C1 PRO

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

- Overview
- Features
- Specifications
- Dimensions

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

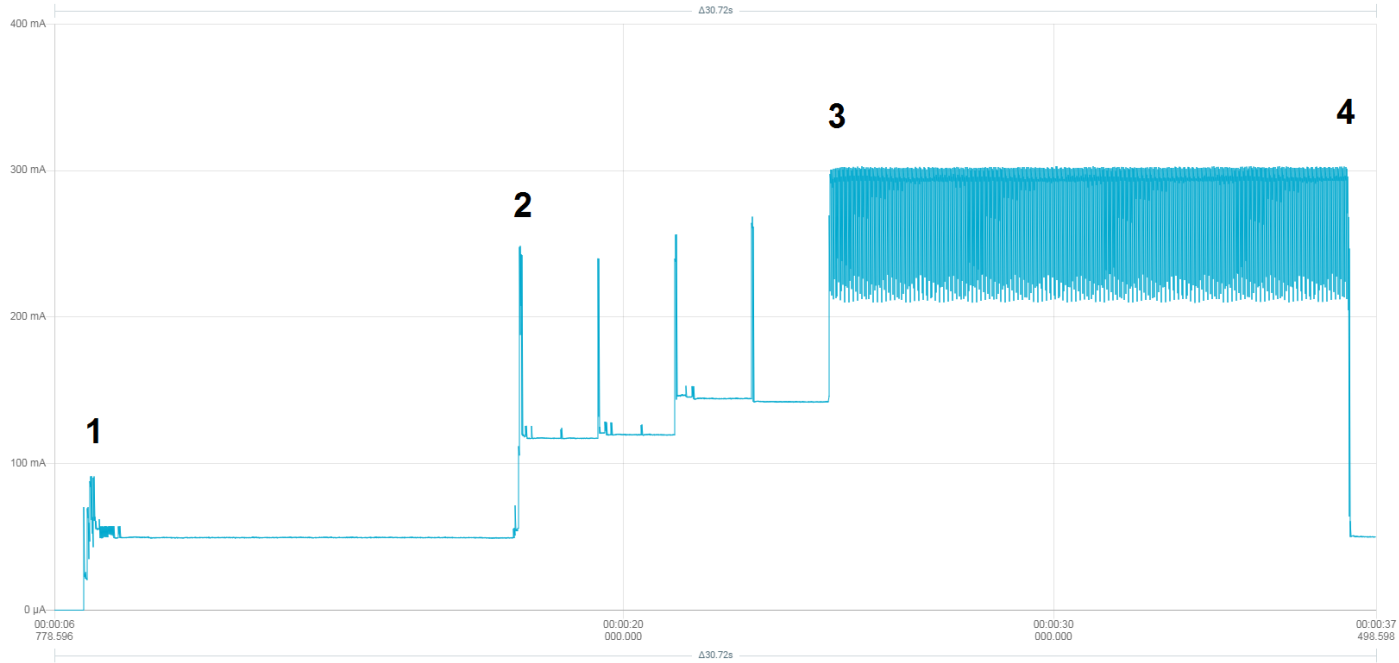
Frame rates	• h.264 – 30fps in all modes
	• MJPG – 30fps in all modes
	• YUV 4:2:2 (YUYV)
	  ◦ 1920x1080 – 5fps
	  ◦ 1280×720 – 10fps
	  ◦ 640×480 – 30fps

Output frame sizes	1920×1080, 1280×720, 640×480, 640×360, 320×240, 320×180
Scan	Progressive
Manual control	• Exposure • White balance (2800°K – 9300°K) • Gain • Gamma • Backlight compensation • Sharpnes • 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
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)

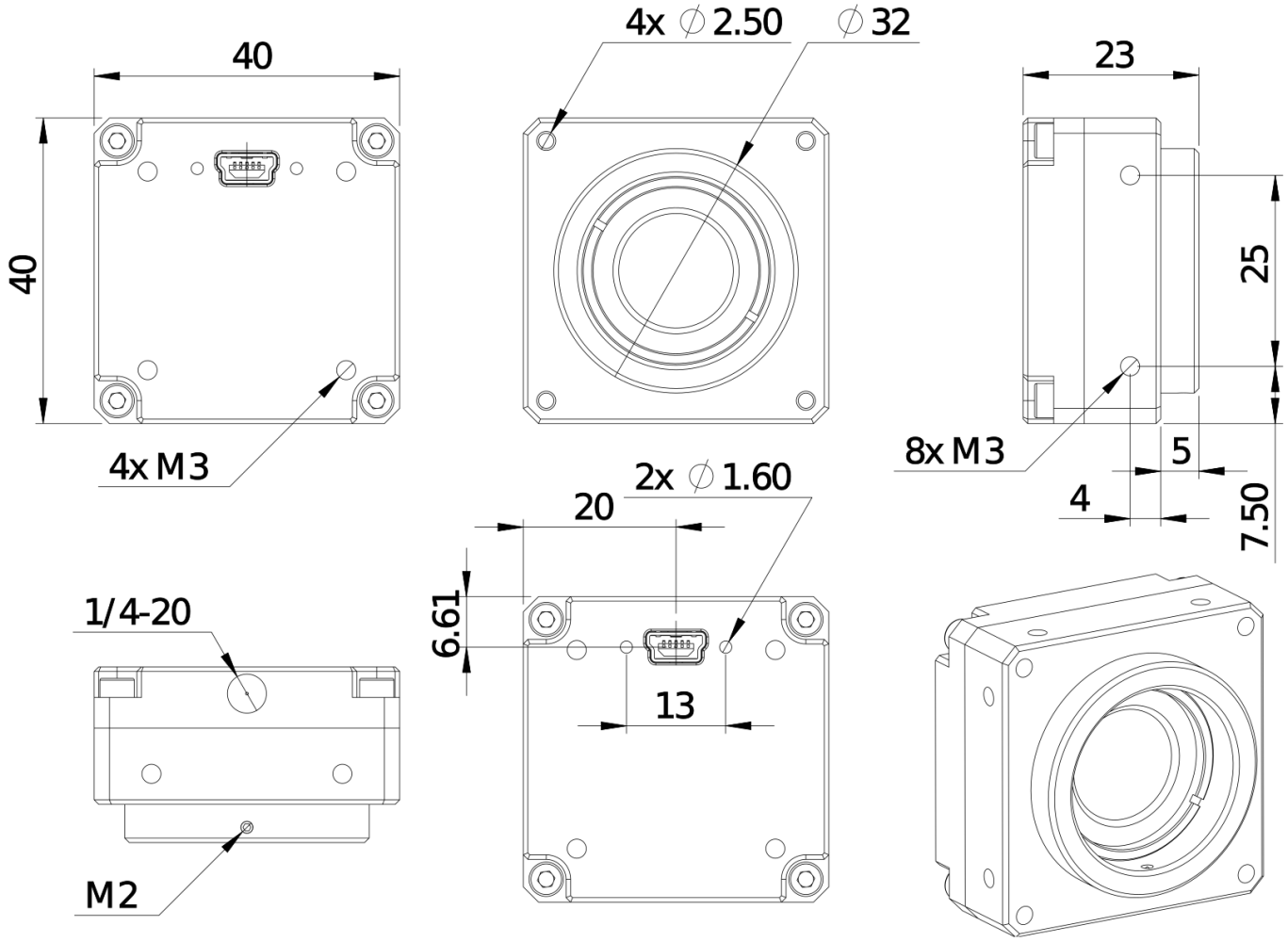
Power profile

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 modes uploaded to Github