

# C1 PRO

Industrial USB camera with CS lens mount and h.264 on-board encoder

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# Overview

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



# Features

- 1"-32TPI 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: 2.9µm x 2.9µm
- Sensor dynamic range: 66db
- SNR max: 40.5db
- Operation temperature range: -50°C...+85°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

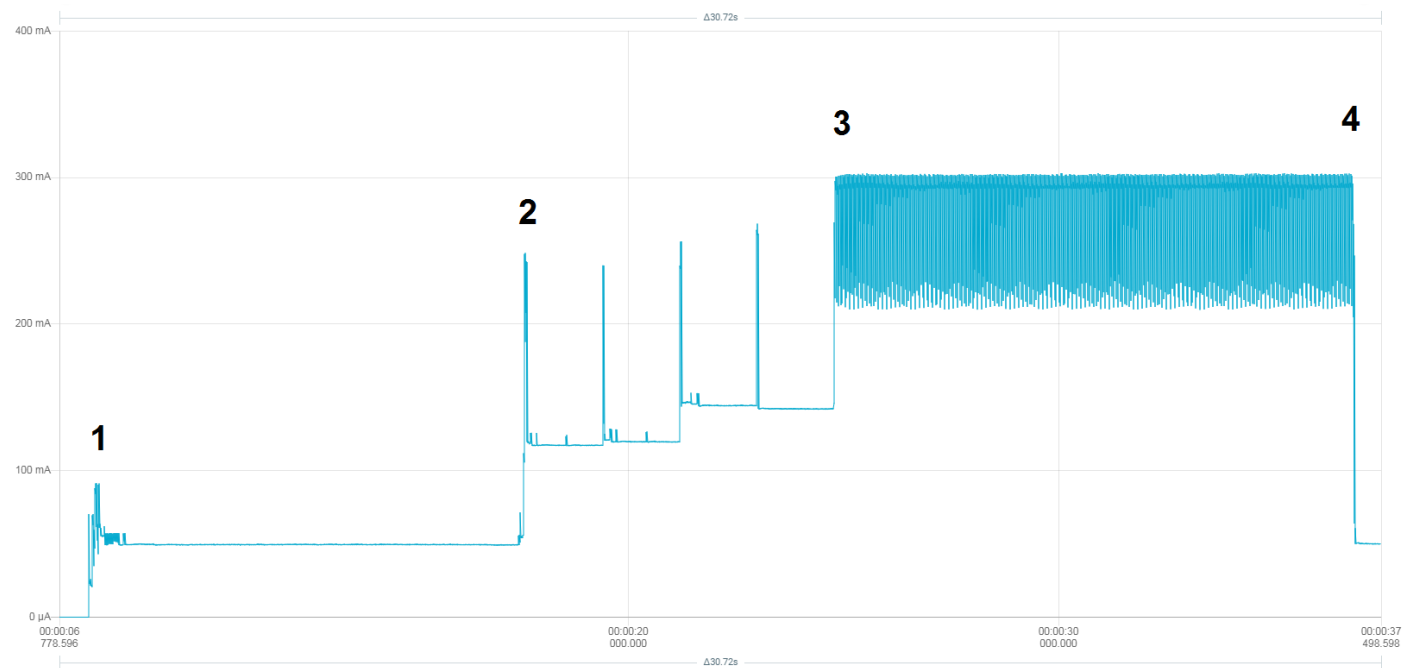
# Specifications

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	<ul style="list-style-type: none"><li>• h.264 – 30fps in all modes</li><li>• MJPG – 30fps in all modes</li><li>• YUV 4:2:2 (YUYV)<ul style="list-style-type: none"><li>◦ 1920x1080 – 5fps</li><li>◦ 1280x720 – 10fps</li><li>◦ 640x480 – 30fps</li></ul></li></ul>
Output frame sizes	1920×1080, 1280×720, 640×480, 640×360, 320×240, 320×180
Scan	Progressive
Manual control	<ul style="list-style-type: none"><li>• Exposure</li><li>• White balance (2800°K – 9300°K)</li><li>• Gain</li><li>• Gamma</li><li>• Backlight compensation</li></ul> <hr/> <ul style="list-style-type: none"><li>• Sharpnes</li><li>• Contrast</li><li>• Saturation</li><li>• Hue</li><li>• Brightness</li><li>• Anti-flicker frequency</li></ul>
Rated power	<ul style="list-style-type: none"><li>• 2W max</li><li>• 350mA @ 5V – h.264</li><li>• 290mA @ 5V – MJPEG / YUYV</li></ul>
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
Supported OS	<ul style="list-style-type: none"><li>• Windows</li><li>• OSX</li><li>• Linux</li><li>• Android</li></ul>
Sensor	Sony IMX290

Weight	53g
Dimensions	40×40×23mm
Ingress protection	IP40
Lens mount	CS-mount
Operational temperature	-50 ... 85°C (non condensing)

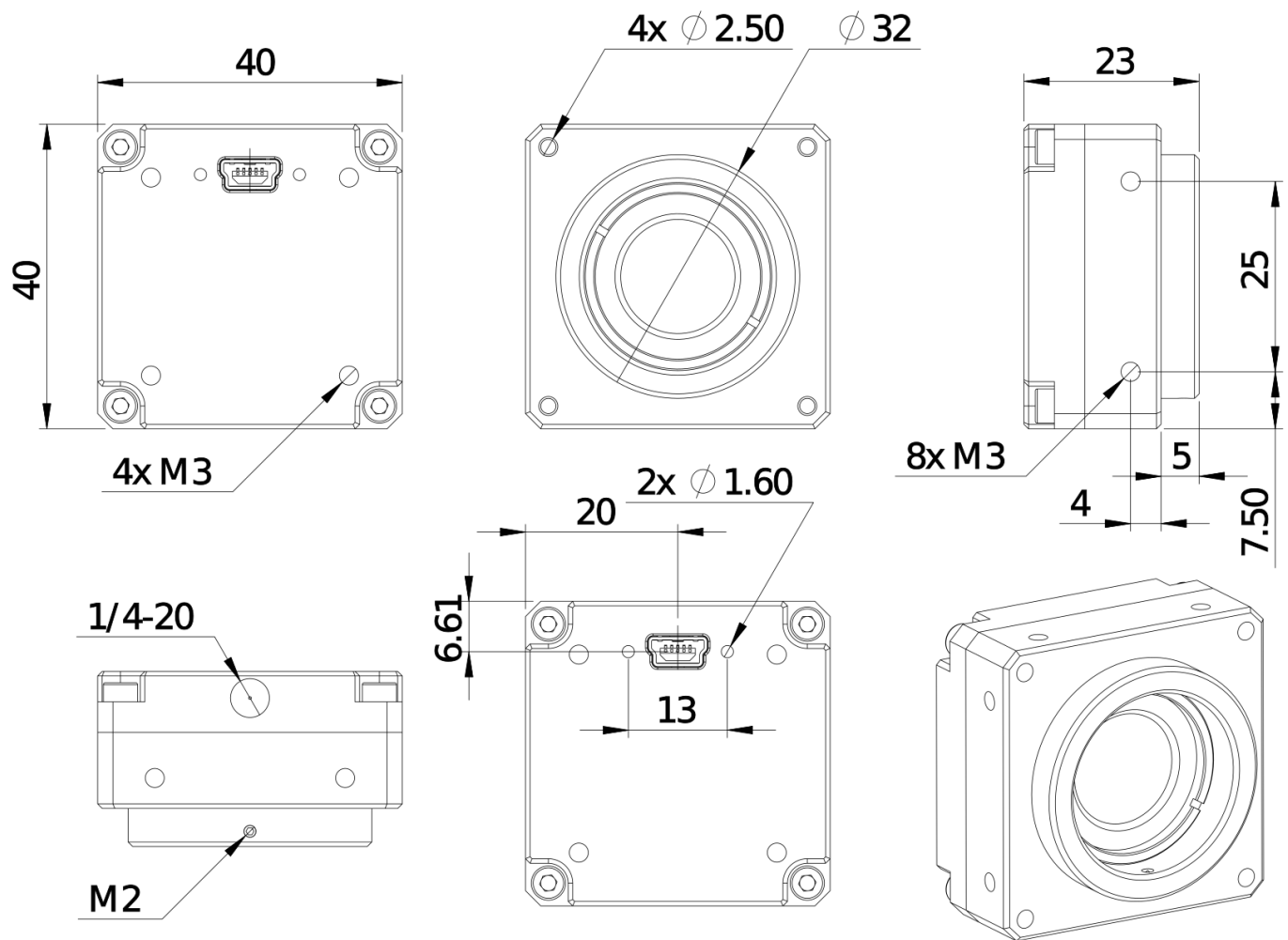
# Power profile

Typical power consumption looks like in diagram below (MJPEG mode)



- 1. Camera powered on
- 2. Software requests to open camera
- 3. Actual data transfer starts
- 4. Preview closed, camera switched off

# Dimensions



## 3D model

Most of the Kurokesu product 3D models uploaded to [Github](#)