DS325 Datasheet
Close interaction time-of-flight 3D depth-sensing camera
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What is DepthSense?

DepthSense® is SoftKinetic’s patented time-of-flight depth sensor. The sensor measures the round-trip-time it takes for infrared light emitted from the DepthSense 325 (DS325) camera to return, known as time-of-flight (ToF). DepthSense transforms the ToF positional data into real-time 3D RGB images, as well as grayscale confidence and depth map images. At 60 frames per second (fps) refresh rate, DepthSense delivers fast, low latency data transfer to enable 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 a DS325 is simple, fast and portable. Combined with our powerful middleware Issu, the DS325 enables a new world of unique experiences accessible through a natural user interface.

DS325 is available in scalable quantities for development and commercial applications.

End-to-end Solution

SoftKinetic® is the leading end-to-end provider of natural gesture recognition solutions. From 3D CMOS ToF sensors and cameras (DepthSense®), to natural gesture recognition middleware and tools (Issu®), as well as games and applications from SoftKinetic Studios. Our vision is 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.

Close Interaction

Innovative User Experience

Immersive natural user interaction using no-touch precise 2 hand-10 finger tracking

PC & Laptop Experience

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

Development Experience

Create new experiences or convert existing apps to use natural gesture recognition with Issu

Technical Description

DEPTHSENSE®

CMOS sensor creates 3D scene data

Laser

Eye-safe Infrared laser light illuminates the scene

Microphones

Dual microphones

Product Specifications

- Technology: Patented CAFD Time-of-Flight
- Depth Pixel Count: 320 x 240
- Depth Field of View: 74° x 58° x 87° (H x V x D)
- Resolution: 320 x 240 (QVGA)
- Frame Rate: 25 fps - 30 fps [QVGA and QVGA]
- 50 fps - 60 fps [QVGA and QVGA]
- Nominal Operating Range: 0.15 m – 1.0 m
- Depth Resolution: < 1.4 cm @ 1 m
- Illumination Type: Diffused Laser
- Ambient Light: Typical Indoor
- RGB Pixel Count: HD 720p
- RGB Field of View: 63.2° x 49.3° x 75.2° (H x V x D)
- Microphones: 2
- Accelerometer: 3 axis
- Connectivity: Single USB
- Operating Temperature: 10°C to 40°C
- Power: <= 2.5W
- Size: 10.5 cm x 3.0 cm x 2.3 cm

www.softkinetic.com