



LEOPARD
IMAGING

LI-VENUS-OX03F10-96717-xxxH



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INTRODUCTION

The LI-VENUS-OX03F10-96717-xxxH is equipped with OmniVision CMOS high-definition high dynamic range CMOS sensor OX03F10 and Maxim serializer MAX96717. This camera outputs 12-bit / 14-bit / 16-bit / 20-bit RAW data.

SPECIFICATIONS

Sensor	OmniVision high-definition high dynamic range sensor OX03F10
Optical Format	1/2.44"
Resolution	1920 (H) x 1536 (V) (active pixels)
Pixel Size	3.0 x 3.0 μm
Output Format	12-bit / 14-bit / 16-bit / 20-bit RAW
Color / Mono	Color sensor
Maximum Frame Rate	60 fps @ 1920 x 1536
HDR (High Dynamic Range)	Supported
LFM (LED Flicker Mitigation)	Supported
Lens	FOV H 28° / 60° / 120° / 195°
IP Rating	FOV H 60° / 195°: IP69K FOV H 120°: TBD FOV H 28°: IP5K2
Serializer	Maxim MAX96717
Power Supply Range	8 ~ 17 VDC
Connector	FAKRA Z TYPE
Power Consumption	78 mA @ 12 VDC (1920 x 1542 @ 38 fps)
Operating Temp	-40°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Weight	~ 35 g
Part#	LI-VENUS-OX03F10-96717-xxxH

APPLICATIONS

- Automotive
 - ◆ SVS
 - ◆ Rear View Camera
 - ◆ Autonomous Driving

IMAGE ORIENTATION



CABLE CONNECTOR

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



LI-VENUS-OX03F10-96717-028H



LI-VENUS-OX03F10-96717-060



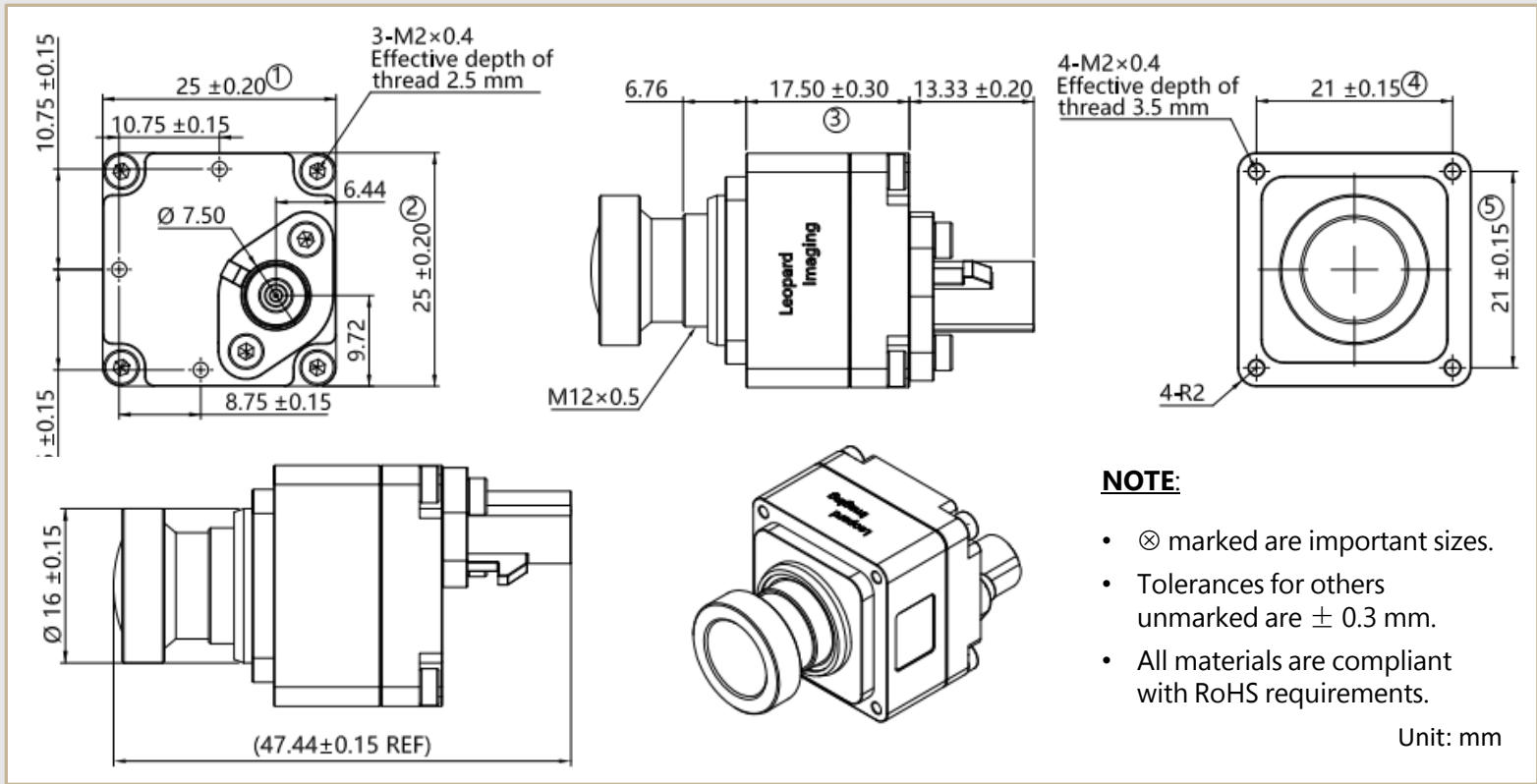
LI-VENUS-OX03F10-96717-120H



LI-VENUS-OX03F10-96717-195H



DIMENSIONS: LI-VENUS-OX03F10-96717-028H

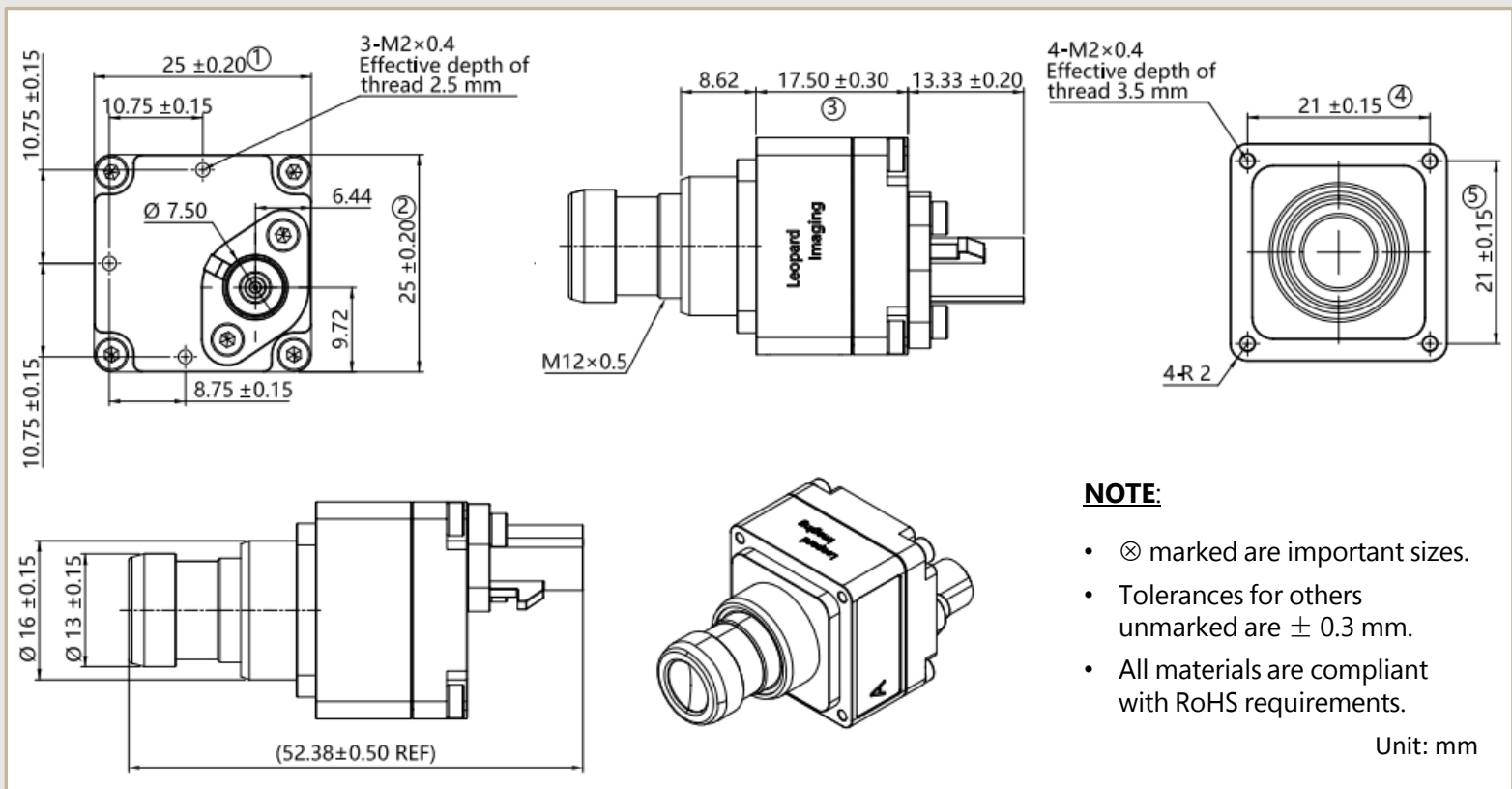


NOTE:

- ⊗ marked are important sizes.
- Tolerances for others unmarked are ± 0.3 mm.
- All materials are compliant with RoHS requirements.

Unit: mm

DIMENSIONS: LI-VENUS-OX03F10-96717-060H

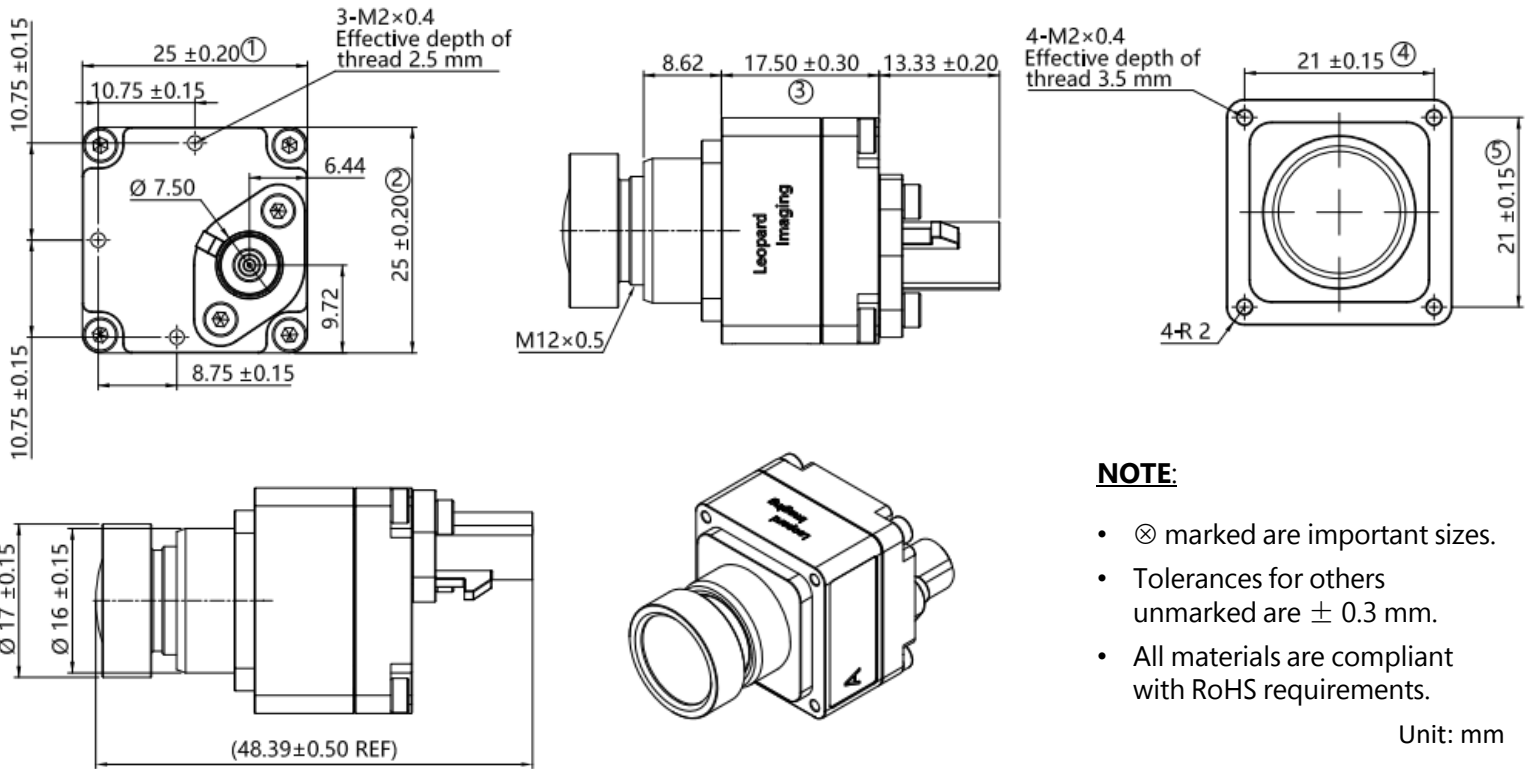


NOTE:

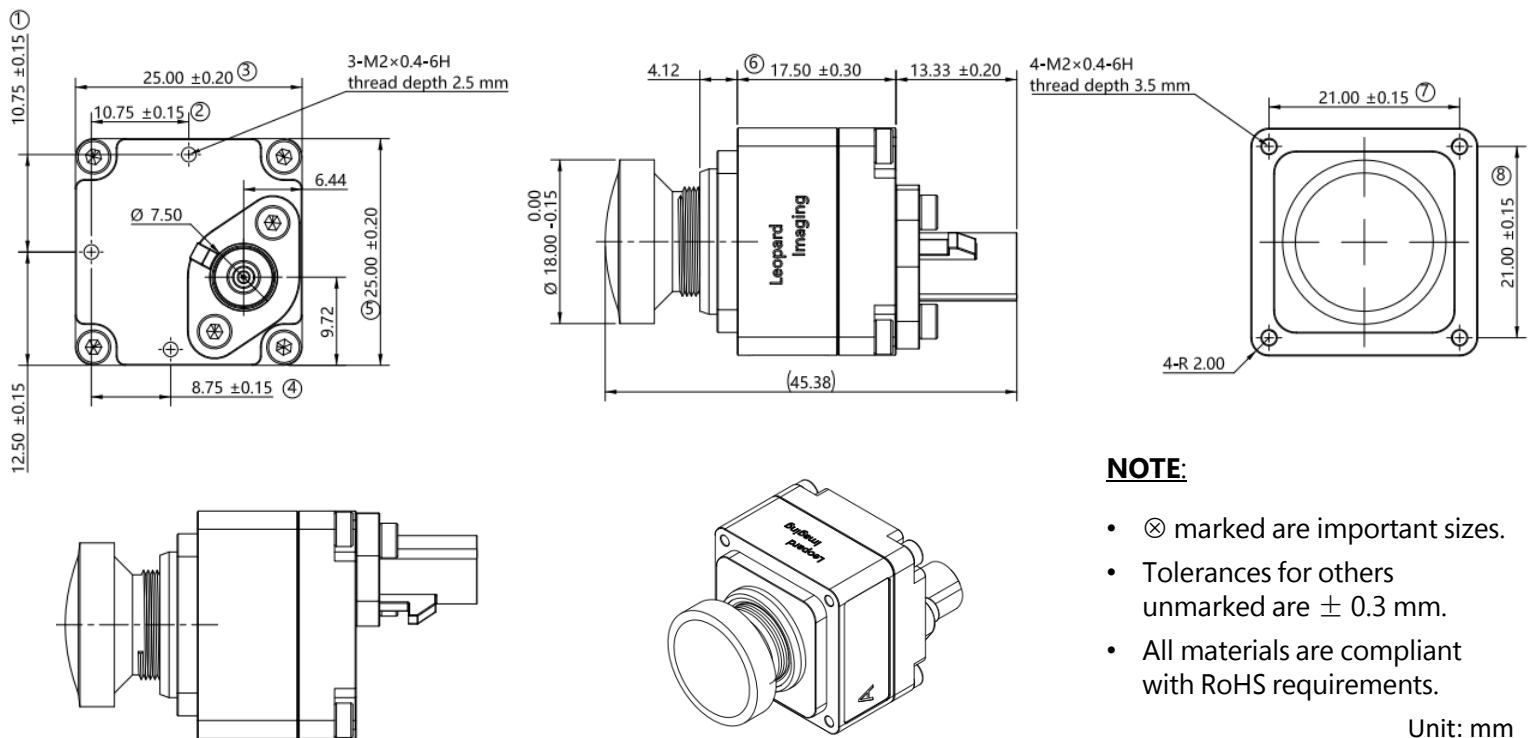
- ⊗ marked are important sizes.
- Tolerances for others unmarked are ± 0.3 mm.
- All materials are compliant with RoHS requirements.

Unit: mm

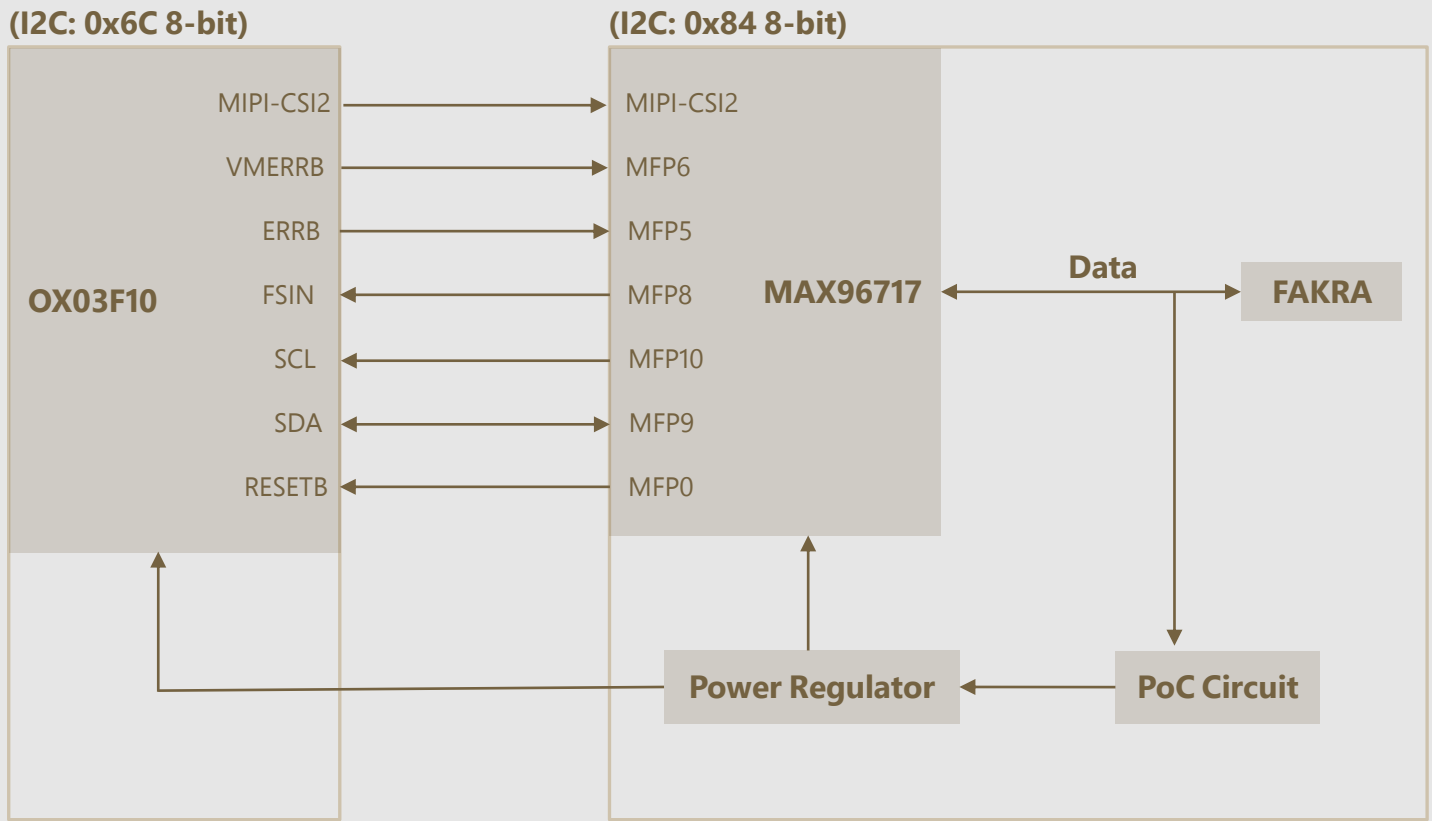
DIMENSIONS: LI-VENUS-OX03F10-96717-120H



DIMENSIONS: LI-VENUS-OX03F10-96717-195H



PINOUT CONNECTIONS



ORDERING INFORMATION

NOTE:

xxxH refers to 028H (FOV H 28°), 060H (FOV H 60°), 120H (FOV H 120°) or 195H (FOV H 195°)

LI-VENUS-OX03F10-96717-028H	LI-VENUS-OX03F10-96717-060H
	
Lens EFL: 11.655 mm \pm 5%	Lens EFL: 5.83 mm \pm 2%
Aperture, F/#: 2.5 \pm 5%	Aperture, F/#: 1.8 \pm 5%
Field of View (FOV): 28.02° \pm 2° horizontal	Field of View (FOV): 60° horizontal (2Y' = 5.784 mm)
Optical Distortion: -1.38% \pm 5% (F-tan θ)	Optical Distortion: < -20.07% (2Y' = 6.826 mm)
Relative Illumination: \geq 80.0%	Relative Illumination: 90% (2Y' = 6.826 mm)
IR Filter: 690 nm IR cut filter	IR Filter: 650 nm IR cut filter
Mount: M12 x P0.5	Mount: M12 x P0.5

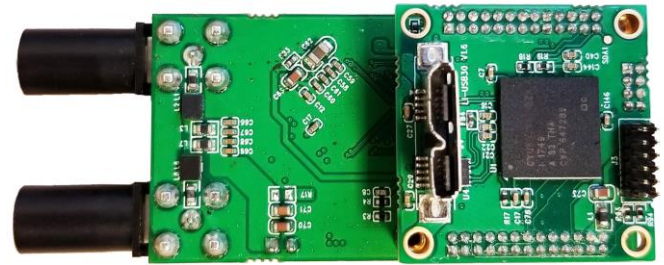
LI-VENUS-OX03F10-96717-120H	LI-VENUS-OX03F10-96717-195H
	
Lens EFL: 2.9 mm	Lens EFL: 1.51 mm \pm 5%
Aperture, F/#: 1.8	Aperture, F/#: 2.0 \pm 5%
Field of View (FOV): 120° horizontal	Field of View (FOV): 195.9° \pm 3° horizontal (y = 2.880 mm)
Distortion: -42% @ HFOV	F- θ Distortion: -154.2% (y = 3.025 mm)
Relative Illumination: 82% @ HFOV	Relative Illumination: 37% (y = 3.025 mm)
IR Filter: 700 nm IR cut filter	IR Filter: 650 nm IR cut filter
Mount: M12 x P0.5	Mount: M12

USB3.0 CAMERA KIT

LI-GMSL2-USB



Top View



Bottom View

LI-VENUS-OX03F10-96717-xxxH can connect to LI-GMSL2-USB as a USB 3.0 camera.

Part#: **LI-USB30-VENUS-OX03F10-96717-xxxH**

SPECIFICATIONS

- USB 3.0 Super Speed support
- UVC compliant
- Allows customization
- 12 VDC Power Supply for camera
- Weight: ~ 190 g
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: 1920 x 1542 @ 38 fps
- Power consumption: 78 mA @ 12 VDC
- Compatible with Windows, Linux OS and other OS which have UVC drivers



BOM

#	Items	QTY
1	LI-VENUS-OX03F10-96717-xxxH	1
2	LI-GMSL2-USB	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
- Register Access Function

● REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	14 Apr 2023
1.1	Changed IP for 120H to TBD and deleted IP rating on the Ordering Information section.	15 Sep 2023
1.2	1. Added section "Calibration Config: LI-VENUS-OX03F10-96717-195H". 2. Updated "Pinout Connections".	23 Nov 2023
1.3	Updated image orientation.	01 Dec 2023
1.4	Deleted Calibration Config.	05 Jun 2026

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