

ZED M



ZED Mini Camera and SDK Overview

ZED Mini DEPTH SENSOR The ZED Mini 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 M 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 Type-C port

Depth Sensing

Baseline	63 mm (2.4")
Depth Range	0.10 m to 15 m (0.3 to 49 ft)
Depth Map Resolution	Native video resolution (in Ultra mode)
Depth Accuracy	< 1.5% up to 3m < 7% up to 15m

Motion

Motion Sensors	Gyroscope, Accelerometer Sampling Rate 800Hz
Technology	Visual-inertial stereo SLAM
6-axis Pose Accuracy	Position: +/- 1mm Orientation: 0.1 deg.
Pose Update Rate	Up to 100 Hz

Physical

Dimensions	124.5 x 30.5 x 26.5 mm (4.9 x 1.2 x 1.0")
Weight	62.9g - 0.14 lb
Operating Temperature	0°C to +45°C (32°F to 113°F)
Power	380mA / 5V USB Powered

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 ⁽¹⁾ 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

