

VLS-FPD3-AR1335-SL

TechNexion
INNOVATORS OF TECHNOLOGY

- onsemi AR1335 13MP Rolling Shutter Sensor
- 4K Imaging for Low-Cost Applications
- S-Mount for Interchangeable Lenses
- FAKRA Z-Code Automotive Connector
- Plug & Play with Linux OS & Yocto
- VizionViewer™ configuration utility
- VizionSDK for custom development



Camera Information

CMOS Sensor	onsemi AR1335
Active Pixels	4208 (H) x 3120 (V) = 13 MP
Pixel Size	1.1 μm x 1.1 μm
Illuminated Type	Back Side Illuminated (BSI)
Maximum S/N Ratio	37 dB
Optical Format	1/3.2" (Diagonal 5.8 mm)
Shutter Type	Rolling Shutter
Chromaticity	Color
Maximum Frame Rate (YUV422-UYYV)	4208 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 @ 60 fps
Output Format	YUV422-UYYV RGB888 / RGB565 RAW8 / RAW10 / RAW12

Camera Interface

Serial Link	FPD-Link III
Serializer	TI DS90UB953
Connector	FAKRA SMB Jack Z-Code

Power

Power over Coax	10.8V - 26.4V
Power Consumption	4200 x 3120 @ 12 fps \leq 1.4W
Standby Power	\leq 0.3W Standby

Software Support

Platform Support	NVIDIA Jetson AGX Orin NVIDIA Jetson Orin Nano / NX NVIDIA Jetson Xavier NX NVIDIA Jetson Nano NXP i.MX95 TI Sitara™ AM68 / AM69 TI Jacinto™ TDA4VM / TDA4VH
Operation System	Linux Yocto
Software	VizionViewer™
Development SDK	VizionSDK

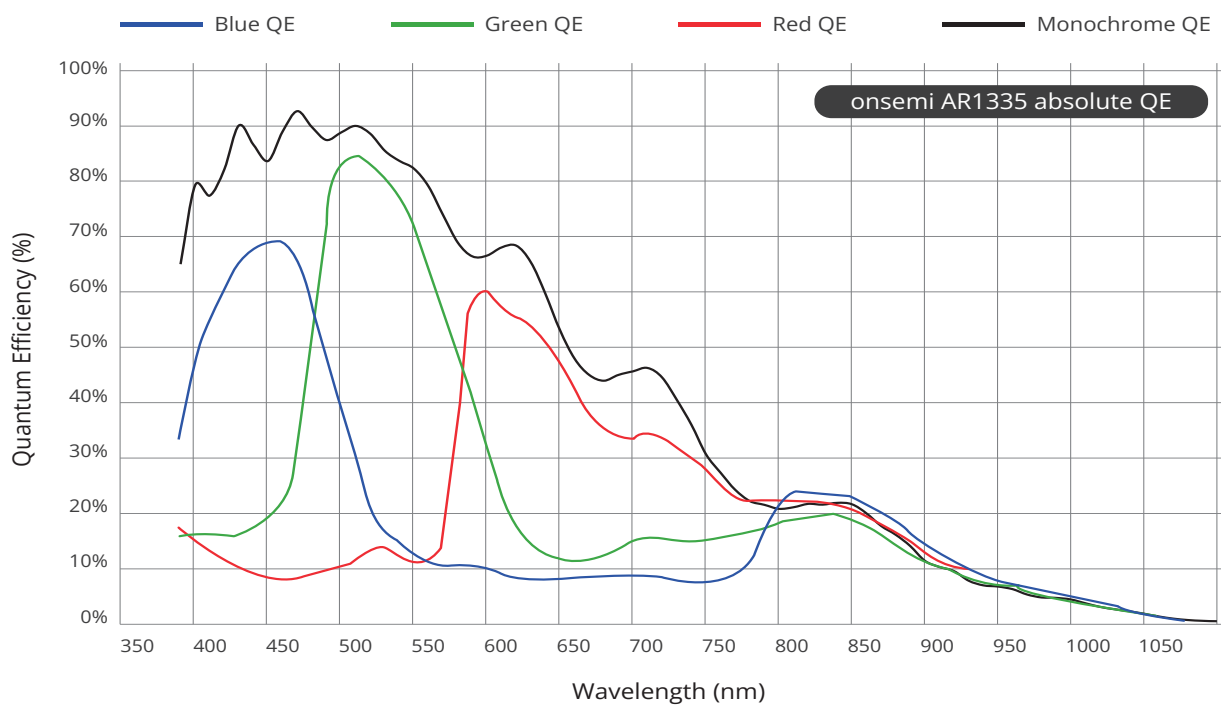
Environmental and Mechanical

Dimensions	29.5(W) x 29.5(H) x 28(D) mm
Weight	\leq 45 grams
MTBF	50,000 Hours
Shock	15G half-sine 11 ms duration
Vibration	1 Grms random 5-500Hz hr/axis
Relative Humidity	10 to 90 %
Operating Temperature	-30°C to + 70°C

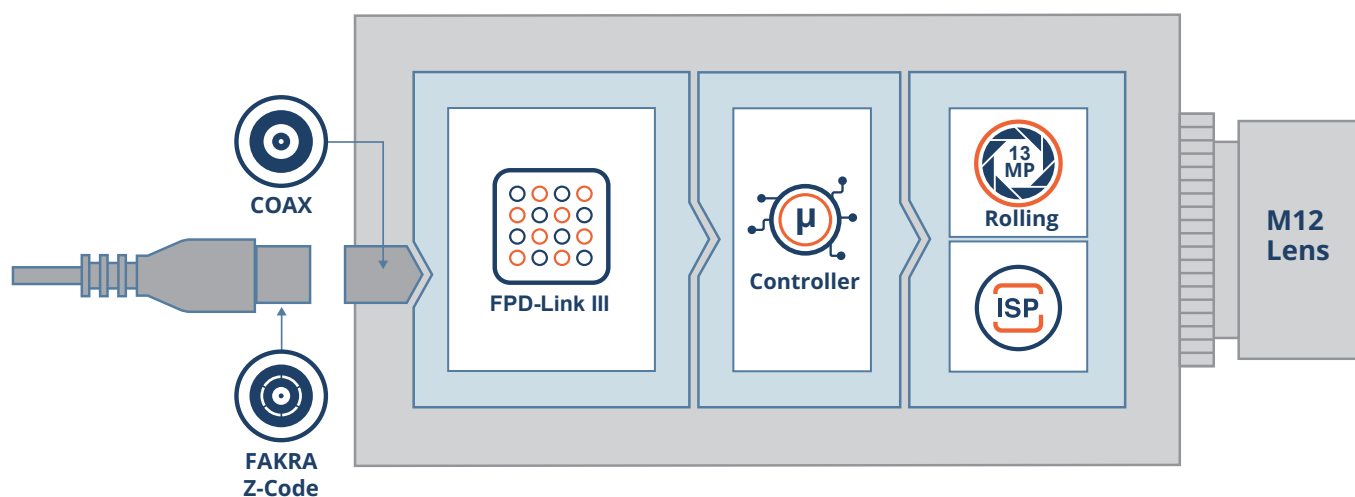
Certification and Compliance

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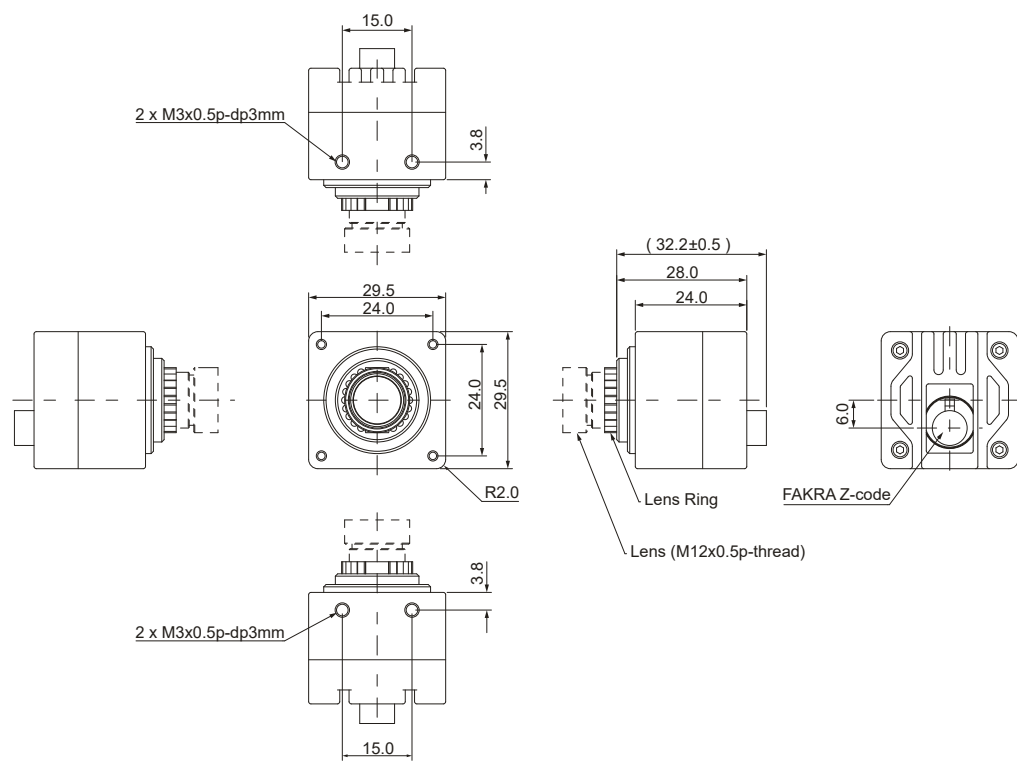
Spectral Characteristics



Block Diagram



Dimensions (units in mm)



Order Information

VLS-FPD3-AR1335-x-Sxx-xx-xxxx

Option	Code	Description
Chromaticity	C	Color
Lens	S85	S-Mount Module D-FOV 85°
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 30mm enclosed cameras.



300-MOUNT-BRACKET



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

Custom Lens Solutions



VLS-FPD3-AR1335-C-S85-IR

Focus Type	Fixed Focus
Focal Length	3.2 mm
Aperture	F2.4
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	<1.6%
IR-Filter	650 nm
Lens Structure	4G + 2P+ IR
First layer material	Glass

FPD-Link III Frame Grabbers

The ease of usage, benefits and integration of a FPD-Link III camera in embedded systems is often made complex by the lack of FPD-Link ports and connectors on the system. For those scenarios TechNexion developed a framegrabber that easily plug into a USB port and extend the system with FPD-Link interconnect.



Up to 15m

Up to 15 meters of data and power transmission over a single COAX cable.



UVC Compliant

Fully plug-n-play in Windows and Linux embedded systems.



Autodetect

Zero configuration required to detect any specific TechNexion FPD-Link camera by the framegrabber.



Software

Linux and Yocto systems are supported.



VizionViewer™

Easy to use software utility providing you with granular camera settings control.



VizionSDK

Hardcode and control your cameras with C# and Python code.

