C1 PRO
INDUSTRIAL USB CAMERA WITH CS LENS MOUNT AND H. 264 ON-BOARD ENCODER

DATASHEET

2021-02-07, Rev. #29
Overview

C1 family camera **C1 PRO** with Sony **Exmo R Starvis IMX290** sensor offers h.264/MHPEG/YUYV compressions over USB interface.
Features

- 1\(^{\circ}\)-20TPI mount for CS lens
- Multiple mounting options (all side walls and top has M3 tapped holes) for machine vision or robotics
- 1/4-20 UNC thread for tripod mounting
- Format: 1/2.8-inch (6.46mm)
- Sensor: Sony IMX290
- MJPEG/h.264/YUY2 compression
- 1920x1080 @ 30fps
- UVC compatible
- Sensor pixel size: 2.9\(\mu\)m x 2.9\(\mu\)m
- Sensor dynamic range: 66db
- SNR max: 40.5db
- Operation temperature range: -50\(^\circ\)C...+85\(^\circ\)C
- USB 2.0
- Interchangeable filters (shortpass 650nm installed by default)
- High quality industrial black anodized aluminum case
- Non cropped sensor operation in all resolutions
- Each camera has unique serial number
- RoHS, REACH, CE certified
## Specifications

### Pixels
1920H x 1080V

### Sensor size
5.63 x 3.17 mm

### Shutter
Electronic Rolling Shutter

### Sensor pixel size
2.9μm x 2.9μm

### Frame rates
- h.264 – 30fps in all modes
- MJPG – 30fps in all modes
- YUV 4:2:2 (YUYV)
  - 1920x1080 – 5fps
  - 1280x720 – 10fps
  - 640x480 – 30fps

### Output frame sizes
- 1920x1080, 1280x720, 640x480, 640x360, 320x240, 320x180

### Scan
Progressive

### Manual control
- Exposure
- White balance (2800°K – 9300°K)
- Gain
- Gamma
- Backlight compensation
- Sharpness
- Contrast
- Saturation
- Hue
- Brightness
- Anti-flicker frequency

### Rated power
- 2W max
- 350mA @ 5V – h.264
- 290mA @ 5V – MJPEG / YUYV

### Interchangeable filter
17×17×0.5mm. Low pass 650nm filter installed by default, high pass 850nm filter available on request, other filters also can be supplied on special order

www.kurokesu.com
## SPECIFICATIONS

| Supported OS        | • Windows  
|                    | • OSX 
|                    | • Linux  
|                    | • Android 
| Sensor             | Sony IMX290 
| Weight             | 53g 
| Dimensions         | 40×40×23mm 
| Ingress protection | IP40 
| Lens mount         | CS-mount 
| Operational temperature | -50 ... 85°C (non condensing) 

### Dimensions

![Dimensions Diagram]

### 3D model

> Most of the Kurokesu product 3D modes uploaded to [Github](https://github.com)