

VIZIONCAM-AR0521



- Monochrome or Color Models, up to 4 lanes MIPI CSI-2 interface.
- Excellent video performance, 60 fps at 5 Megapixel.
- Solution with Image Signal Processing function, tie in UVC USB3.0 Type C connector.
- Enable to embed on the device with windows system.
- Support embedded machine vision application in Security Camera, People Counting, Face Recognition, Car DVR.

Specifications

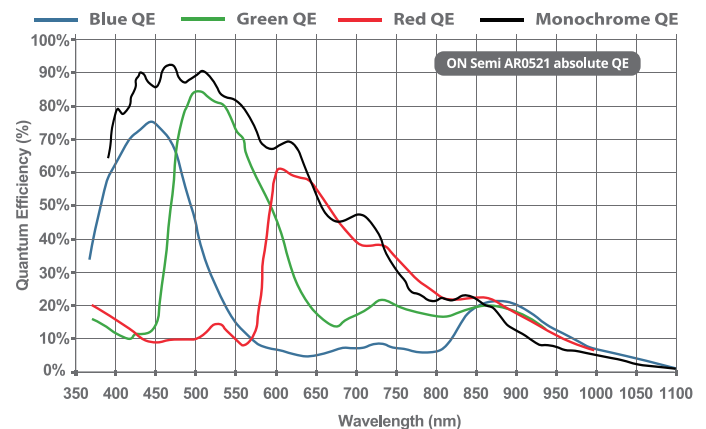
Sensor Information

CMOS Sensor	ON Semi AR0521
Active Pixels	2592 (H) x 1944 (V)
Pixel Size	2.2 μm x 2.2 μm
Optical Format	1/2.5" (Diagonal 7.13 mm)
Shutter Type	Rolling Shutter
Chromaticity	Mono / Color
Max Frame Rate	5Mp/10 bit: 60 fps 5Mp/10 bit/Interleaved HDR: 30 fps 5Mp/12 bit: 32 fps 5Mp/12 bit/Interleaved HDR: 16 fps 1440p/10 bit: 60 fps 1440p/10 bit/Interleaved HDR: 30 fps 1440p/12 bit: 50 fps 1440p/12 bit/Interleaved HDR: 25 fps
Chief Ray Angle	9°
Input Clock Range	10 - 48 MHz (Default 48MHz)
Bit Depths	8 / 10 / 12 bit
Color Format	YUV422, RGB888, RAW8, RAW10, RAW12

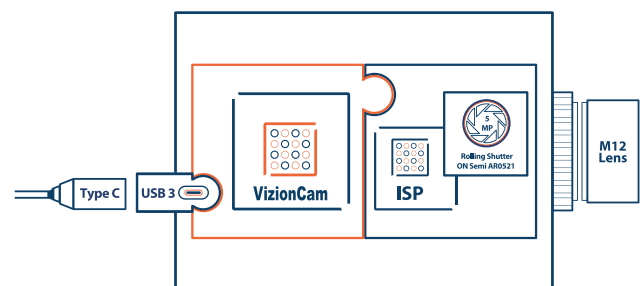
Interface

Data Transmission	MIPI CSI-2, up to 4 lanes
Communication Interface	I ² C
Connector	USB 3.0 Type C

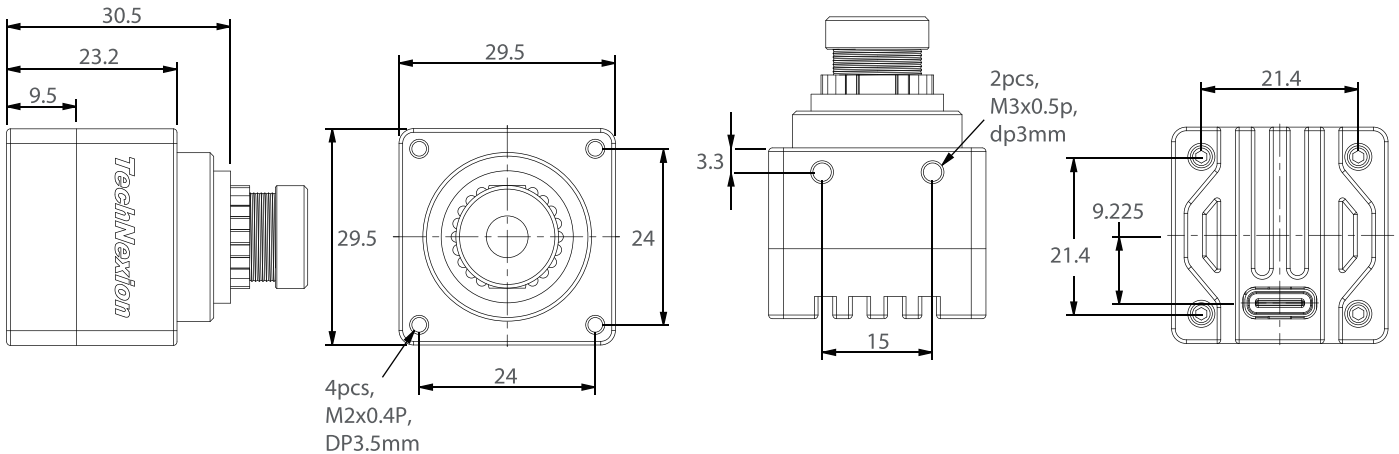
Spectral Characteristics



Block Diagram



Dimensions (units in mm)



Environmental and Mechanical

L x W x H	29.5 x 29.5 x 30.5 (Housing) mm
Mass	<50g
Operating Temperature	-40° ~ 85°C
Storage Temperature	-40° ~ 125°C
Ambient Humidity	10% to 90% RH

Certification and Compliance

Certification	Compliant with CE / FCC / RoHS / REACH directives
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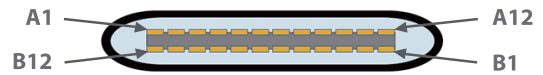
Power

Supply Voltage	5V
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ISP Function

- Auto Exposure
- Auto Gain
- Gamma
- Auto White Balance (Color Model)
- Color Calibration

Connector Pin Definition



A1	GND	B12	GND
A2	TXP1	B11	RXP1
A3	TXN1	B10	RXN1
A4	VBUS1	B9	VBUS3
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	VBUS2	B4	VBUS4
A10	RXN2	B3	TXN2
A11	RXP2	B2	TXP2
A12	GND	B1	GND

Order Information

VIZIONCAM-AR0521

Holder / Frame	S Mount
Lens	Y

Lens Information

TEVSL04096030

Focus Length	3.9 mm
F/No.	2.8
FOV (Diagonal)	86°
TTL	22 mm
Range	30 cm to Infinity

*TechNexion could provide the suitable lens base on customer demand