



**LEOPARD**  
IMAGING

# LI-VENUS-SC120AT-GMSL2-xxxH



**Address:**

48820 Kato Road  
Suite 100B  
Fremont, CA 94538  
USA



**Phone:**

+1 (408)263-0988

**Fax:**

+1 (408)217-1960



**Sales:**

[sales@leopardimaging.com](mailto:sales@leopardimaging.com)

**Support:**

[support@leopardimaging.com](mailto:support@leopardimaging.com)

## INTRODUCTION

The LI-VENUS-SC120AT-GMSL2-xxxH is equipped with SmartSens™ 1/3.7" CMOS automotive image sensor SC120AT and Maxim GMSL2 serializer MAX9295A/B. This camera outputs YUV 422 image data.

## SPECIFICATIONS

Sensor	SmartSens™ CMOS Image Sensor SC120AT
Optical Format	1/3.7"
Resolution	1288 (H) x 968 (V)
Pixel Size	3.0 x 3.0 μm
Output Format	YUV 422 8-bit
Color / Mono	Color sensor
Maximum Frame Rate	30 fps @ HDR @ 1288 x 968
HDR (High Dynamic Range)	Supported
Serializer	Maxim MAX9295A/B
Lens	FOV H 115° / 196°
Power Supply Range	8 ~ 17 VDC
Connector	FAKRA Z TYPE
IP Rating	TBD
Power Consumption	65 mA @ 12 VDC (1280 x 960 @ 30 fps)
Operating Temp	TBD
Storage Temp	TBD
Weight	~ 33 g
Part#	LI-VENUS-SC120AT-GMSL2-xxxH

## APPLICATIONS

- Automotive
  - ◆ Rear View
  - ◆ Blind Spot Detection
  - ◆ 360° Surround View

## IMAGE ORIENTATION

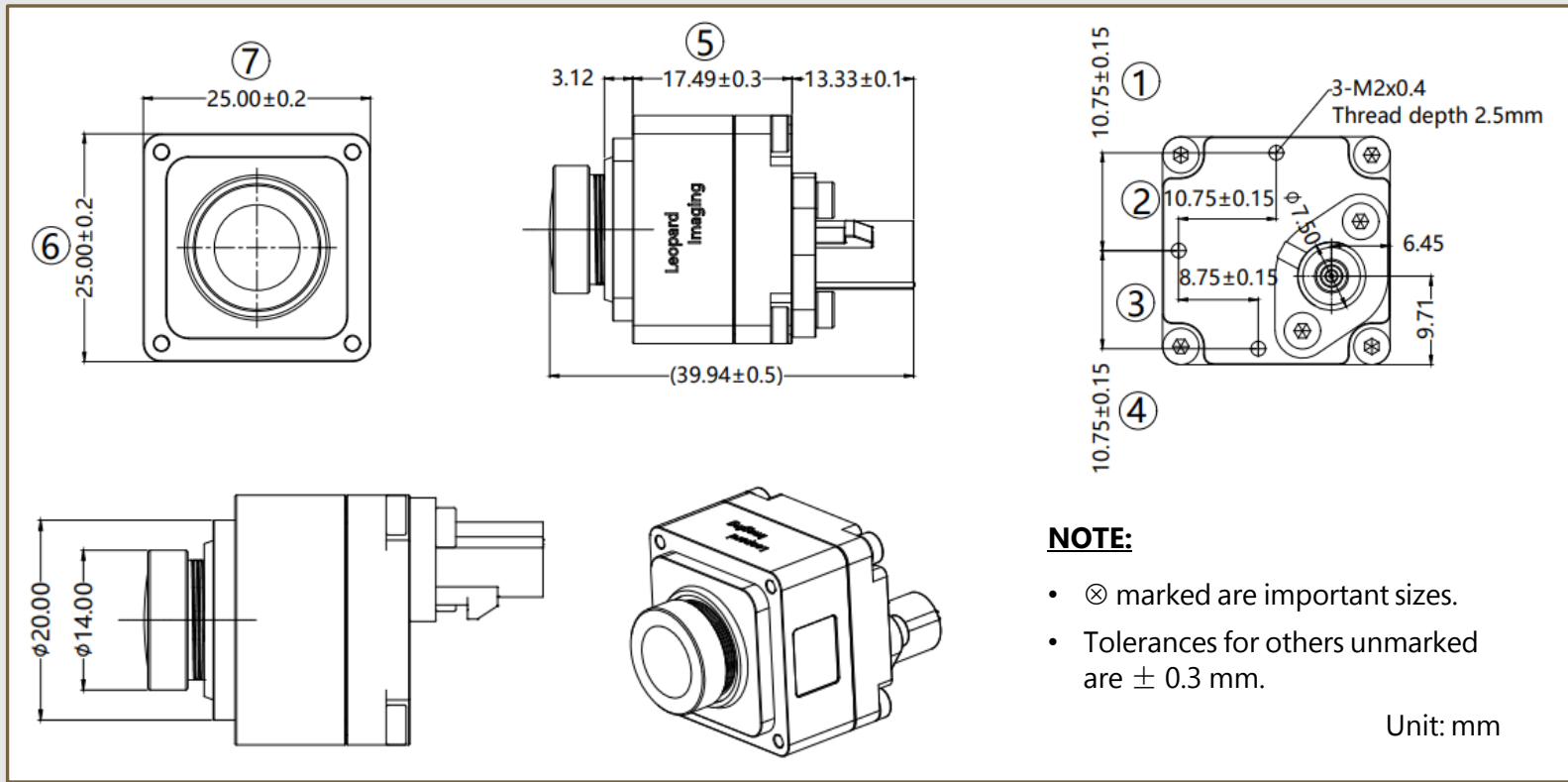


## CABLE CONNECTOR

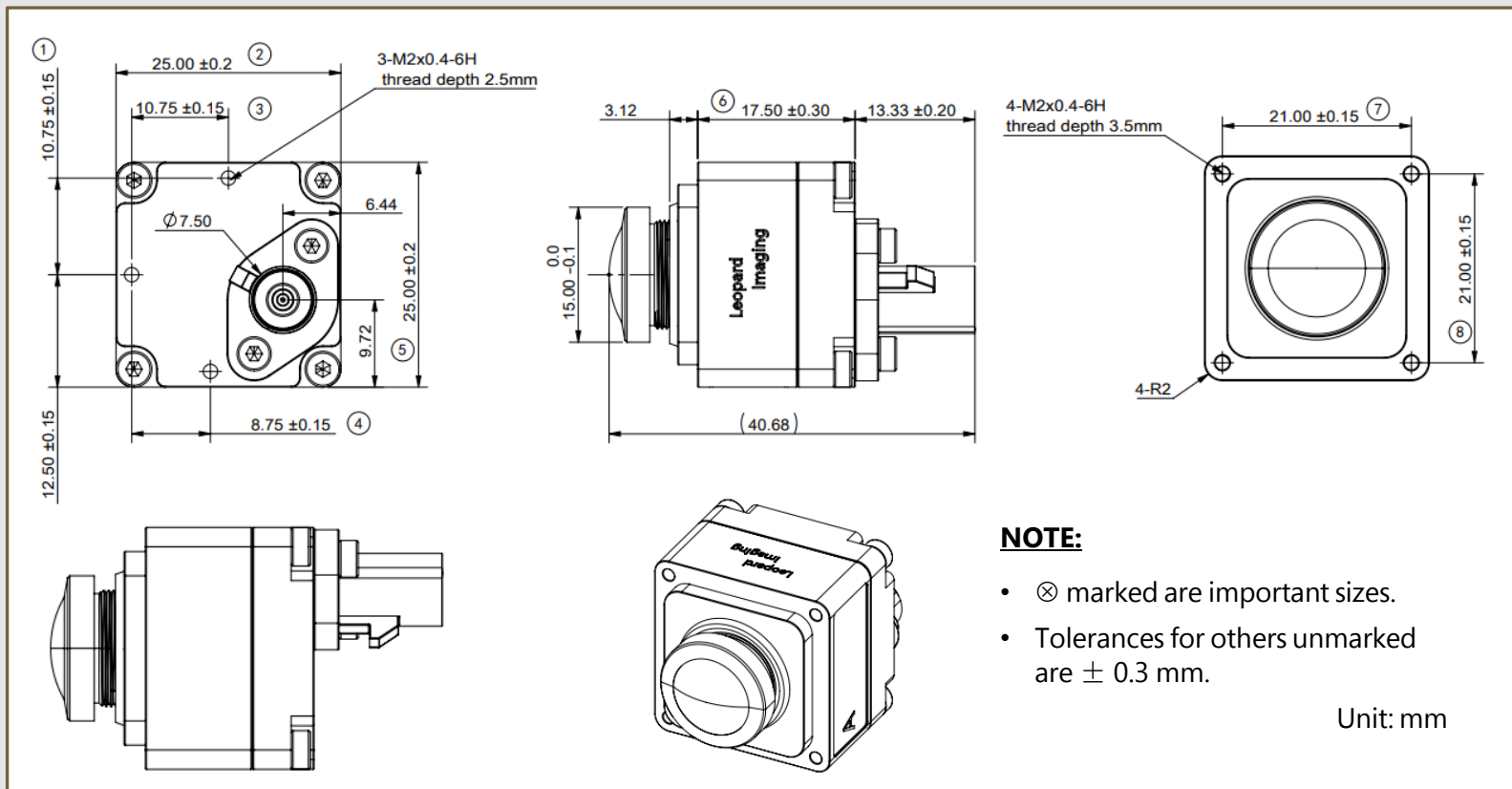
- Housing Connector  
FAKRA Z Type
- Cable Length: 3 meters
- Cable Part#: FAK-SMZSMZ-3M



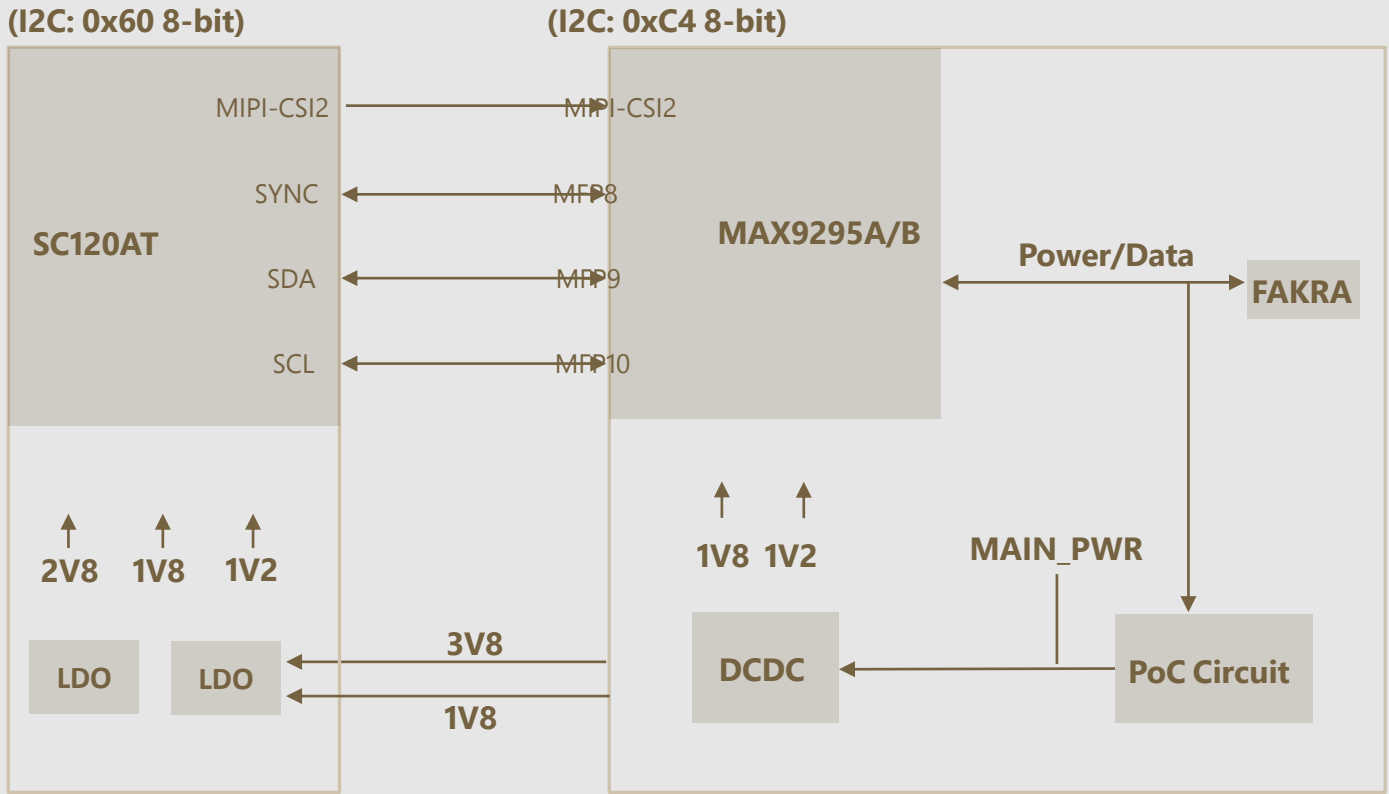
## DIMENSIONS: LI-VENUS-SC120AT-GMSL2-115H



## DIMENSIONS: LI-VENUS-SC120AT-GMSL2-196H



## PINOUT CONNECTIONS



## LENS SPECIFICATIONS

**NOTE:**

xxxH refers to 115H (FOV H 115°), or 196H (FOV H 196°)

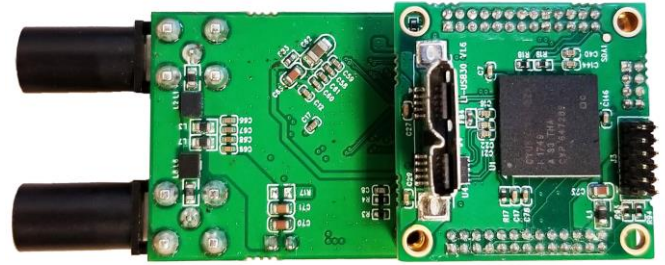
LI-VENUS-SC120AT-GMSL2-115H	LI-VENUS-SC120AT-GMSL2-196H
	
Lens EFL: 1.96 mm	Lens EFL: 0.95 mm $\pm$ 5%
Aperture, F/#: 2.2	Aperture, F/#: 2.0 $\pm$ 5%
Field of View (FOV): 115° horizontal	Field of View (FOV): 196.3° $\pm$ 3° horizontal
F-Theta Distortion: < -4.5%	F-Theta Distortion: < +18.1% (3.84 mm)
Relative Illumination: > 60%	Relative Illumination: > 30% (HFOV)
IR Filter: 650 nm IR cut filter	IR Filter: 650 nm IR cut filter
Mount: M12	Mount: M12
IP Rating: IP69K	IP Rating: IP69K

## USB3.0 CAMERA KIT

LI-GMSL2-USB



Top View



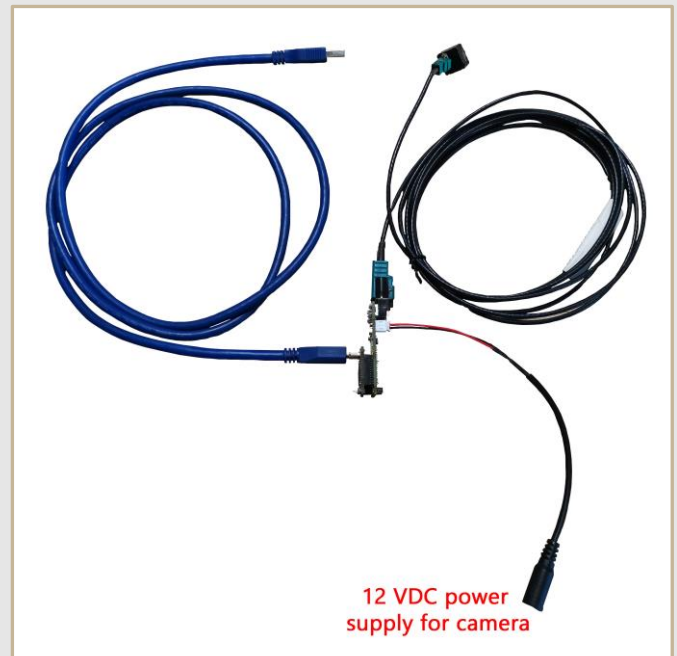
Bottom View

LI-VENUS-SC120AT-GMSL2-xxxH can connect to LI-GMSL2-USB as a USB 3.0 camera.

Part#: **LI-USB30-VENUS-SC120AT-GMSL2-xxxH**

### SPECIFICATIONS

- USB 3.0 Super Speed support
- UVC compliant
- Allows customization
- 12 VDC power supply for camera
- Weight: ~ 189 g
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: 1280 x 960 @ 30 fps
- Power consumption: 65 mA @ 12 VDC
- Compatible with Windows, Linux OS and other OS which have UVC drivers



### BOM

#	Items	QTY
1	LI-VENUS-SC120AT-GMSL2-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
0.1	Initial draft.	14 Oct 2022
0.2	Updated image direction.	27 Dec 2023

48820 Kato Rd, Suite 100B, Fremont, CA 94538, USA

Phone: +1 (408)263-0988

Fax: +1 (408)217-1960

Email: [sales@leopardimaging.com](mailto:sales@leopardimaging.com)

Website: [www.leopardimaging.com](http://www.leopardimaging.com)

