



LEOPARD IMAGING INC

# LI-AR0239-GW5200-FPDLINKIII-xxxH Data Sheet

## Key Features

- ON SEMI 2.3MP CMOS Image Sensor AR0239
- Optical format: 1/2.7"
- Resolution: 1920H x 1080V
- Pixel size: 3.0 um x 3.0 um
- YUV output without compression
- Includes GEO Semi GW5200 ISP
- Support HDR
- Lens: FOV H 130° / 200°
- Built-in 650nm+940nm Dual band filter
- TI953 FPDLINKIII Serializer
- Connector: FAKRA Z TYPE
- Water proof: IP67
- Operating Temp: -30 ~ 85 °C
- Storage Temp: -40 ~ 125 °C
- Size: 30 x 30 x 37.8 mm
- Weight: 50 g
- Part#:

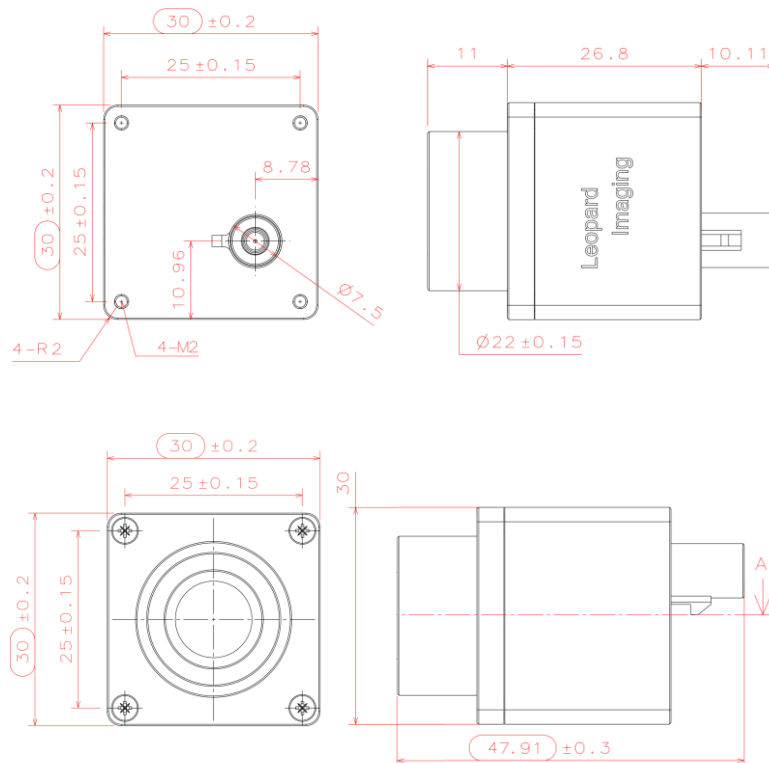
LI-AR0239-GW5200-FPDLINKIII-xxxH



## Application

- Automotive ADAS
- 1080p video applications
- ADAS + Viewing Fusion

## Dimensions



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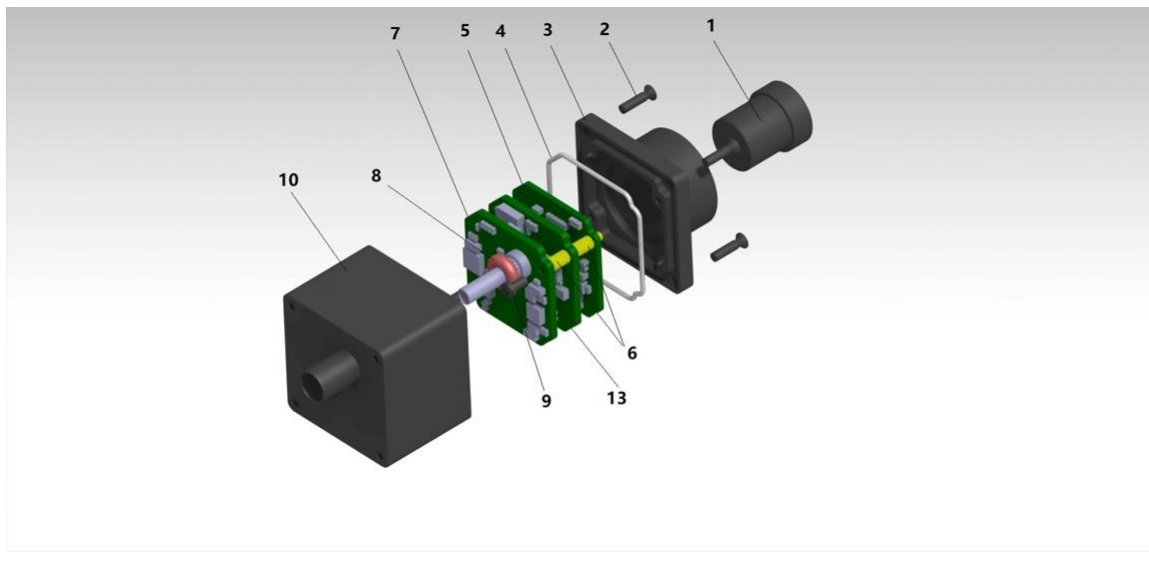
Shanghai Office (China)

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# BOM

#	Name	SPEC	QTY/SET
1	M12 Lens	HJ6074L AT205B	1
2	Screw	KM2*8 black STAINLESS 304	4
3	Shell 2	AL6061-T6 BLACK Anodizing	1
4	Sealing ring	Silicon rubber, White	1
5	LI-AR0239-MIPI-FKR	AR0239 sensor board	1
6	Copper pillar	M2*5+4	4
7	LI-TI953-FKR	TI953 serializer board	1
8	O ring	7*2.4 Silicon rubber Red	1
9	Screw	M2*4 black ZINC	2
10	Shell 1	AL6061-T6 BLACK Anodizing	1
13	LI-GW5200-MIPI	GW5200 ISP board	1

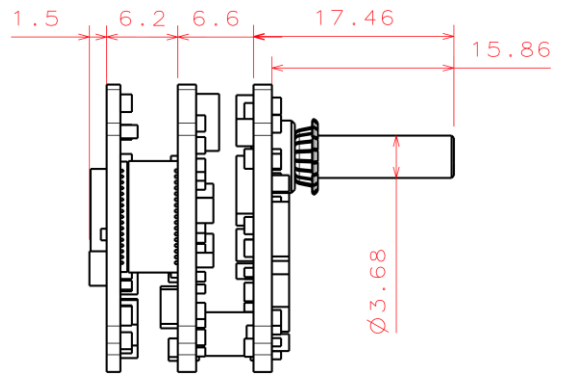
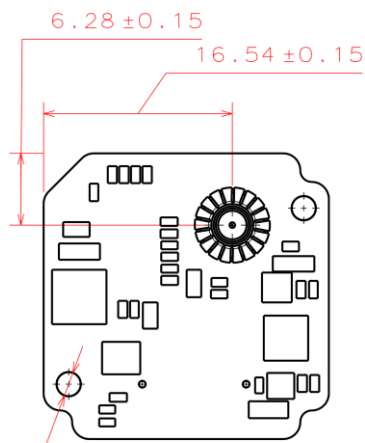
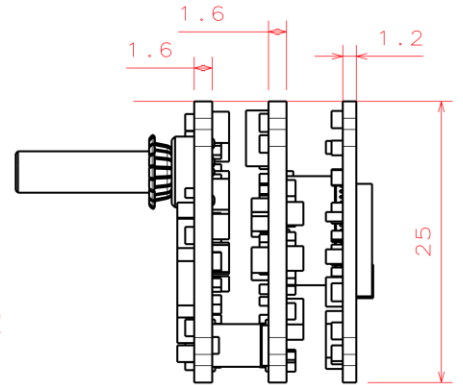
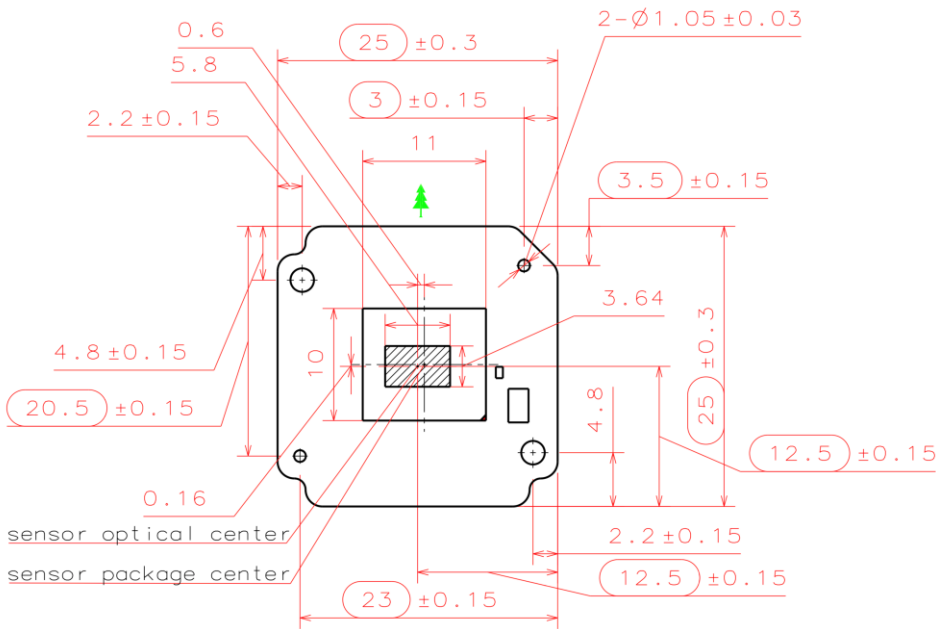


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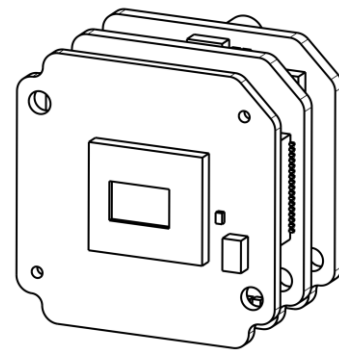
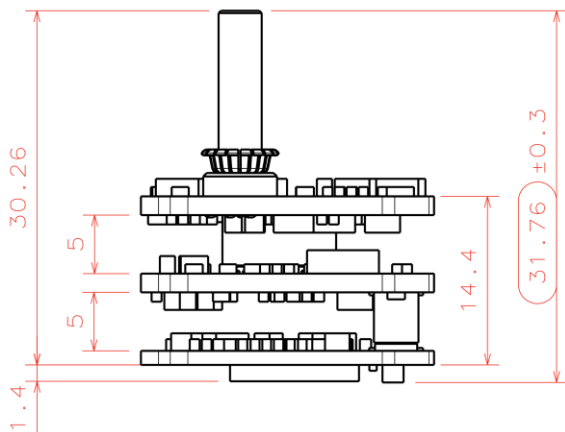
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# Camera boards Dimensions



2-∅2.1 ± 0.05



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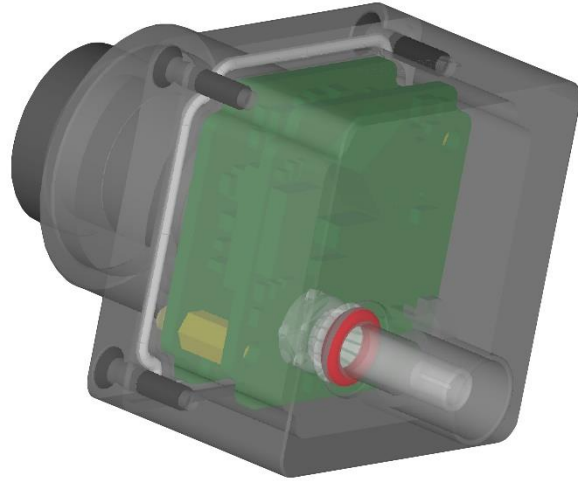
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## Water Proof

- Metal Housing
- Water-proof M12 lens
- Sealed Gasket (White)
- Sealed O-ring (Red)

Note: The lens must be glued for water-proof.  
The LED light version of housing is not water-proof.



## Cable Connector

- Housing Connector- FAKRA Z Type
- Cable length: 3 meters  
Support single Coax Cable transmit up to 12 meters
- Cable Part#: FAK-SMZSMZ-3M
- FAKRA type connectors



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## Ordering Information

**Part#: LI-AR0239-GW5200-FPDLINKIII-xxxH**

Note:

xxxH - 130H: FOV H 130°

xxxH - 200H: FOV H 200°

LI-AR0239-GW5200-FPDLINKIII-130H	LI-AR0239-GW5200-FPDLINKIII-200H
	
<p>Lens: HJ6074L            Lens EFL: 2.852 mm            F/#: 2.0            FOV(D): 152°            FOV(H): 130.4°            FOV(V): 60.3°            Built-in 650nm + 940nm Dual band filter</p>	<p>Lens: AT205B            Lens EFL: 1.34 mm +/- 5%            F/#: 2.0 +/- 5%            FOV(D): 200°            FOV(H): 200°            FOV(V): 125°            Built-in 650nm + 940nm Dual band filter</p>

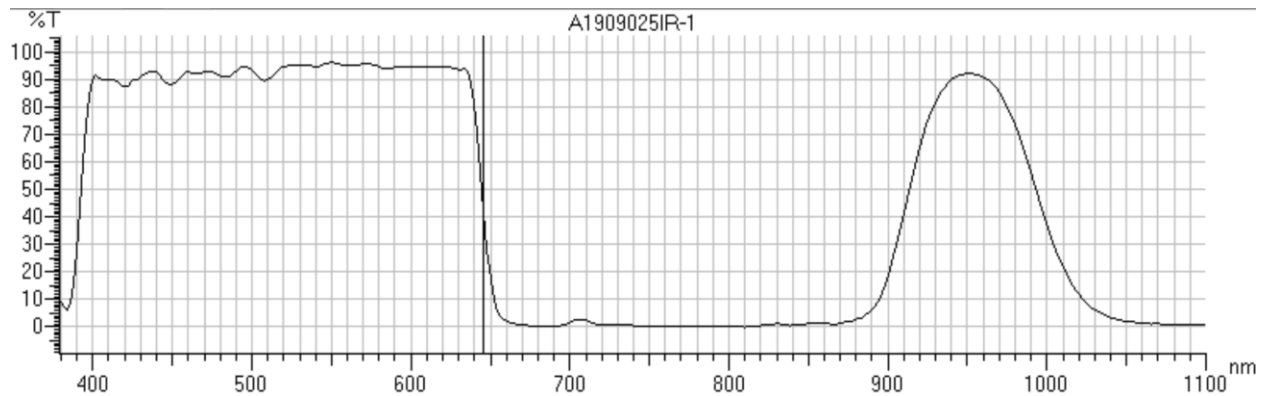


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## 650nm + 940nm Dual band filter



Peak #	Start (nm)	Apex (nm)	End (nm)	Height (%T)	Area (%T*nm)	Valley (nm)	Valley (%T)
1	1100.00	1080.00	946.00	0.93	4677.65	946.00	93.33
2	946.00	858.00	842.00	0.26	3725.43	842.00	1.61
3	842.00	780.00	732.00	0.02	24.53	732.00	0.76
4	732.00	722.00	706.00	0.57	31.33	706.00	2.67
5	706.00	684.00	600.00	0.34	4220.24	600.00	95.33
6	600.00	574.00	560.00	93.01	3970.43	560.00	95.55
7	560.00	550.00	540.00	95.08	2097.31	540.00	95.63
8	540.00	506.00	494.00	90.45	4495.85	494.00	95.00
9	494.00	478.00	470.00	91.57	2418.99	470.00	92.99
10	470.00	448.00	436.00	87.92	3283.20	436.00	93.00

## Image Sample



RGB mode



IR mode



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## LI-USB30-DESER-FPDLINKIII



LI-AR0239-GW5200-FPDLINKIII can connect to LI-USB30-DESER-FPDLINKIII as a USB 3.0 camera. Part#: [LI-USB30-AR0239-GW5200-FPDLINKIII-xxxH](#)

### Key Features

- USB 3.0 Super Speed support
- YUV output without compression
- Support HDR
- UVC compliance
- Provide customization services
- 12VDC Power Supply (Comes with camera)
- Weight: 178 g
- Single Coax Cable transmit up to 12 meter PoC(Power over Cable)
- Support 1920x1080@30fps
- Power consumption: < 140mA@12V
- Support Windows, Linux OS and other OS which include UVC drivers

### SDK Supported

- Camera Tool Source Code in C#
- Capture & Display



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## Revision History

Revision	Description	Release Date
1.0	First Release	7. Jan. 2020



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