

C2

INDUSTRIAL USB CAMERAS WITH CS LENS MOUNT AND H. 264 ON-BOARD ENCODER

DATASHEET



2021-05-27, Rev. #5

2 OVERVIEW

Overview

C2 family cameras are based on with Sony Exmo R Starvis IMX290 sensor and offers h.264/ MHPEG/YUYV compressions over USB interface.

There are few camera versions:

Camera model	Lens mount	Microphones	Connector
C2_USBC	CS	No	USB-C
C2_USBC_MIC	CS	Yes	USB-C
C2_BOARD_FFC_M12	M12	No	FFC 6p 0.5mm



3 FEATURES

Features

- 1"-20TPI CS / M12 lens mount
- Multiple mounting options (all side walls and top has M3 tapped holes)
 for machine vision or robotics
- Board mount option
- Optional 1/4-20 UNC thread for tripod mounting
- Format: 1/2.8-inch (6.46mm)
- Sensor: Sony IMX290 Color / Mono
- 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 (650nm installed by default)
- High quality industrial black anodized aluminum case / lens mount
- Non cropped sensor operation in all resolutions
- Each camera has unique serial number
- RoHS, REACH, CE certified

Specifications

Common 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	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
Supported OS	WindowsOSXLinuxAndroid
Sensor	Sony IMX290

5 SPECIFICATIONS

Boxed camera

Weight	TBD
Dimensions	33×33×24.5mm
Ingress protection	IP40
Lens mount	CS-mount
Operational temperature	-50 85°C (non condensing)

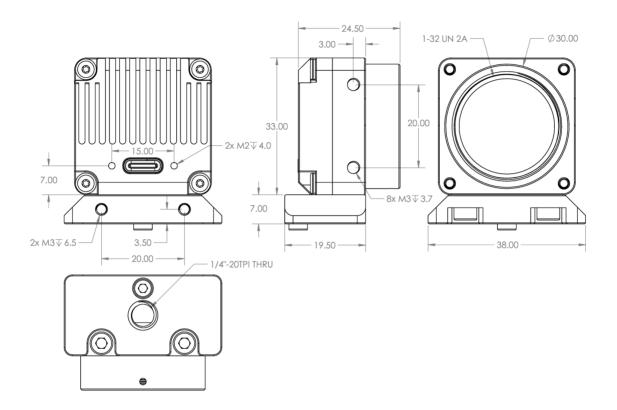
Board camera

Weight	TBD
Dimensions	TBD
Ingress protection	TBD
Lens mount	M12
Operational temperature	-50 65°C (non condensing)

6 DIMENSIONS

Dimensions

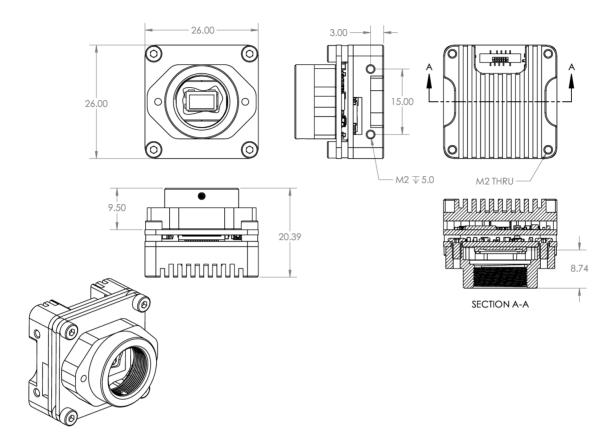
Boxed camera



1 Tripod / Arca Swiss mount plate is optional

7 DIMENSIONS

Board camera



Back plate heat-sink is optional