

# ZED



## ZED Camera and SDK Overview

**ZED DEPTH SENSOR** The ZED is a stereo camera that provides high definition images and accurate measure of the environment depth. It has been designed for the most challenging applications, including autonomous vehicle control, mobile mapping, aerial mapping, security, and surveillance.



# ZED Detailed Specifications

## Technical Specifications

### Video Output

Output Resolution	Side by Side 2x (2208x1242) @15fps 2x (1920x1080) @30fps 2x (1280x720) @60fps 2x (672x376) @100fps
Output Format	YUV 4:2:2
Field of View	Max. 90° (H) x 60° (V) x 100° (D)
RGB Sensor Type	1/3" 4MP CMOS
Active Array Size	2688x1520 pixels per sensor (4MP)
Focal Length	2.8mm (0.11") - f/2.0
Shutter	Electronic synchronized rolling shutter
Interface	USB 3.0 - Integrated 1.5m cable

### Depth Sensing

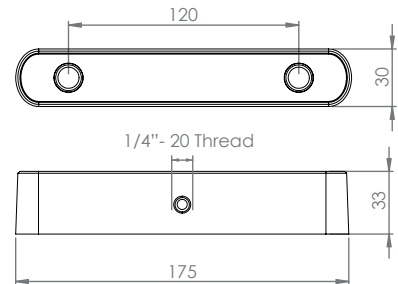
Baseline	120 mm (4.7")
Depth Range	0.5 m to 25 m (1.6 to 82 ft)
Depth Map Resolution	Native video resolution (in Ultra mode)
Depth Accuracy	< 2% up to 3m < 4% up to 15m

### Physical

Dimensions	175 x 30 x 33 mm (6.89 x 1.18 x 1.3")
Weight	170g (0.37 lb)
Power	380mA / 5V USB Powered
Operating Temperature	0°C to +45°C (32°F to 113°F)

## Mechanical Drawing

Dimensions are in mm



## System Requirements

Win 10, Win 8 Win 7  
Ubuntu 18.0/16.04  
CentOS, Debian (via Docker)  
USB3.0 Interface

### SDK Requirements

Dual-core 2.3GHz or faster  
Minimum 4GB RAM Memory  
Nvidia GPU <sup>(1)</sup> Compute capability ≥ 3.0

(1) Compatible with Nvidia Jetson Nano, TX2, Xavier

## Camera Control

The ZED API provides low level access and control of the device and related sensors. The API allows for precise manipulation of common parameters such as frame rate, exposition time, white balance, gain, low light sensitivity. The API will also provide different resolutions.

## Functional SDK Diagram

