



# LI-AR0231-AP0200-GMSL2-xxxH



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## INTRODUCTION

The LI-AR0231-AP0200-GMSL2-xxxH is equipped with ON Semiconductor 1/2.7" 2.3MP CMOS digital image sensor AR0231, AP0200 ISP and Maxim GMSL2 serializer MAX9295A/B. This camera outputs fine tuned YUV422 image data with WDR (Wide Dynamic Range) supported.

## KEY FEATURES

Sensor	ON SEMI 2.3MP CMOS Sensor AR0231
Optical Format	1/2.7"
Maximum Resolution	1920 (H) x 1020 (V)
Pixel Size	3.0 x 3.0 $\mu$ m
Data Format	Fine tuned YUV422 10-bit data
Color / Mono	Color sensor
Frame Rate	28.7 fps @ 1920 x 1020
ISP	ON SEMI AP0200
WDR (Wide Dynamic Range)	Supported
Lens	FOV H 60° / 120° / 200°
Serializer	Maxim MAX9295A/B
Power Supply Range	9 ~ 19 VDC
Connector	FAKRA Z TYPE
IP Rating	IP67
Power Consumption	Approx. 116 mA @ 12 VDC
Operating Temp	-40°C ~ +85°C
Storage Temp	-40°C ~ +105°C
Weight	~ 50 g
Part#	LI-AR0231-AP0200-GMSL2-xxxH

## APPLICATIONS

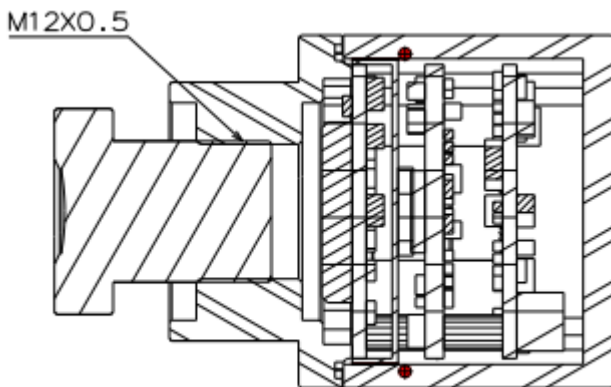
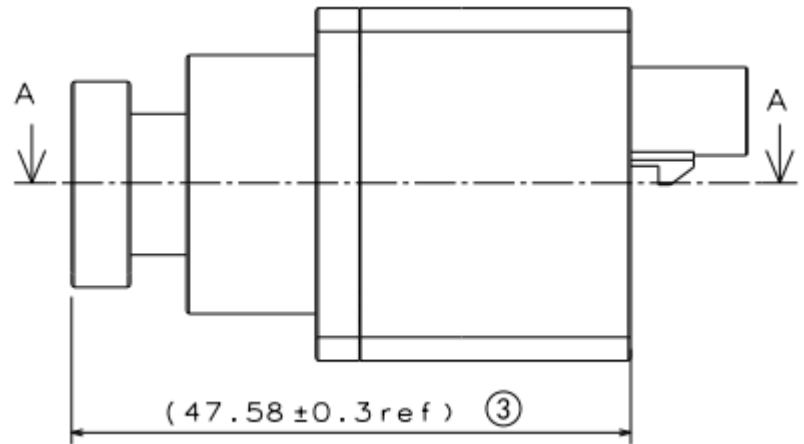
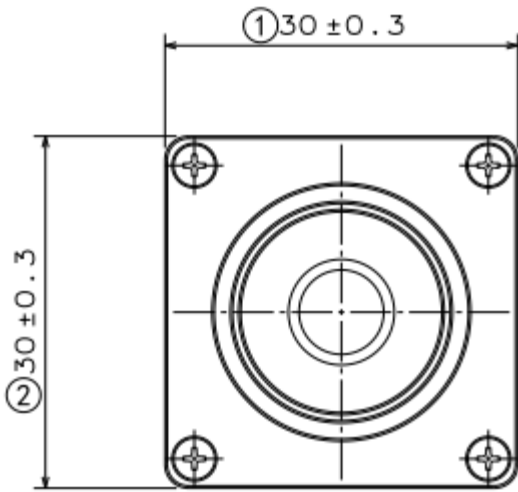
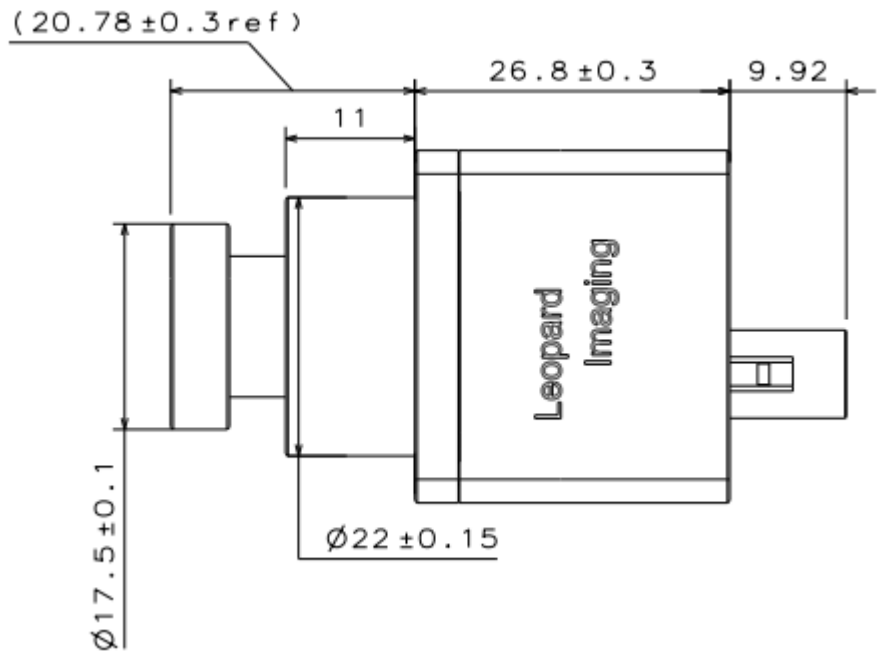
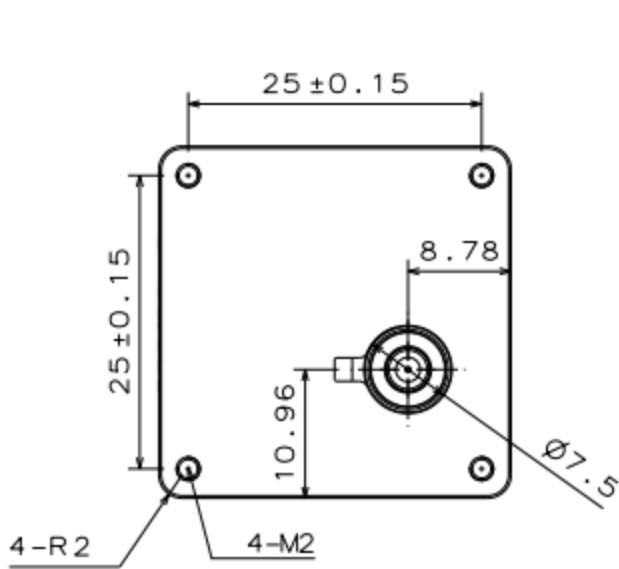
- Automotive ADAS
- ADAS + Viewing Fusion

## CABLE CONNECTOR

- Housing Connector: FAKRA Z Type
- Cable Length: 3 meters
- Cable Part#: FAK-SMZSMZ-3M



DIMENSIONS: LI-AR0231-AP0200-GMSL2-060H



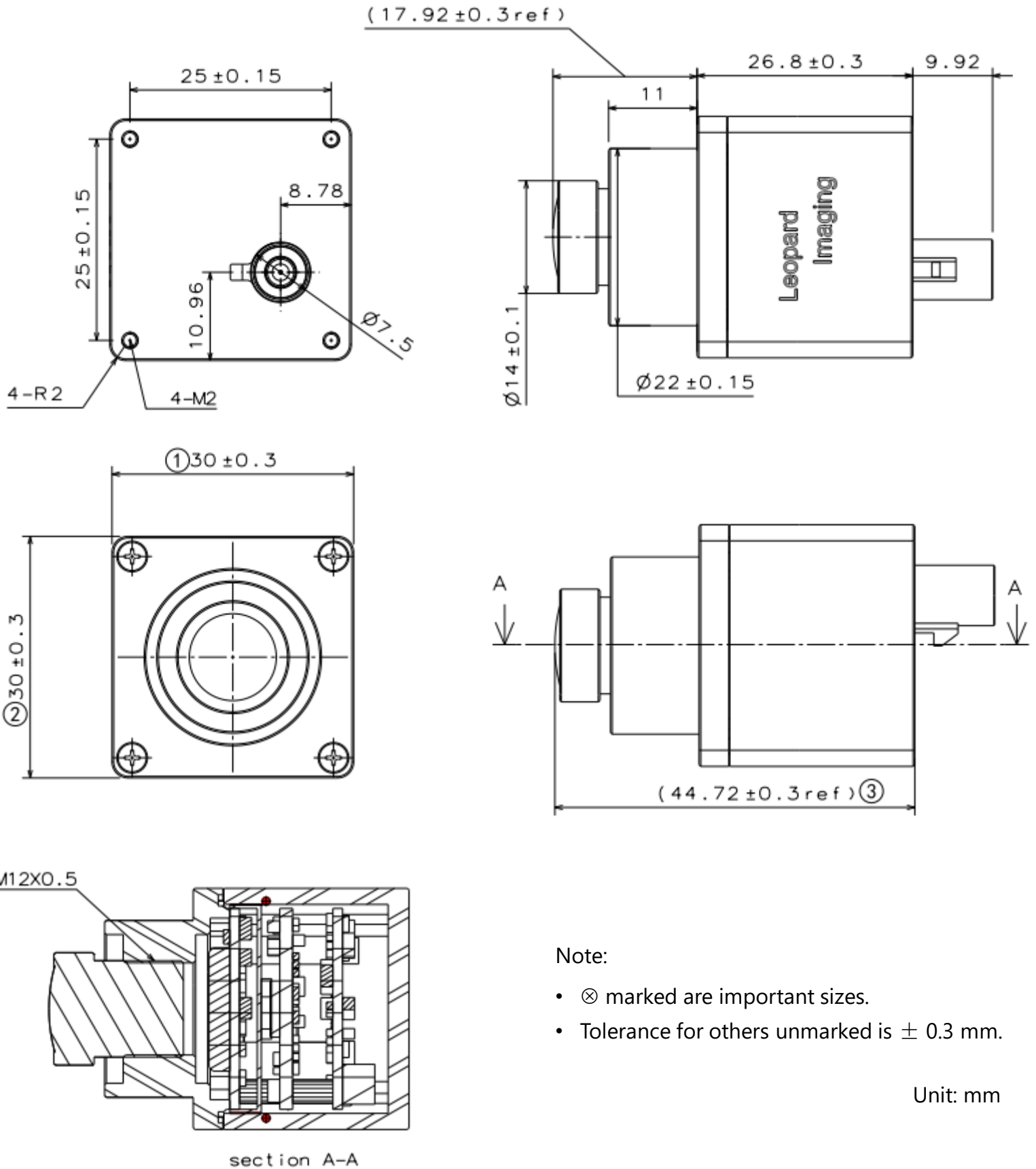
section A-A

Note:

- ⊗ marked are important sizes.
- Tolerance for others unmarked is  $\pm 0.3$  mm.

Unit: mm

# DIMENSIONS: LI-AR0231-AP0200-GMSL2-120H

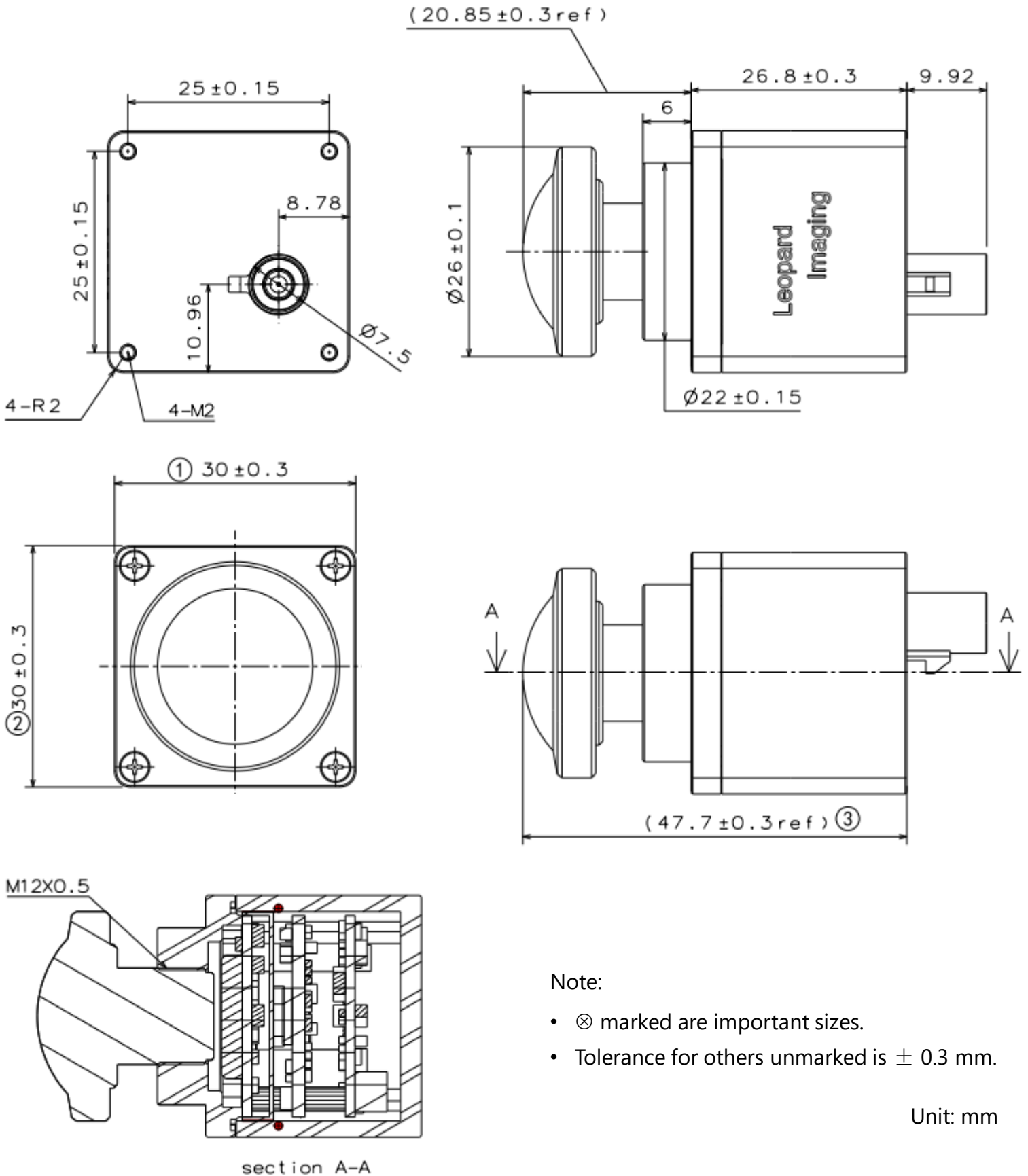


Note:

- $\otimes$  marked are important sizes.
- Tolerance for others unmarked is  $\pm 0.3$  mm.

Unit: mm

# DIMENSIONS: LI-AR0231-AP0200-GMSL2-200H



Note:

- $\otimes$  marked are important sizes.
- Tolerance for others unmarked is  $\pm 0.3$  mm.

Unit: mm

## LENS SPECIFICATIONS

**NOTE:**

xxxH refers to 060H (FOV H 60° ), 120H (FOV H 120° ) or 200H (FOV H 200° )

LI-AR0231-AP0200-GMSL2-060H

Lens: M127B0618WR2
Lens EFL: 6.0 mm
Field of View (FOV): 74.5° (D) / 60.6° (H) / 36.1° (V)
Mount: M12

LI-AR0231-AP0200-GMSL2-120H	LI-AR0231-AP0200-GMSL2-200H
	
Lens: M128B02820WM12R1	Lens: F13B0108WM12R1
Lens EFL: 2.8 mm	Lens EFL: 1.08 mm
Field of View (FOV): 148° (D) / 122° (H) / 74° (V)	Field of View (FOV): 200° (D) / 200° (H) / 200° (V)
Mount: M12	Mount: M12

# USB3.0 CAMERA KIT

LI-GMSL2-USB-BOX



Front View



Side View

LI-AR0231-AP0200-GMSL2-xxxH can connect to LI-GMSL2-USB-BOX as a USB 3.0 camera.

Part#: **LI-USB30-AR0231-AP0200-GMSL2-xxxH**

## KEY FEATURES

- USB 3.0 Super Speed support
- YUV output without compression
- Support WDR
- UVC compliance
- Provide customization services
- 12 VDC power supply
- Weight: ~ 178 g
- Single Coax Cable transmit up to 12 meters PoC (Power over Cable)
- Resolution: 1920 x 1020 @ 28.7 fps
- Support Windows, Linux OS and other OS which include the UVC drivers

## BOM

#	Items	QTY
1	LI-AR0231-AP0200-GMSL2-xxxH	1
2	LI-GMSL2-USB-BOX	1
3	3-Meter Fakra Cable	1
4	12 VDC Power Supply	1
5	USB3.0 Cable	1



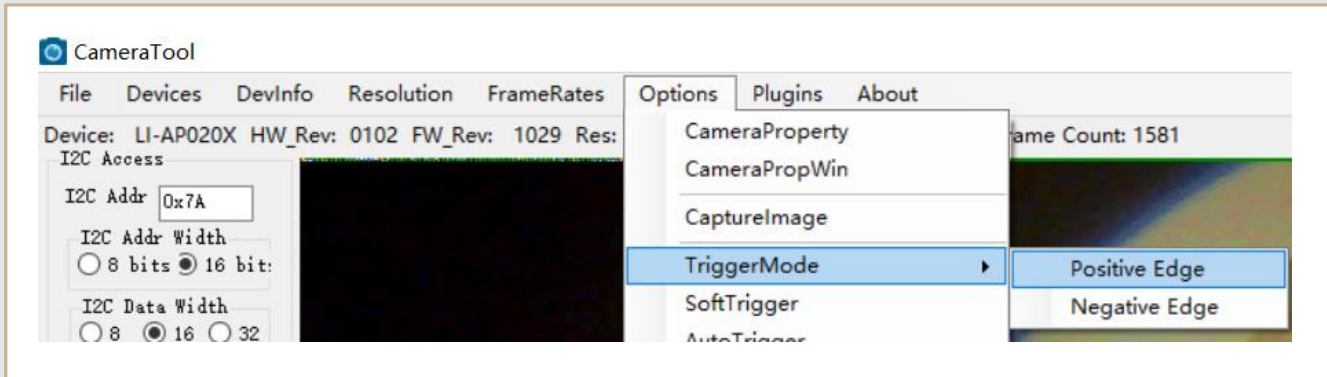
## SDK SUPPORTED

- Camera Tool Source Code in C#
- Capture & Display
- ISP Binary Update
- Register Access Function
- Hardware Trigger Mode

# How to Use Hardware Trigger

## INSTRUCTIONS

1. Click **Options** > **TriggerMode** > **Positive Edge** / **Negative Edge** on the camera tool to enable Trigger mode. The video will stop.



2. Connect the external trigger device to **Pin1 (OPT\_IN)** and **Pin5 (GND)** of **J3**. The voltage of trigger signal can be 3.3V ~ 12V.

Once receiving trigger pulses, the camera will output frames.





## ● REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	18 November 2021

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