



## 8M Magnifying Lens USB2.0 Camera Module

### Key Properties

IMX415 Image Sensor  
MJPEG/YUV2 Format  
Frame Rate: 30fps @ 3840 x 2160 MJPG  
Max Resolution: 3840 x 2160  
Lenses Type: Focus Adjustable / Auto Focus  
3x Optical Zoom, FL 3.41~10.33mm

### Application

Quality Control & Inspection / Image Recognition Laser Sensing  
/ DIY Camera Solutions / Robotics Vision / Process Monitoring

### Feature

- ♦ 8M(3840x2160) image sensor IMX415
  - Low illumination and high dynamic range sensor
- ♦ Megapixel lenses optional
  - Focus adjusts compliance with UVC
- ♦ MJPEG compressed format output support
- ♦ UVC support, plug and play for Windows and Linux



### Introduction

ZCM8M30M30QX3 is an 8MP (3840x2160) USB camera module featuring the 1/2.8" Sony IMX415 sensor, engineered for exceptional performance in low-light conditions and high dynamic range (HDR) scenes. Its advanced optics, including 3× optical magnification, make it the perfect solution for outdoor and long-distance imaging applications, delivering crisp, detailed images even in challenging environments such as backlit scenes and during motion detection tasks.

This UVC-compliant, Plug-and-Play camera ensures seamless compatibility with Windows and Linux systems, offering easy integration for a wide range of industrial, surveillance, and machine vision applications.



## Specifications

Model	ZCM8M30M30QX3
Sensor	IMX415
Image Size	1/2.8 inch
Pixel Size	1.45 $\mu\text{m}$
Image Area	5568 $\mu\text{m}$ x 3132 $\mu\text{m}$
Image Pixels & Resolution	8M / 3840(H) x 2160(V)
Image Formats	MJPEG / YUY2 (YUYV)
Image Transfer Rate	3840x2160 MJPG @30fps 2592x1944 MJPG @30fps 2048x1536 MJPG @30fps 1600x1200 MJPG @30fps 1920x1080 MJPG @30fps 1280x960 MJPG @30fps 1280x720 MJPG @30fps 800x600 MJPG @30fps
Max S/N Ratio	30dB
Dynamic Range	100dB
Sensitivity	TBD
Mini illumination	TBD
Shutter Type	Electronic rolling shutter
Connecting Port	USB2.0 High Speed
OTG Protocol	USB2.0 HS/FS
Plug & Play	UVC(USB Video Class) Compliant support
Auto White Balance (AWB)	Support
Adjustable Parameters	Brightness, Contrast, Hue, Saturation, Sharpness, Gamma, Gain, Exposure
Lens Parameters	3x optical magnification DFOV: 40° ~ 120°
Lens Holder	M30-Magnifying Lens
Power Supply	USB Type A BUS POWER
Operating Voltage	DC 5V
Operating Current	360mA
Operating Temperature	-20 ~ 70°C
Storage Temperature	0 ~ 50°C
PCBA Dimensions	38mm x 38mm
Weight	TBD
Operating System Request	WinXP/Win7/Win8/Win10/Win11 Linux 2.6 or above/Android 4.0 or above/IOS

## Mechanical Drawing

