TechNexion
INNOVATORS OF TECHNOLOGY

VCI-AR1335-SL



- onsemi AR1335 13MP Rolling Shutter Sensor
- 4K HDR Imaging for Low-Cost Applications
- S-Mount for Interchangeable Lenses
- UVC USB Type-C 5 Gbps Connector
- Plug & Play with Windows & Linux OS
- Comes with VizionViewer™ Configuration Utility and VizionSDK

Specifications

Camera Information

CMOS Sensor	onsemi AR1335
Active Pixels	4208 (H) x 3120 (V) = 13MP
Pixel Size	1.1 µm x 1.1 µm
Optical Format	1/3.2" (Diagonal 5.8 mm)
Shutter Type	Rolling Shutter
Chromaticity	Color
Illuminated type	Back Side Illuminated (BSI)
Maximum Frame Rate (MJPEG)	4200 x 3120 @ 30 fps 3840 x 2160 @ 30 fps 2560 x 1440 @ 60 fps 1920 x 1080 @ 60 fps 1280 x 720 @ 120 fps 640 x 480 @ 60 fps
Maximum Frame Rate (UYVY)	4200 x 3120 @ 10 fps 3840 x 2160 @ 15 fps 2560 x 1440 @ 30 fps 1920 x 1080 @ 60 fps 1280 x 720 @ 120 fps 640 x 480 @ 30 fps
Maximum S/N Ratio	37 dB
HDR Support	Yes
Output Format	MJPEG (JPG) UYVY

Camera Interface

Connector	USB Type-C 5 Gbps

Power

Supply Voltage	5V ± 5%
Power Consumption	UYVY 4200 x 3120 @ 12 fps ≤ 1.4W
Standby Power	≤ 0.3W Standby

Software Support

Operation System	UVC Plug-and-play Windows 10/11 Linux Yocto
Software	VizionViewer™
Development SDK	VizionSDK

Environmental and Mechanical

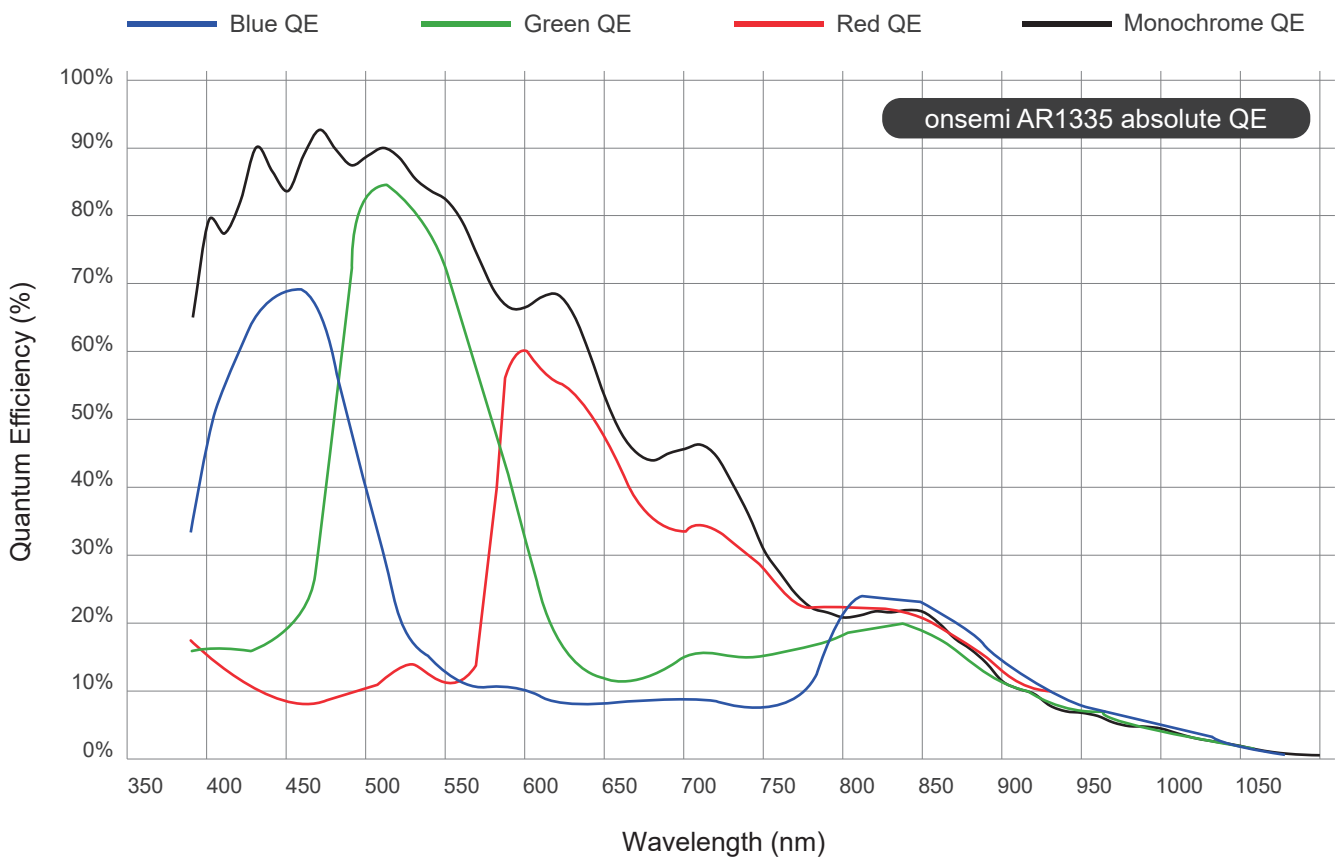
Dimensions	29.5(W) x 29.5(H) x 28.5(D) mm
Weight	44 grams
Relative Humidity	10 to 90 %
MTBF	50,000 Hours
Shock	15G half-sine 11 ms duration
Operating Temperature	-30°C to +70°C
Vibration	1 Grms random 5-500Hz hr/axis

Certification and Compliance

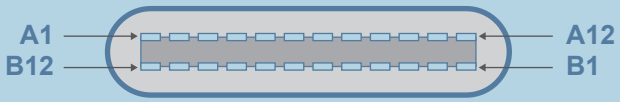
Certification	Compliant with CE / FCC / RoHS / REACH directives

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Spectral Characteristics



Connector Pin Definition



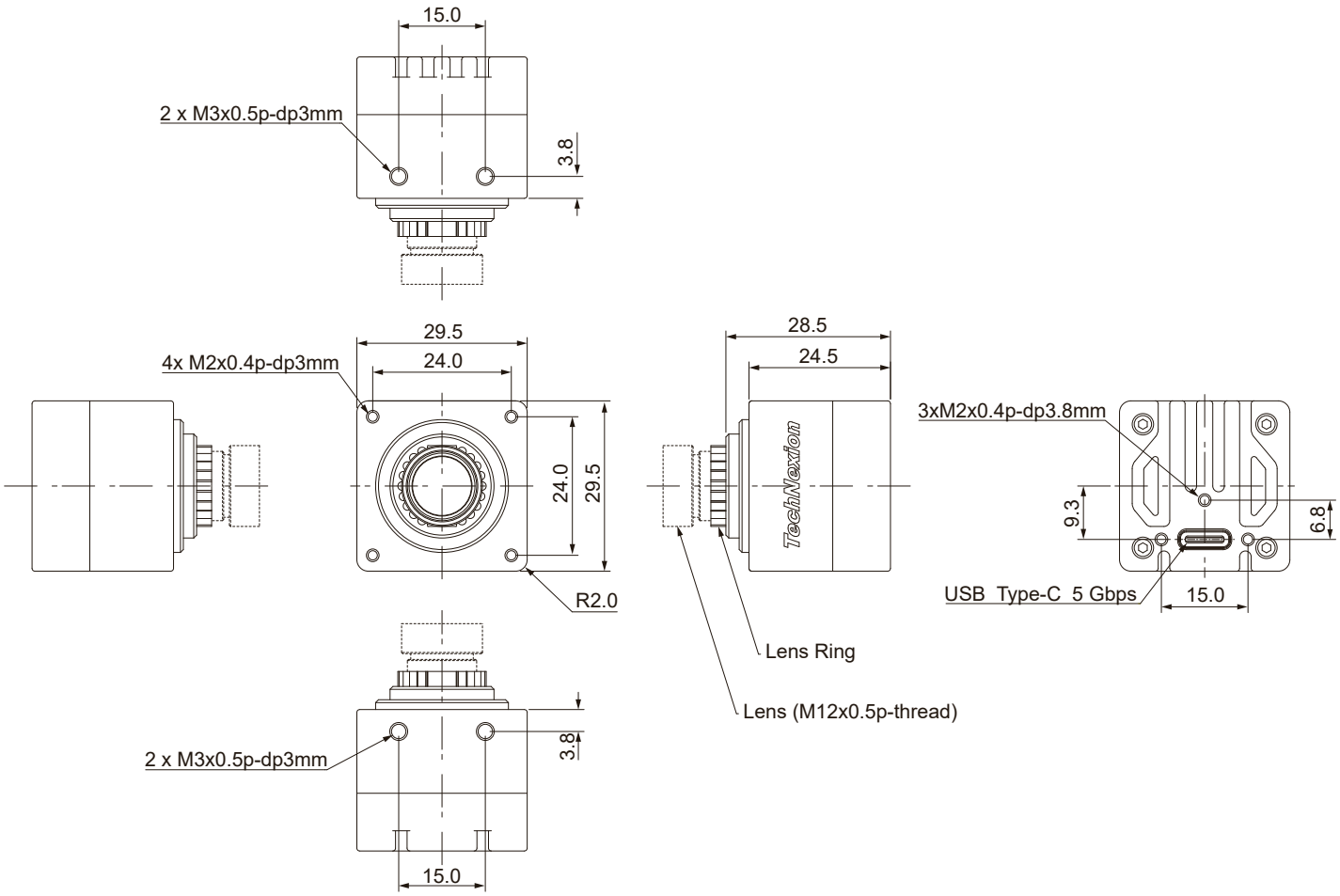
A1	GND	**B12**	GND
A2	TXP1	**B11**	RXP1
A3	TXN1	**B10**	RXN1
A4	VBUS1	**B9**	VBUS3
A5	CC1	**B8**	SBU2
A6	DP1	**B7**	DN2
A7	DN1	**B6**	DP2
A8	SBU1	**B5**	CC2
A9	VBUS2	**B4**	VBUS4
A10	RXN2	**B3**	TXN2
A11	RXP2	**B2**	TXP2
A12	GND	**B1**	GND

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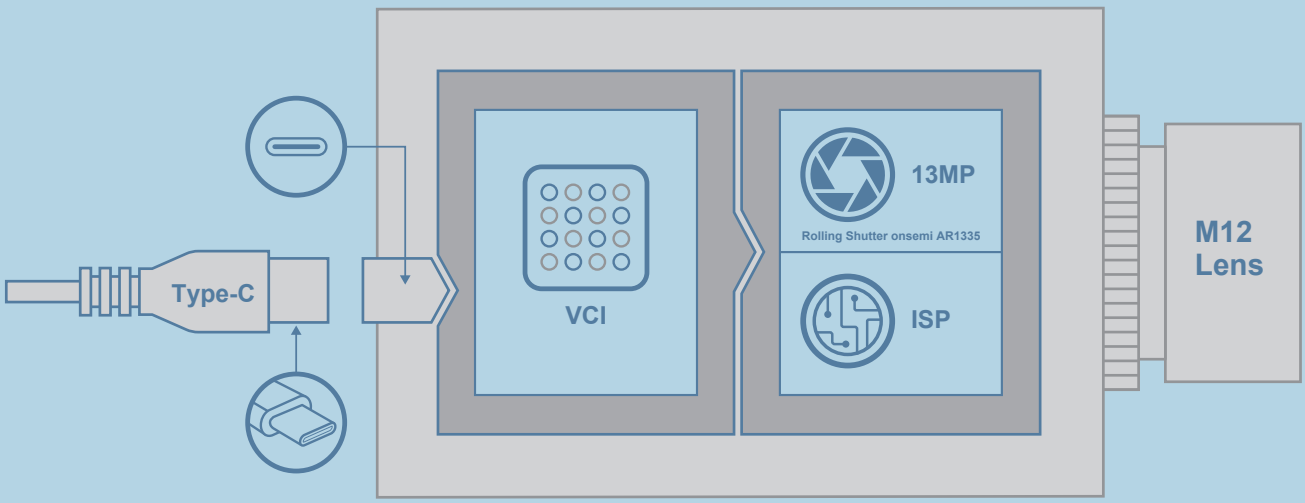
For more information:
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sales@technexion.com

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Dimensions (units in mm)



Block Diagram



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Lens Information

	 VCI-AR1335-C-S85-IR
Focus Type	Fixed Focus
Focal Length	3.2 mm
Aperture	F2.4
Lens D-FOV	91.0°
Lens H-FOV	82.0°
Lens V-FOV	51.4°
Module D-FOV	84.6° ± 5%
Module H-FOV	70.3° ± 5%
Module V-FOV	55.2° ± 5%
TTL	22 mm
BFL	3.4 mm
MOD	0.3 m
Distortion	<3.9%
IR-Filter	650 nm

Order Information

VCI-AR1335-x-Sxx-xx

Part Number Rules

Option	Code	Description
Chromaticity	C	Color
Lens	S85	S-Mount Module D-FOV 85°
Filter	-	-
	IR	IR Cut Filter 650nm

For further customization or questions about orders, contact your TechNexion sales representative.

Optional Accessories

300-MOUNT-BRACKET
An easy to attach A-Mount bracket
for TechNexion 30mm enclosed cameras.



300-MOUNT-BRACKET



300-MOUNT-BRACKET on tripod
(tripod not included)

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