

# \*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.



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## Detailed Specifications

### Technical Specifications

#### Video Output

<b>Output Resolution</b>	Side by Side 2x (2208x1242) @15fps 2x (1920x1080) @30fps 2x (1280x720) @60fps 2x(672x376) @100fps
<b>Output Format</b>	YUV 4:2:2
<b>Field of View</b>	Max. 102°(H) x 57°(V) x 118°(D)
<b>RGB Sensor Type</b>	1/3" 4MP CMOS
<b>Active Array Size</b>	2688x1520 pixels per sensor (4MP)
<b>Focal Length</b>	3.06mm (0.12") - f/2.0
<b>Shutter</b>	Electronic synchronized rolling shutter
<b>Interface</b>	USB 3.0 Type-C port

#### Physical

<b>Dimensions</b>	124.5 x 30.5 x 26.5 mm (4.9 x 1.2 x 1.0")
<b>Weight</b>	62.9g - 0.14 lb
<b>Operating Temperature</b>	0°C to +45°C (32°F to 113°F)
<b>Power</b>	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

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

#### Depth Sensing

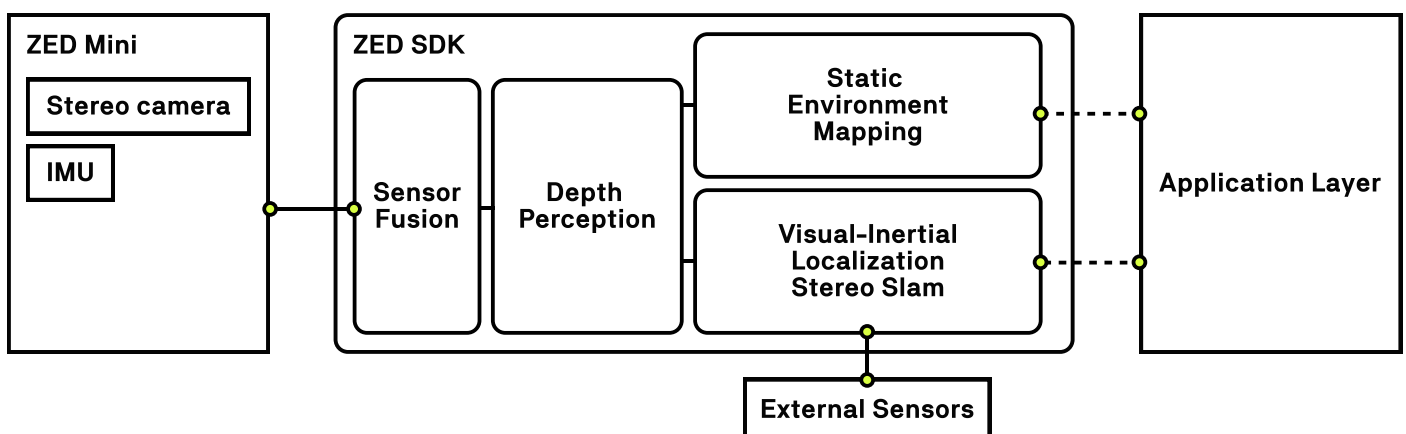
<b>Baseline</b>	63mm (2.4")
<b>Depth Range Max</b>	0.1m to 15m (0.3ft to 49ft)
<b>Ideal Range</b>	0.1m to 9m (0.3ft to 13.1ft)
<b>Depth Accuracy</b>	< 1.0% at 2m (6.6ft) < 1.8% at 4m (13.1ft)
<b>Depth Map Resolution</b>	Native video resolution (in Ultra mode)

#### System Requirements

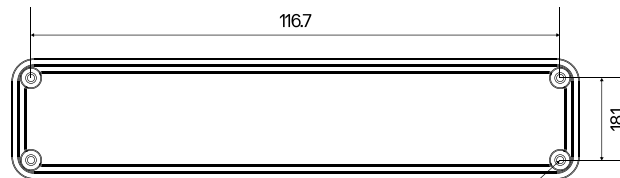
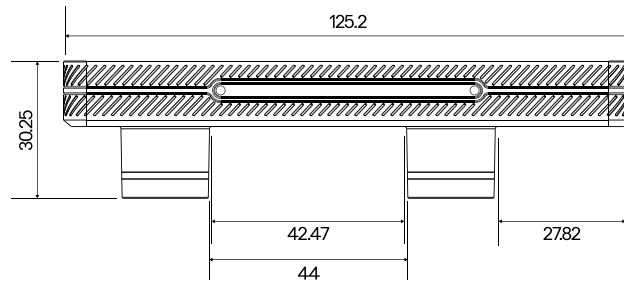
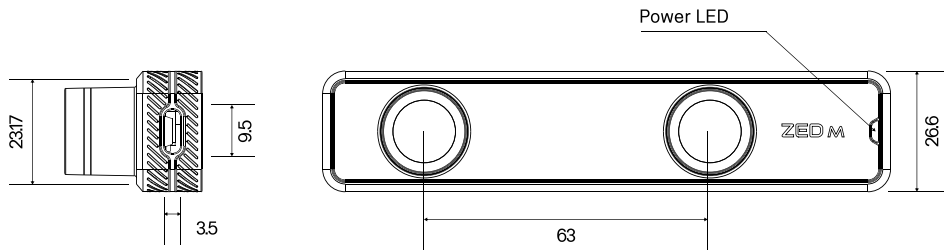
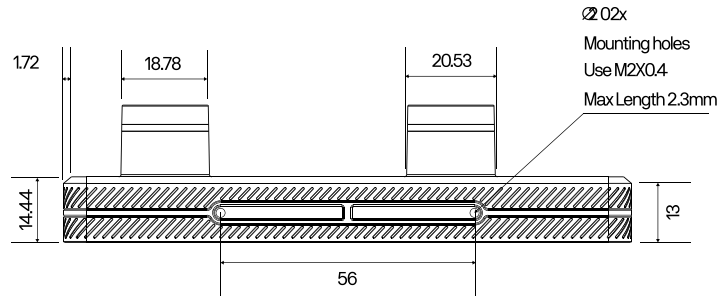
<b>Supported OS</b>	Win 10, Win 11 Ubuntu 20 & 22 CentOS, Debian (via Docker) USB3.0 Interface
<b>SDK Requirements</b>	Dual-core 2.3GHz or faster Minimum 4GB RAM Memory NVIDIA GPU(1) Compute capability ≥ 3.0

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

### Functional SDK Diagram



# \*ZED Mini Technical Drawings



$\varnothing 02x$   
 Mounting holes  
 Use M2X0.4  
 Max Length 2.3mm