Azure Kinect DK

Fact Sheet

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Introducing Azure Kinect DK, a developer kit with advanced AI sensors for building sophisticated computer vision and speech models. It combines a best-in-class depth sensor and spatial microphone array with a video camera and orientation sensor—all in one small device with multiple modes, options, and SDKs. At half the size of Kinect for Windows v2 with twice the accuracy, Azure Kinect DK was designed to pull together our best artificial intelligence (AI) sensors in a single device that can connect to a range of compute options.

Top Features and Benefits

A versatile sensing device.

- Azure Kinect DK brings together a best-in-class 1MP depth camera, 360˚ microphone array, 12MP RGB camera, and orientation sensor for building advanced computer vision and speech models. It measures just under 5 inches long and 1.5 inches thin with the ability to mount and sync multiple Azure Kinect devices in a variety of ways.

Quick start.

- Get started with a range of SDKs, including an open-source Sensor SDK with a sensor stream viewer. See why our Body Tracking SDK, which allows fully articulated, uniquely identified body tracking of multiple skeletons, is so popular in the healthcare community. Or use the Azure Speech Services SDK, to enable functions like real time translation or transcription.

Easy Azure integration.

- Take your project further with easy Azure integration. Develop more accurate vision and speech models by combining the advanced sensors on your Azure Kinect with Azure Cognitive Services and use Azure Machine Learning to train your models. Manage PCs connected to Azure Kinect with Azure IoT Edge. New to Azure? Create a free account.

Customer stories

We shared early hardware with a handful of customers. Here are their impressions and what they plan to do.

Company	Company Type	Use Case	Quote
Ocuvera (Healthcare)	Only computer vision-based patient fall prevention company with partners like the Cleveland Clinic	Building a system with Azure Kinect DK to alert nurses to the likelihood of a patient fall. There are over 1 million patient falls in the US every year, and of those, 11,000 people die. They want to reduce that number to zero.	"We've worked extensively with over a dozen depth cameras over the past eight years and Azure Kinect absolutely blows away every one of them." -Steve Kiene, CEO
Ava Retail (Retail)	A pioneer of affordable autonomous store technology and Microsoft US 2018 Retail Partner of the year	Building solutions with Azure Kinect DK plus Azure to improve retail from the warehouse where you can use the device's depth sensing with Azure's Optical Character Recognition to automate the depalletizing process to the store front with grab and go technology.	"The combination of highly accurate audio and depth in the small form factor of Azure Kinect is awesome." -Atul Hirpara, CEO
Datamesh (Manufacturing)	A Fast Company Top 50 Innovation company in China focused on manufacturing and mixed reality	Wants to use Azure Kinect DK and machine learning to create software that can compare CAD models to physical parts on the factory floor. The model would be trained with Kinect and then run on HoloLens 2.	With the ability to get real-time high-resolution depth map... scenarios like maintenance, training, guidance, and remote support can all benefit." -Jie Li, CEO

Technical Specifications

Exterior	Dimensions: 4.96 x 4.05 x 1.53 in (126.00 x 103.00 x 39.00 mm) Weight: 15.5 oz (440g)
Sensors	Depth camera: 1MP Time-of-flight RGB camera: 12MP CMOS sensor rolling shutter IMU: 3D digital accelerometer and a 3D digital gyroscope Microphone: 7-microphone circular array
Input/Output/Connectivity	USB-C data connector Power through USB-C (USB-C to USB-C cable not included) or external PSU Sync connectors to synchronize multiple units
In the box	Azure Kinect DK device* Stand USB-A to USB-C data cable USB-A to DC barrel-jack power cable Power supply Wrench *Azure Kinect DK is a PC peripheral*
Warranty	One-year standard warranty

System Requirements

Windows® 10 PC with 7th Generation Intel® Core™ i3 Processor (Dual Core 2.4 GHz with HD620 GPU or faster), USB 3.0 Port, 4 GB RAM. Not available on Windows 10 in S mode. Skeletal/body tracking and other experiences may require more advanced PC hardware. This product is meant for developers and commercial businesses, not consumers. It is meant for use in an ambient temperature range of 10-25⁰ Celsius. Azure Kinect DK is not a replacement for Xbox Kinect. Learn more at **aka.ms/kinectdocs**.

Contact Information

For more information, press only:
Rapid Response Team, WE Communications, (425) 638-7777, rrt@we-worldwide.com

For more product information and images:
Visit the Microsoft at MWC19 website.

For more information about Azure Kinect DK:
Visit **Azure.com/Kinect**