SmartSonic™

PRIMARY APPLICATIONS

Presence Detection
- Ultra-low power and low latency Ultrasonic ToF sensors detect presence and minor motion in any lighting condition

Smart Lock
- Always-on battery-powered smart locks utilize ultra-low power Ultrasonic ToF sensors to enable a rich variety of features

Liquid Level
- Contactless, low-power Ultrasonic ToF sensors enable remote liquid level measurements and touchless water dispensing

Robotics / RVC
- Ultrasonic ToF sensors enable cliff detection, material composition identification, and obstacle avoidance

FEATURED PRODUCTS

ICU-20201
- High performance ultrasonic Time-of-Flight Range Sensor, ideal for measuring the range of objects between 20 cm and 5m; offers a customizable field-of-view of up to 180°

ICU-10201
- High performance ultrasonic Time-of-Flight Range Sensor, ideal for measuring the range of objects between 3 cm and 1.2m; offers a customizable field-of-view of up to 180°

PRODUCT CATEGORIES

ICU-20201
- High performance Long Range Sensor
  - High-performance ultrasonic Time-of-Flight sensor that is ideal for measuring the range of objects between 20 cm and 5m.
  - High flexibility thanks to a large amount of embedded program and data memory
  - Works in any lighting condition from full sunlight to complete darkness, providing millimeter-accurate range measurements

CH101
- High performance Short Range Sensor
  - High-performance ultrasonic Time-of-Flight sensor that is ideal for measuring the range of objects between 3cm and 1.2m.
  - High flexibility thanks to a large amount of embedded program and data memory
  - Works in any lighting condition from full sunlight to complete darkness, providing millimeter-accurate range measurements at very short distances

CH201
- Long Range Sensor
  - Accurate range measurements to targets at distances up to 5m.
  - Works in any lighting condition from full sunlight to complete darkness, providing millimeter-accurate range measurements independent of the target’s color & optical transparency.
  - Its wide Field-of-View can be customized and enables simultaneous range measurements to multiple objects.

CH101
- Short Range Sensor
  - Accurate range measurements to targets at distances up to 1.2m.
  - Works in any lighting condition and provides millimeter-accurate range measurements independent of the target’s color and optical transparency

PRODUCT DETAILS

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Package Size (mm)</th>
<th>Range (m)</th>
<th>Current Consumption (1 sample/s, 1m range)</th>
<th>Interface</th>
<th>Field of View (FoV) (degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICU-20201</td>
<td>3.5 × 3.5 × 1.26</td>
<td>Up to 5</td>
<td>26 μA</td>
<td>SPI 13 MHz</td>
<td>Configurable Up to 180°</td>
</tr>
<tr>
<td>ICU-10201</td>
<td>3.5 × 3.5 × 1.26</td>
<td>Up to 1.2</td>
<td>17 μA</td>
<td>SPI 13 MHz</td>
<td>Configurable Up to 180°</td>
</tr>
<tr>
<td>CH201</td>
<td>3.5 × 3.5 × 1.26</td>
<td>Up to 5</td>
<td>13.5 μA</td>
<td>I²C</td>
<td>Configurable Up to 180°</td>
</tr>
<tr>
<td>CH101</td>
<td>3.5 × 3.5 × 1.26</td>
<td>Up to 1.2</td>
<td>15 μA</td>
<td>I²C</td>
<td>Configurable Up to 180°</td>
</tr>
</tbody>
</table>