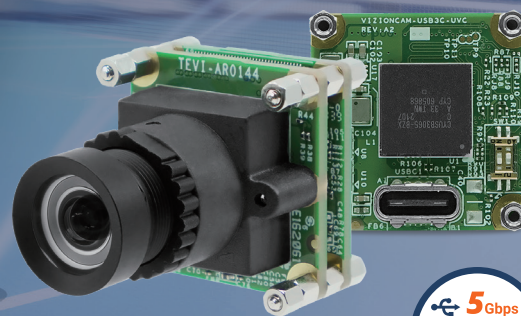


UVCI-AR0144-SL

TechNexion
INNOVATORS OF TECHNOLOGY

- onsemi AR0144 1MP Global Shutter Sensor
- S-Mount for Interchangeable Lenses
- UVC USB Type-C 5 Gbps Connector
- Plug & Play with Windows & Linux OS
- VizionViewer™ configuration utility
- VizionSDK for custom development



VizionSDK VizionViewer™

Camera Information

CMOS Sensor	onsemi AR0144
Active Pixels	1280 (H) x 800 (V) = 1MP
Pixel Size	3.0 μm x 3.0 μm
Illuminated Type	Front Side Illuminated (FSI)
Maximum S/N Ratio	38 dB
Optical Format	1/4" (Diagonal 4.5 mm)
Shutter Type	Global Shutter
Chromaticity	Color
Maximum Frame Rate (YUV422-UYYVY)	1280 x 800 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps
Maximum Frame Rate (MJPEG)	1280 x 800 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps
Output Format	YUV422-UYYVY MJPEG (JPG)

Camera Interface

Connector	USB Type-C 5 Gbps
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Power

Supply Voltage	5V $\pm$ 5%
Power Consumption	1280 x 800 @ 60 fps $\leq$ 0.9W
Standby Power	$\leq$ 0.1W Standby

Software Support

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

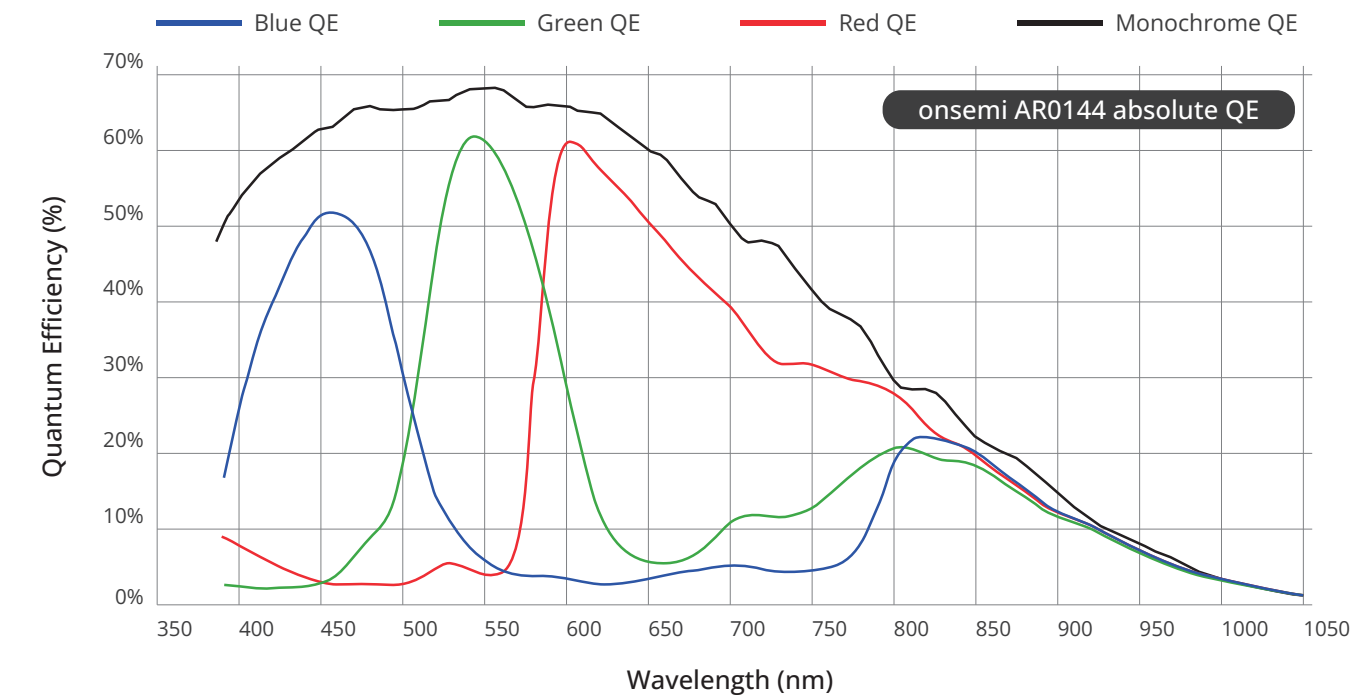
Environmental and Mechanical

Dimensions	24.5(W) x 24.5(H) x 25.6(D) mm
Weight	$\leq$ 18 grams
Operating Temperature	-30°C to + 70°C

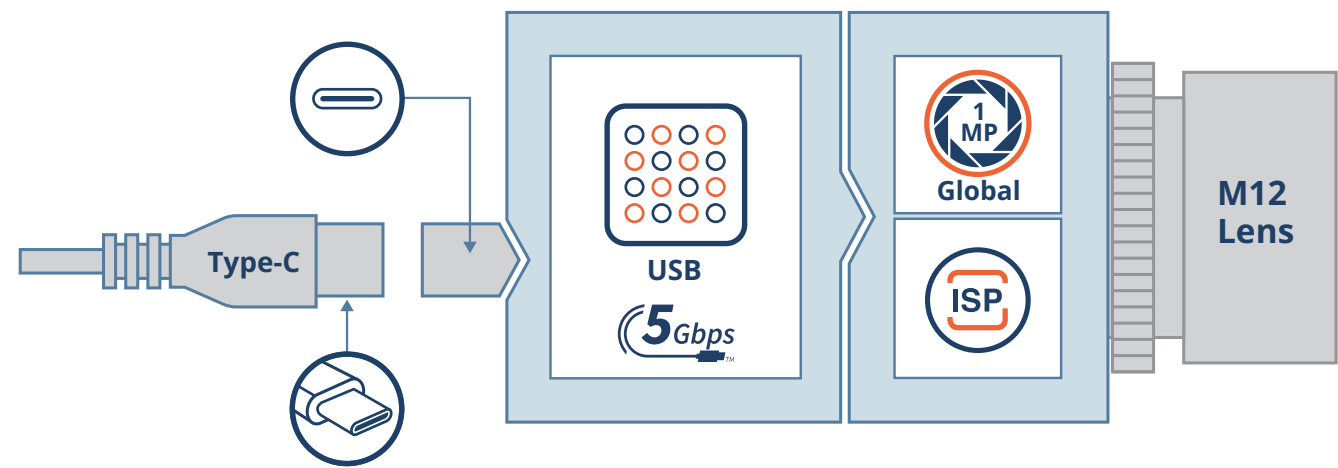
Certification and Compliance

Certification	Compliant with CE / FCC / RoHS / REACH directives
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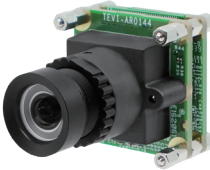
Spectral Characteristics



Block Diagram



Lens Information

		
	UVCI-AR0144-C-S33-IR	UVCI-AR0234-C-S83-IR
Focus Type	Fixed Focus	Fixed Focus
Focal Length	8 mm	2.85 mm
Aperture	F1.6	F2.8
Module D-FOV	33.1° ± 5%	82.6° ± 5%
Module H-FOV	28.0° ± 5%	73.5° ± 5%
Module V-FOV	17.4° ± 5%	50.3° ± 5%
TTL	26.2 mm	20 mm
BFL	7.8 mm	2.03 mm
MOD	0.3 m	0.3 m
Distortion	<-5.03%	<-0.35%
IR-Filter	650 nm	650 nm
Lens Structure	6G + IR	2G + 3P + IR
First layer material	Glass	Plastic

Order Information

UVCI-AR0144-x-Sxx-xx-xxxx

Option	Code	Description
Chromaticity	C	Color
Lens	S33	S-Mount Module D-FOV 33°
	S83	S-Mount Module D-FOV 83°
Filter	-	-
	IR	IR Cut Filter 650nm
Custom ID	xxxx	Custom Part number ID

For customization, please contact your TechNexion sales representative.

Optional Accessories

An easy to attach A-Mount bracket for TechNexion camera board modules.



245-MOUNT-BRACKET-A



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