

C1 MICRO

COMPACT AND LIGHTWEIGHT USB CAMERA WITH M12 LENS MOUNT AND H.264 ON-BOARD ENCODER

DATASHEET



2021-02-07, Rev. #15

2 OVERVIEW

Overview

C1 family camera **C1 MICRO** with Onsemi AR0330 sensor offers h.264/MHPEG/YUYV compressions over USB interface.



3 FEATURES

Features

- M12 (S-mount) lens mount
- Multiple mounting options (all side walls and top has M3 tapped holes)
 for machine vision or robotics
- M2 threads for mounting
- Format: 1/3-inch (5.8mm)
- Sensor: Onsemi AR0330
- MJPEG/h.264/YUY2 compression
- 1920x1080 @ 30fps
- UVC compatible
- Sensor pixel size: 2.2μm x 2.2μm
- Sensor dynamic range: 72.4db
- Sensor sensitivity: 1.9 V/lux-sec (550nm)
- Operation temperature range: -50°C...+65°C
- USB 2.0
- · High quality industrial black anodized aluminum case
- Non cropped sensor operation in all resolutions
- Each camera has unique serial number
- RoHS, REACH, CE certified

4 SPECIFICATIONS

Specifications

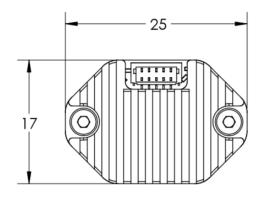
Specifications

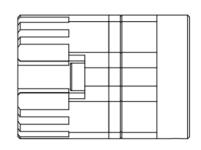
Sensor size Shutter Electronic Rolling Shutter Sensor pixel size 2.2 µm x 2.2 µm h.264 - 30 fps in all modes MJPG - 30 fps in all modes YUV 4.2:2 (YUYV) 1920x1080 - 5 fps 1280x720 - 10 fps 640x480 - 30 fps 1920x1080, 1280x720, 640x480, 640x360, 320x240, 320x180 Scan Progressive Exposure White balance (2800°K - 9300°K) Gain Gamma Backlight compensation **Sharpnes** Contras** Saturation Hue Brightness Anti-flicker frequency **Saturation Hue Brightness Anti-flicker frequency **Supported OS Supported OS **Supported OS **Suppor	Pixels	2304H x 1536V
Sensor pixel size 2.2 µm x 2.2 µm h.264 - 30 fps in all modes MJPG - 30 fps in all modes YUV 4:2:2 (YUYV) 9 1920 x 1080 - 51 fps 9 1280 x 720 - 10 fps 9 640 x 480 - 30 fps Output frame sizes 320 x 240, 320 x 180 Scan Progressive Exposure White balance (2800° K - 9300° K) Gain Gamma Backlight compensation Manual control * Sharpnes Contras Saturation Hue Brightness Anti-flicker frequency * Windows 350 mA @ 5V - h.264 290 mA @ 5V - MJPEG / YUYV * Windows OSX Linux Android	Sensor size	5.07mm x 3.38mm
h.264 - 30fps in all modes	Shutter	Electronic Rolling Shutter
Frame rates • MJPG – 30fps in all modes • YUV 4:2:2 (YUYV) • 1920x1080 – 5fps • 1280×720 – 10fps • 640×480 – 30fps Dutput frame sizes 1920×1080, 1280×720, 640×480, 640×360, 320×240, 320×180 Scan Progressive • Exposure • White balance (2800°K – 9300°K) • Gain • Gamma • Backlight compensation Manual control • Sharpnes • Contras • Saturation • Hue • Brightness • Anti-flicker frequency • 2W max • 350mA @ 5V – h.264 • 290mA @ 5V – MJPEG / YUYV • Windows • OSX • Linux • Android	Sensor pixel size	2.2μm x 2.2μm
Output frame sizes 320×240, 320×180 Progressive Exposure White balance (2800°K - 9300°K) Gain Gamma Backlight compensation **Sharpnes** Contras Saturation Hue Brightness Anti-flicker frequency **2W max 350mA @ 5V - h.264 290mA @ 5V - MJPEG / YUYV **Windows OSX Linux Android	Frame rates	 MJPG - 30fps in all modes YUV 4:2:2 (YUYV) 1920x1080 - 5fps 1280×720 - 10fps
• Exposure • White balance (2800°K - 9300°K) • Gain • Gamma • Backlight compensation Manual control • Sharpnes • Contras • Saturation • Hue • Brightness • Anti-flicker frequency • 2W max • 350mA @ 5V - h.264 • 290mA @ 5V - MJPEG / YUYV • Windows • OSX • Linux • Android	Output frame sizes	320×240,
• White balance (2800°K - 9300°K) • Gain • Gamma • Backlight compensation Manual control • Sharpnes • Contras • Saturation • Hue • Brightness • Anti-flicker frequency • 2W max • 350mA @ 5V - h.264 • 290mA @ 5V - MJPEG / YUYV • Windows • OSX • Linux • Android	Scan	Progressive
 * 350mA @ 5V - h.264 * 290mA @ 5V - MJPEG / YUYV * Windows * OSX * Linux * Android 	Manual control	 White balance (2800°K - 9300°K) Gain Gamma Backlight compensation Sharpnes Contras Saturation Hue Brightness
• OSX • Linux • Android	Rated power	• 350mA @ 5V - h.264
Sensor Onsemi AR0330	Supported OS	• OSX • Linux
	Sensor	Onsemi AR0330

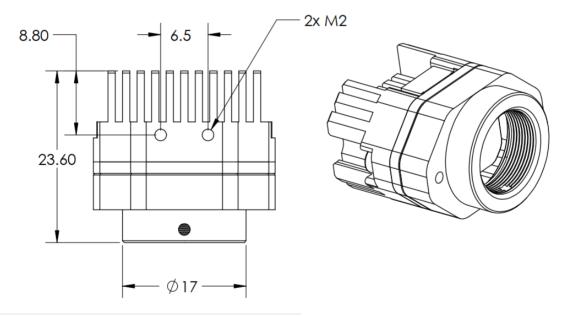
5 SPECIFICATIONS

Weight	12g
Dimensions	25×17×28.8mm
Ingress protection	IP40
Lens mount	M12-mount
Operational temperature	-50 +65°C

Dimensions



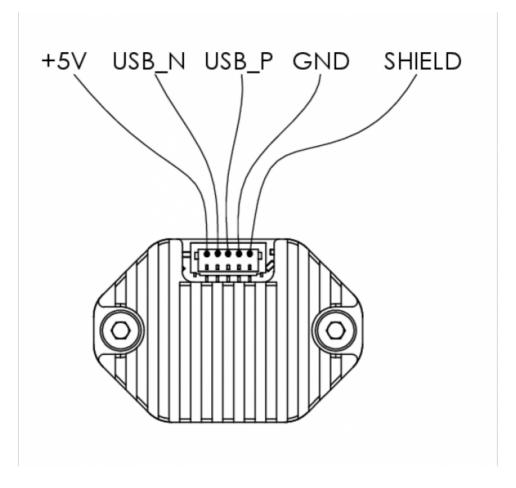




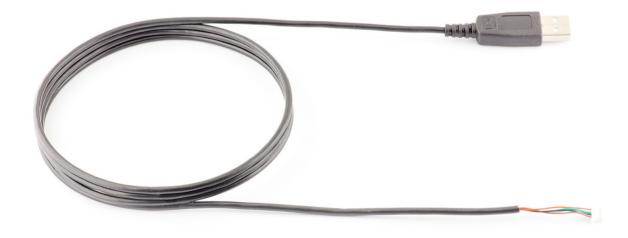
Wiring

• Receptacle: Wurth Electronics 665305124022

6 SPECIFICATIONS



Camera comes with 1m custom made USB cable CABLE_USB_1MM



3D model

Most of the Kurokesu product 3D modes uploaded to Github