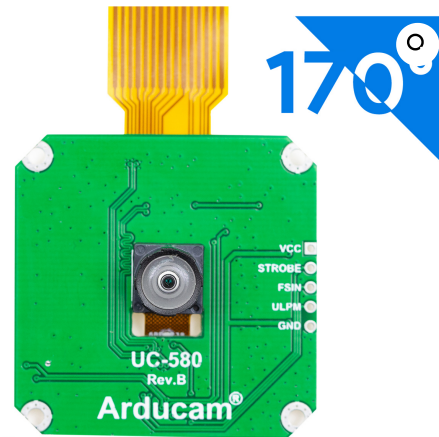
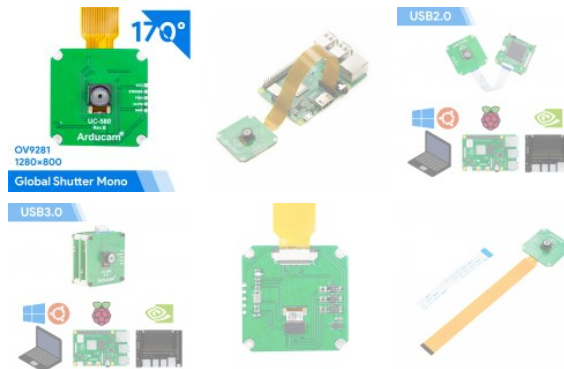


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OV9281  
1280×800

Global Shutter Mono



SKU: **B0162**

## Arducam 1MP OV9281 Monochrome Global Shutter Camera Module for Raspberry Pi 4/3B+/3

[Buy Now](#)

- Monochrome global shutter Camera Module with M12 Mount lens directly inserts to CSI slot on Raspberry Pi. Support Raspberry Pi 4, Pi 3/3B+/3A+, CM3/3+, Pi Zero and more.
- Supported By The Latest Official Firmware: The Raspberry Pi has recently updated its firmware with V4L2 camera drivers, which adds support including for OV9281. Thus this OV9281 camera module is compatible with the official V4L2 camera driver, and you can get it working easily just by enabling the overlay.
- NOTE: 1) Only the Rev.B version supports the official V4L2 driver. Please use Arducam MIPI camera driver for the first version. 2) The official V4L2 driver only supports RAW data and manual exposure. 3) This camera and RPi driver doesn't support hardware JPEG/H.264 encoding. 4) Raspberry Pi motherboard is not included in the package.

DESCRIPTION

ADDITIONAL INFORMATION

REVIEWS (0)

## Description

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## Overview

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The Arducam monochrome (B&W) global shutter 1280×800 resolution OV9281 camera module is mainly designed for Raspberry Pi boards, and it can be connected directly to RPi's CSI-2 camera interface without additional hardware.

The sensor's global shutter and excellent low-light sensitivity allow it to be used for any application that needs gesture detection, head, and eye tracking, and depth and motion detection.

## Features

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- Sensor: Monochrome global shutter OV9281
- Pixel Size: 3 μm x 3 μm
- Active array size: 1280 x 800
- Optical Size: 1/4 inch
- Focusing Range: 65mm ~ infinite
- IR Sensitive: Visible light only, build-in 650nm IR cut filter
- Output interface: 1-lane MIPI serial output with Arducam SDK.
- Output formats: RAW 8/10
- Maximum image transfer rate: 1280 x 800@120 fps with the Official driver/Arducam SDK.
- Board Size: 40mm x 40mm
- Lens Specs: FoV – 166°(D), EFL – 0.83mm, F.NO – 2.0

## Application

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- Security
- High dynamic range imaging
- Unattended surveillance
- Stereo vision
- Machine vision
- Automation

## NOTE

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- This camera and RPI driver doesn't support hardware JPEG/H.264 encoding.

## Package Including

- 1 pcs Arducam OV9281 1MP Mono Global Shutter Camera Module
- 1 pcs 150mm 15pin 1.0mm to 22pin 0.5mm pitch FPC cable
- 1 pcs 80mm 22pin 0.5mm pitch FPC cable

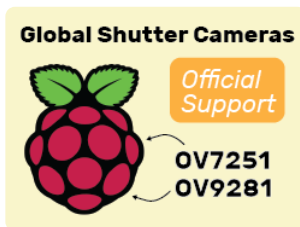
## Documentation

### OV9281 1MP Global Shutter Camera for Raspberry Pi

Posted: March 20, 2019

Introduction The Arducam OV9281 camera breakout incorporates Omnivision 1/4-inch 1 Mp (1280×800) CMOS digital image sensor which is capable of operating at up to 60fps in 1MP ( 1280×800 ) resolution at 1-lane MIPI mode. [Read more...](#)

## Blog



### Monochrome Global Shutter Cameras on RPi: OV7251 and OV9281 Camera Drivers Merged to Raspberry Pi Kernel

Posted: September 16, 2020

Many people perform computer and machine vision tasks on RPi, in which they have to deal with fast-moving objects. A global shutter camera is an ideal solution to avoid the rolling artifacts for better image [Read more...](#)

0 comments

## Video

Arducam Global Shutter OV9281 MIPI Camera Demo for Raspberry Pi 4/3B+/3 and More



## GitHub

 ArduCAM/MIPI\_Camera

## Selection Guide

SKU	Product	Resolution	Color	Shutter	Camera board	Mount	IR sensitivity	Focus
B0161	0.3MP Monochrome Global Shutter	0.3MP	B/W	Global shutter	40mm	Stock	Visible light	Fixed Focus
B0162	1MP Monochrome Global Shutter	1MP	B/W	Global shutter	40mm	Stock	Visible light	Fixed Focus
B0165	1MP Monochrome Global Shutter M12 Mount	1MP	B/W	Global shutter	40mm	M12	Visible light	Adjustable
B0031	5MP M12	5MP	RGB	rolling shutter	36mm	M12	Visible light	Adjustable
B0032	5MP CS Mount	5MP	RGB	rolling shutter	36mm	CS	Visible light	Adjustable
B0033	5MP	5MP	RGB	rolling shutter	24mm	Stock	Visible light	Fixed Focus
B0033+B0087	5MP with Pi Zero Cable	5MP	RGB	rolling shutter	24mm	Stock	Visible light	Fixed Focus
B003301	5MP NoIR	5MP	RGB	rolling shutter	24mm	Stock	IR sensitive	Fixed Focus
B0033C	5MP with case	5MP	RGB	rolling shutter	24mm	Stock	Visible light	Fixed Focus

Showing 1 to 10 of 39 entries

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## How to purchase

You can purchase this item from [Arducam distributors](#)

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0.31MP Monochrome  
Global Shutter Camera...

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Sensor for Raspberry Pi...**


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Raspberry Pi – 5MP OV5647  
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