

## GENERAL DESCRIPTION

OPNCAM8008 is a series of 3D ToF cameras, based on OPNOUS HAWK platform. This platform consists of image sensor, VCSEL driver, ToF ISP, and all of them are developed by OPNOUS.

High integration, long measurement range, less exposure time and easy use are the key features of OPNCAM8008, which make it ideal for 3D depth sensing applications.

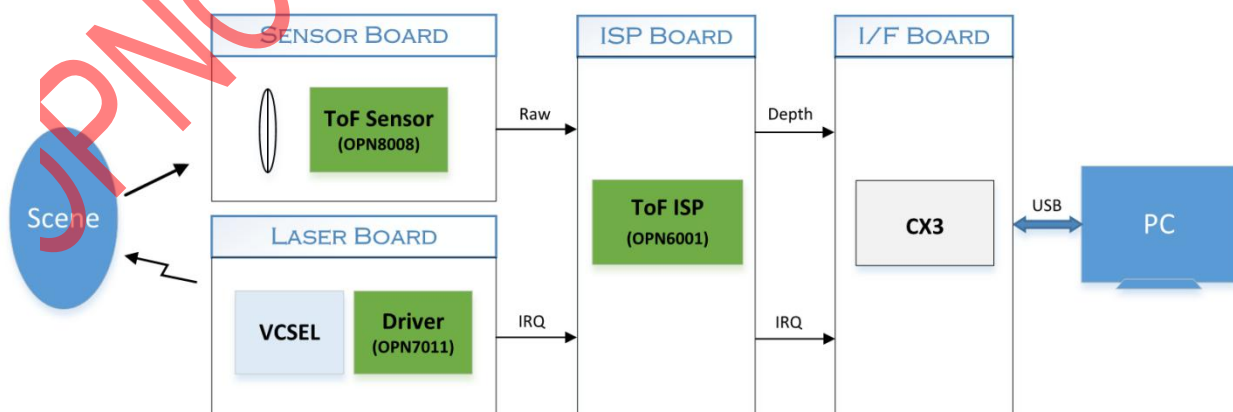
This camera comes with OPNOUS's powerful SDK, contains APIs, example code and depth display tool- OPN ToF Viewer, it's a cross platform compatible software package.



## TYPICAL APPLICATIONS

- ✓ Face recognition and face motion tracking
- ✓ 3D reconstruction
- ✓ AR/VR
- ✓ Hand and finger tracking for gesture control and interaction with virtual objects
- ✓ Visual support for robot grippers
- ✓ People counting and motion analysis
- ✓ Health care
- ✓ Surveillance

## SYSTEM DIAGRAM

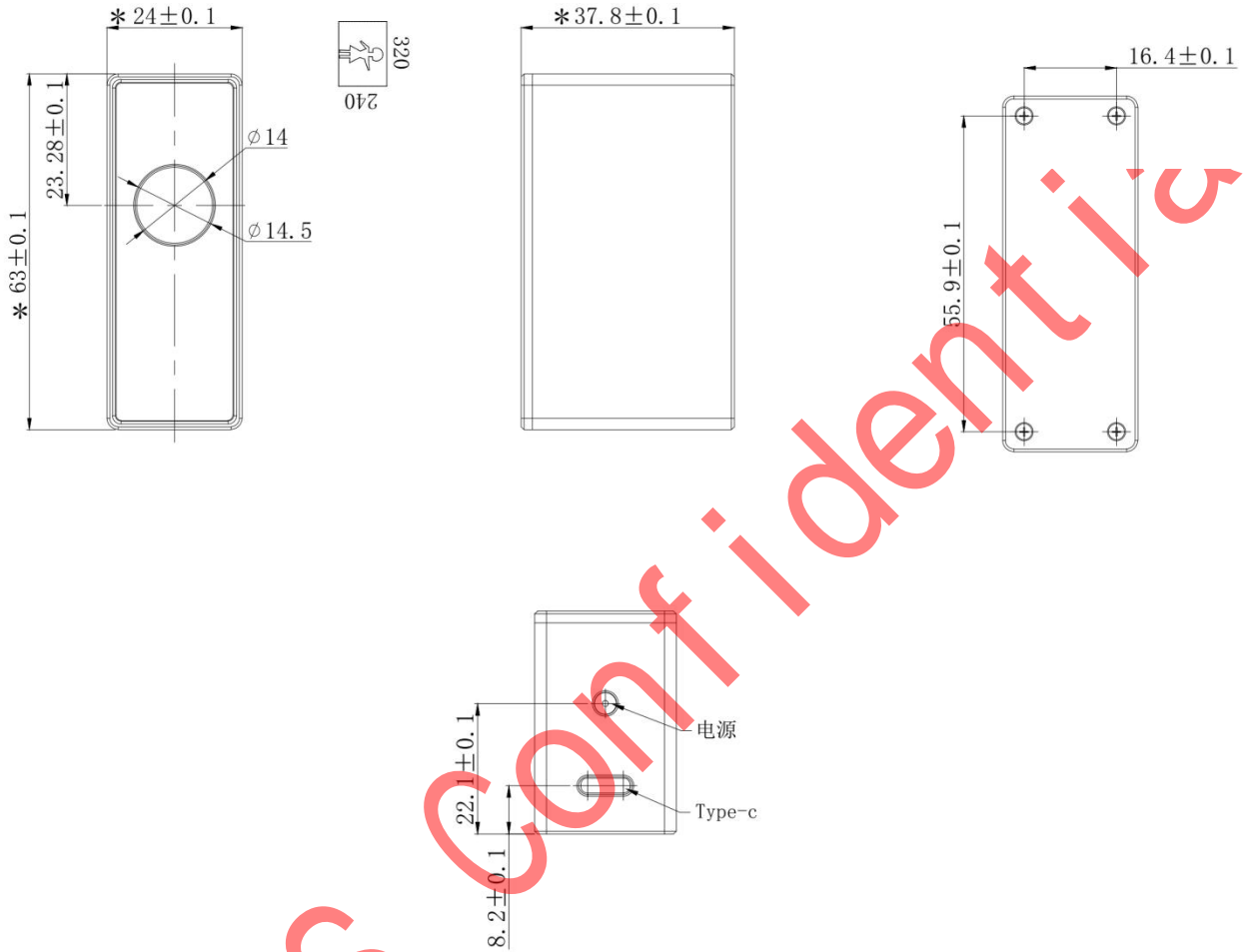


## KEY SPECIFICATIONS

| Parameter          | Description                                     |
|--------------------|---|
| Sensor             | OPN8008D, global shutter                        |
| Resolution         | 320 * 240                                       |
| Pixel size         | 15um  |
| Sensor size        | 1/3"  |
| Dimensions (L*W*H) | 63.00mm * 24.00mm * 37.80mm                     |
| Frame rate         | 5 – 30 fps                                      |
| Measurement range  | 0.2 – 10m <sup>1</sup>                          |
| FOV (H*V)          | 86° * 68° / 110° * 90° / 24° * 18° <sup>2</sup> |
| Distortion         | <2.5%   |
| Illumination       | 850nm / 940nm <sup>2</sup>                      |
| Power consumption  | TBD. Typ <sup>3</sup>                           |
| Depth accuracy     | <=1% <sup>4</sup>                               |
| Interface          | USB3.0  |

1. If need longer range, please contact OPNOUS.
2. Customizable, please contact OPNOUS for detailed information.
3. Typical application, room temperature, 5fps, >85% reflection chart.
4. Dark room, >85% reflection chart.

**DIMENSIONS**



## ORDER INFORMATION

| Part Number           | Resolution | Range | IR Filter | FoV      | Interface |
|-----------------------|------------|-------|-----------|----------|-----------|
| OPNCAM8008/588-1MA-UA | 320 x 240  | 5m    | 850nm     | 86 x 68  | USB 3.0   |
| OPNCAM8008/58B-1MA-UA | 320 x 240  | 5m    | 850nm     | 110 x 90 | USB 3.0   |
| OPNCAM8008/A92-1MA-UA | 320 x 240  | 10m   | 940nm     | 24 x 18  | USB 3.0   |

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## REVISION HISTORY

| Revision | Date      | Description       |
|----------|-----------|-------------------|
| V1.0     | 2020/4/12 | Initial revision. |

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