

# DUO MLX

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## Specifications

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### Description

The DUO MLX is an ultra-compact imaging sensor with a standard USB interface. Intended for use in research, industrial and integration, the camera's high speed and small size make it ideal for existing and new use cases for vision based applications. With a programmable illumination more...

### Version

Revision 2.0

### SKU

DUO-MINILX-LV1

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# Contents

## **DUO Sensor**

1x Compact DUO MLX Unit

1x Getting Started Card

1x USB Mini-B Cable

## **DUO Software**

1x DUO API/SDK License

1x DUO Dense3D License

## **Related**

DUO M

DUO MLX

DUO DDK

# Sensing Unit

## Model

DUO-MINILX-LV1 (DUO MLX R2)

## Dimensions

52.02mm x 25.40mm x 13.30mm

## Frame Rates

0.1-3000+ FPS

## Stereo Resolutions

Configurable Binning/Windowing:

- 56 FPS @ 752x480
- 62 FPS @ 640x480
- 123 FPS @ 640x240
- 240 FPS @ 640x120
- 93 FPS @ 320x480
- 184 FPS @ 320x240
- 360 FPS @ 320x120

## Pixel Size

6.0 x 6.0µm

## Shutter Speed

0.3 µsec ~ 10 sec

## Baseline

30.0mm

## Lens Mount

Standard M8 x P0.5

## Field of View

170° Wide Angle Lens

Low Distortion < 3%

## Focal Length

2.0mm - 2.1mm

## Filters

850-870nm Narrow Band-Pass

## Illumination

Fully Programmable LED Array

3 Independently controlled 3.4W

850nm IR LEDs 170° light cone

## Illumination Control

Individual brightness sequence

programmable in 256 linear steps

## Motion Sensing

Six Degree of Freedom (DoF)

Accelerometer/Gyroscope

IMU/Temperature

## Color Modes

Monochrome (S/N Ratio > 54dB Linear)

## Control Functions

Exposure/Shutter/Brightness

## Scanning Modes

Progressive Scan/Global Shutter

## Power Consumption

~2.5 Watt @ +5V DC from USB

## Interfaces

480 Mbps - USB 2.0 Interface (Micro

USB)

## Mounting Options

1 x 1/4"-20 UNC thread mount

## Weight

12.5g

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## Software

### Operating Systems

DUO OS - Custom Linux Kernel  
Linux, Mac OS X & Windows

### Applications Included

DUO Dashboard Host

- Calibration Application
- Camera Application
- Dense3D Application

### Developers

DUO Device SDK  
DUO Dense3D SDK

### Integration

OpenCV/Qt5

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## Platforms



The **DUO MLX** supports:  
32bit/64bit Linux (Ubuntu 12 or later)



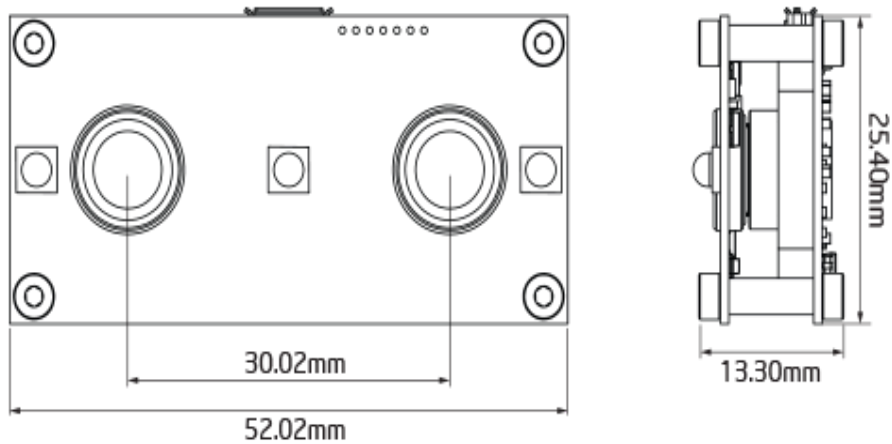
The **DUO MLX** supports:  
64bit Mac (OS X 10.8 or later)



The **DUO MLX** supports:  
32bit/64bit Windows (7/8 or later)

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## Dimensions



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## Environment

### Operating Temperature

0° to 40-50° C (32° to 104-122° F)

### Storage Temperature

-20° to 45° C (-4° to 113° F)

### Relative Humidity

0% to 90% non-condensing

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## Warranty

### Product Warranty

12 Month Limited Manufacturer's Warranty.

### Where to Find Details

Refer to product [Installation and Operation Manual](#) and [Product's Warranty](#).

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