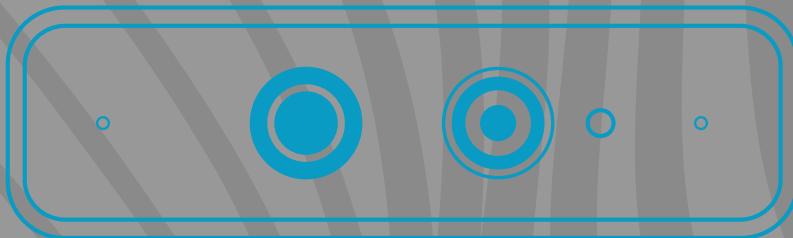


DS325 Datasheet

Close Interaction Time-of-Flight 3D Depth-Sensing Camera



DS325 Datasheet

Close Interaction Time-of-Flight 3D Depth-Sensing Camera



DS325 produced by SoftKinetic Korea

What is DepthSense?

DepthSense is SoftKinetic's patented time-of-flight depth sensor. The sensor measures the time it takes for infrared light emitted from the DepthSense 325 (DS325) camera to return. This is the Time-of-Flight (ToF). DepthSense transforms the ToF positional data into real time, 3D RGB images, as well as greyscale confidence and depth map images. At a refresh rate of 60 frames per second (fps), DepthSense delivers fast, low latency data transfer to create the best user experience with virtually no lag.

About DS325

The DS325 delivers real time 3D distance data for close interaction. The most accurate depth camera on the market, the DS325 provides depth data for software analysis from as close as 15cm, at up to 60fps. It combines our patented ToF DepthSense sensor, an HD RGB sensor and two microphones. With only a single USB plug, connecting the DS325 is simple and fast. Working with our powerful middleware iisu, the DS325 enables a new world of unique experiences that are accessible through a natural user interface. The DS325 is available in scalable quantities for development and commercial applications.

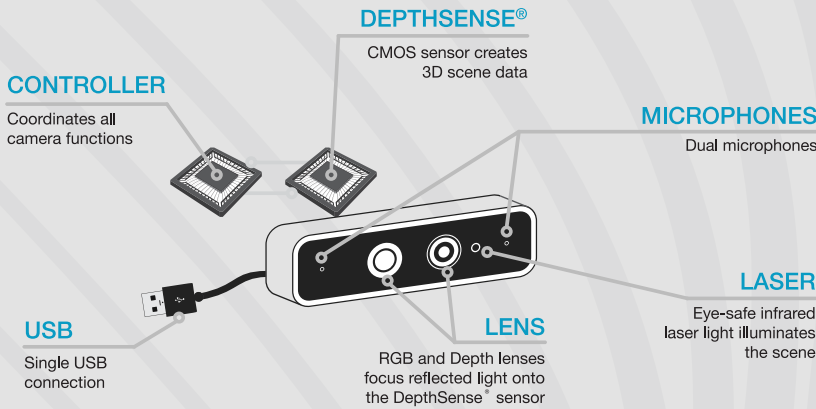
Key Features & Benefits

- ▶ **Safe:** Diffused laser illumination
- ▶ **Accurate:** Detailed sensitivity
- ▶ **Economic:** Low power consumption
- ▶ **Reliable:** Confidence measure for each pixel
- ▶ **Fully featured:** Z cam + RGB + microphones
- ▶ **Customizable:** Technology for a variety of different camera configurations and formats
- ▶ **Standardized CMOS:** Powerful and low cost sensor technology
- ▶ **For indoor use**

End-to-End Solution

SoftKinetic is the leading provider of end-to-end, natural gesture recognition solutions. These include 3D CMOS ToF sensors, modules and cameras produced by SoftKinetic Korea (**DepthSense**®), natural gesture recognition middleware (**iisu**®), and games and applications from **SoftKinetic Studios**. We want to give everyone the freedom to control, explore and enjoy the entire digital world through the most natural and intuitive user interfaces and machine interactions.

/ Specifications



Technical Specifications

- ▶ **Technology:** DepthSense®
- ▶ **Depth field of view:** 74° x 58° x 87° (H x V x D)
- ▶ **Depth resolution:** 320 x 240 | QVGA
- ▶ **Frame rate:** 25 fps – 30 fps | QVGA
50 fps – 60 fps | QVGA
- ▶ **Nominal operating range:** 0.15m – 1.0m
- ▶ **Depth noise:** < 1.4cm at 1m (50% reflectivity)
- ▶ **Illumination type:** Diffused laser
- ▶ **Ambient light:** Typical indoor
- ▶ **RGB resolution:** HD 720p
- ▶ **RGB field of view:** 63.2° x 49.3° x 75.2° (H x V x D)
- ▶ **Accelerometer:** 3 axis
- ▶ **Microphones:** 2
- ▶ **Connectivity:** Single USB
- ▶ **Operating temperature:** 10°C to 40°C
- ▶ **Power:** < 2.5W
- ▶ **Size:** 10.5cm (W) x 3cm (H) x 2.3cm (D)

/ Close Interaction

Innovative User Experience



Immersive natural user interaction using no-touch precise two-hand/ten-finger tracking.

PC & Laptop Experience



Control any application without touching the screen or any other external input device.

Development Experience



Use iisu to develop new experiences or convert existing applications to use natural gesture recognition.