerns
- Improve Customer Experience Using Analytics

Intelligent Interior Behaviors Analysis
- Dwell and Queuing, Whole-Store Heatmap
- Optimize Customer Services and Staffing Operations
- Accurate Real-Time Consumers Shelf Monitoring

Additional Offerings from Hitachi:
- Real-Time Edge Analytics Libraries
- Integrated with Business Analytics Platforms (Pentaho)
- Professional Support for Customization

Transforming Your Business With Insight That Matters
**High Precision In-Store Tracking for Retailers**

The sensor can detect when someone reaches out to a specific shelf or picks up goods or measures dwelling time, and sends alert information in real time to store personnel.

The sensor can detect abnormal behaviors or suspicious activities which can prevent incidents and losses.

Used in connection with ID cards, the sensor can detect when someone without an ID card follows someone with a card and alert security personnel, eliminating intruders or unauthorized persons.

**3D-LiDAR (ToF) Motion Sensor Platform**

The Hitachi 3D-LiDAR (ToF) Motion Sensor Platform calculates movement and provides data in real time using infrared beam technology. The measurement is based on the time it takes light to travel to the object and back to the sensor, or the "time of flight" (ToF).

Various edge analytics libraries are available for evaluation and customization.

### Specifications

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Sensing Distance</td>
<td>2.3 ft. ~ 32.8 ft. (0.7 ~ 10 m)</td>
</tr>
<tr>
<td>FOV</td>
<td>H76° x V60°</td>
</tr>
<tr>
<td>Pixel Resolution</td>
<td>640 x 480 (10 ~ 30 fps)</td>
</tr>
<tr>
<td>Distance Resolution</td>
<td>X,Y: 6 mm, Z: 8 mm @ 2 m</td>
</tr>
<tr>
<td>Lighting</td>
<td>Infrared IR LD</td>
</tr>
<tr>
<td>Size</td>
<td>5.4&quot; x 2.7&quot; x 2.7&quot;</td>
</tr>
<tr>
<td></td>
<td>138 x 69 x 69 mm (excluding projecting parts)</td>
</tr>
<tr>
<td>Weight</td>
<td>540 g (excluding cable)</td>
</tr>
<tr>
<td>Interface</td>
<td>Ethernet 100 base-TX</td>
</tr>
<tr>
<td></td>
<td>(Power is provided by POE+)</td>
</tr>
<tr>
<td>Illumination Condition</td>
<td>Under 10,000 Lux (Indoor @ daytime)</td>
</tr>
<tr>
<td>Temperature &amp; Humidity Condition</td>
<td>0<del>45°C (Operable at 50°C) 0</del>95% (Non-condensing)</td>
</tr>
<tr>
<td>Laser Class</td>
<td>Laser class 1</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>15W</td>
</tr>
</tbody>
</table>

**Robot Operating System (ROS) driver is available**

For additional information, please contact:

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