### **\*ZED Mini**

# Camera Overview & Datasheet

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 Mini Detailed Specifications

#### **Technical Specifications**

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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. 102°(H) x 57°(V) x 118°(D)
RGB Sensor Type	1/3" 4MP CMOS
Active Array Size	2688x1520 pixels per sensor (4MP)
Focal Length	3.06mm (0.12") - f/2.0
Shutter	Electronic synchronized rolling shutter
Interface	USB 3.0 Type-C port
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	0°C to +45°C (32°F to 113°F)
Temperature	
Power	380mA/5V USB Powered

#### 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.

#### 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

#### **Depth Sensing**

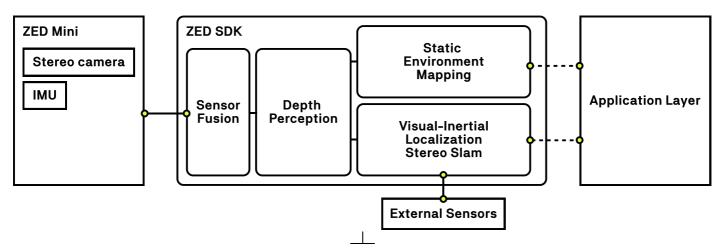
Baseline	63mm (2.4")
Depth Range Max	0.1m to 15m (0.3ft to 49ft)
Ideal Range	0.1m to 9m (0.3ft to 13.1ft)
Depth Accuracy	< 1.0% at 2m (6.6ft) < 1.8% at 4m (13.1ft)
Depth Map Resolution	Native video resolution (in Ultra mode)

#### System Requirements

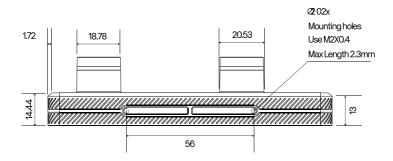
Supported OS	Win 10, Win 11 Ubuntu 20 & 22 CentOS, Debian (via Docker) USB3.0 Interface
SDK Requirements	Dual-core 2.3GHz or faster Minimum 4GB RAM Memory NVIDIA GPU(1) Compute capability ≥ 3.0

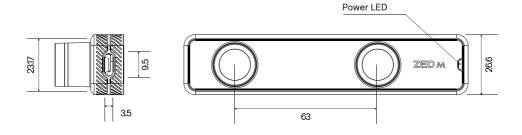
(1) Compatible with Nvidia Jetson Nano, TX2, Xavier

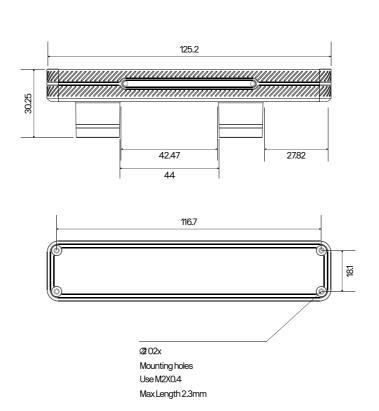
#### Functional SDK Diagram



## \*ZED Mini Technical Drawings







StereoLabs\*

stereolabs.com