LIPS
Sense The World

LIPSedge™ L235

High-Res Structured-Light Camera

User's Manual

April 2026

Revision 1.0

© Copyright LIPS Corporation. All rights reserved.

© Copyright LIPS Corporation 2026. All rights reserved.
Under the Intellectual Property Law, no part of this book may be copied in any form or used by any means without the written consent of LIPS Corporation. Violation to the said law results in consequences and those who failed to comply could be susceptible to penalties.

Although every effort has been made to ensure the accuracy of this manual, errors and inconsistencies may remain. The manufacturer assumes no liability resulting from errors or omission in this manual, even if damages arise from the use of the information. All contents are subject to constant revision to improve its reliability and may be changed without prior notice.

April 2026

© Copyright LIPS Corporation. All rights reserved.

Contents

© Copyright LIPS Corporation. All rights reserved.

Version History

Version	Description	Date
1.0	[Windows] Remove OpenCV dependency Support to enable/disable IR auto exposure Updated H/W installation images 9,10, 15~26	2026/02/23
0.93	Updated system architecture graphic	2025/10/13
0.92	Added FoV & weight	2025/8/21
0.91	Add L235 Model	2025/8/15
0.90	Preliminary version	2025/3/28

© Copyright LIPS Corporation. All rights reserved.

1. Package & Hardware Overview

1.1 Package Overview

A. Packing List

The packing list serves as a reference for package contents. If anything was missing, contact info@lips-hci.com.

No.	Item	Qty.
1.	LIPSedge™ L235 High-Res Structured-Light 3D Depth Camera	1
2.	USB 3.0 Type-A to Type-C Cable 1m	1
3.	LIPSedge™ L235 High-Res Structured-Light 3D Depth Camera Quick Start Guide	1

B. Camera Accessories

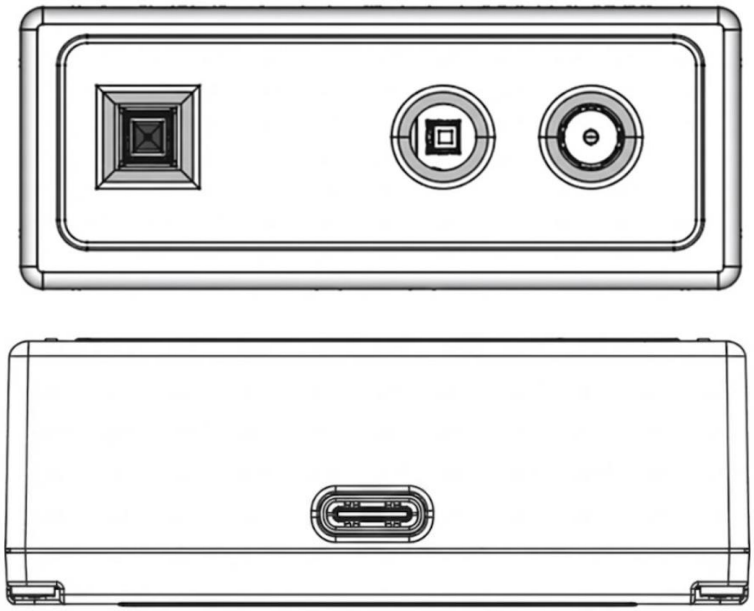
The following supplementary options facilitate the installation process but are NOT included in the package. You need to prepare these accessories on your own.

- Camera tripod: Secures the camera to a stable position.

© Copyright LIPS Corporation. All rights reserved.

1.2 Hardware Overview

The LIPSedge™ L235 High-Res Structured-Light 3D Depth Camera is a compact structured light module engineered for seamless integration into slim devices such as PADs, measuring just 68.2 x 25.4 x 10.4 mm. Despite its small footprint, it delivers advanced depth perception with high-fidelity accuracy of +/- 0.3% at 1.0 meter. Designed for versatility, the module combines robust sunlight resistance—functioning reliably up to 80K Lux—with superior power efficiency, consuming typically only 1.4W to ensure prolonged battery life in portable applications.

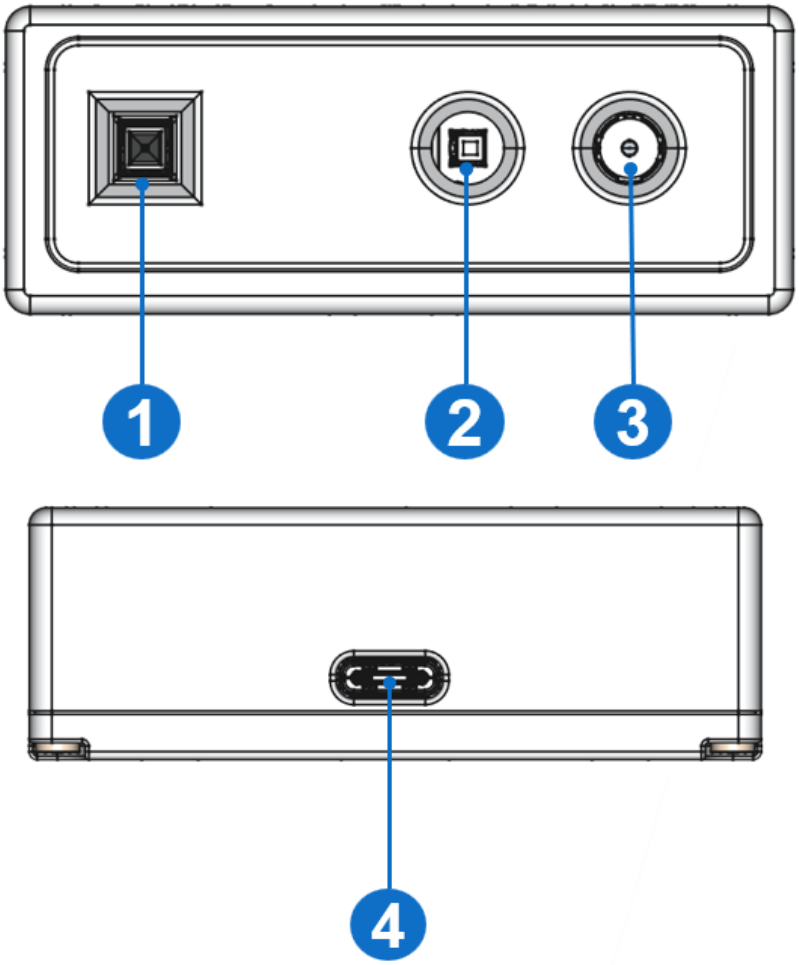


Key Features

- Advanced structured-light depth accuracy (+/- 0.3%@1.0m)
- Compact form factor for PAD integration (68.2 x 25.4 x 10.4 mm)
- Sunlight resistance (up to 80K Lux@100cm)
- Power efficiency (1.4W typical)

© Copyright LIPS Corporation. All rights reserved.

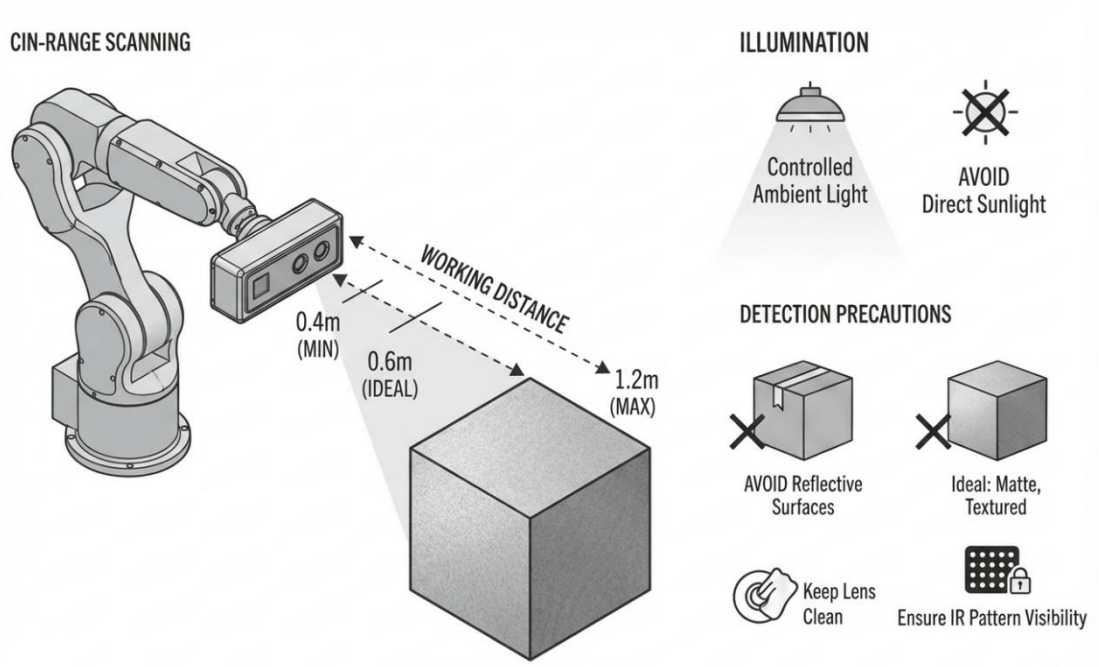
A. Hardware Features



No.	Name	Functions
1.	NIR illuminator	Emit NIR structure dots light
2.	Flood Projector	Emit uniform, flat IR light to enhance lightness
3.	Depth Camera	Collects depth data.
4.	USB 3.0 Interface	Connects to a USB 3.0 type A to C Cable.
Note: Do NOT obscure the aperture of the camera's optical components to ensure the optimal optical performance.		

© Copyright LIPS Corporation. All rights reserved.

B. Hardware Installation



- Camera working distance: LIPSedge™ L235 works best within the 0.4-1.2m. Keep the target within the optimal range or the scanning performance may decrease.
- Illumination: The camera has a high sunlight resistance of up to 80K Lux at 100 cm. However, installing the camera at places under direct sunlight or complete darkness may still cause sub-optimal performance.
- Camera position: Install the camera to a stable platform, facing the target. Note that LIPS Corp. does NOT provide a tripod within the package, and you need to get your own tripod for hardware installation.

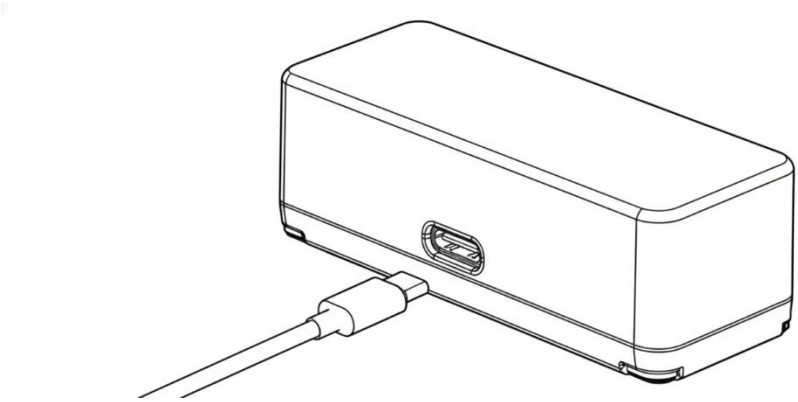
© Copyright LIPS Corporation. All rights reserved.

C. Camera Connection

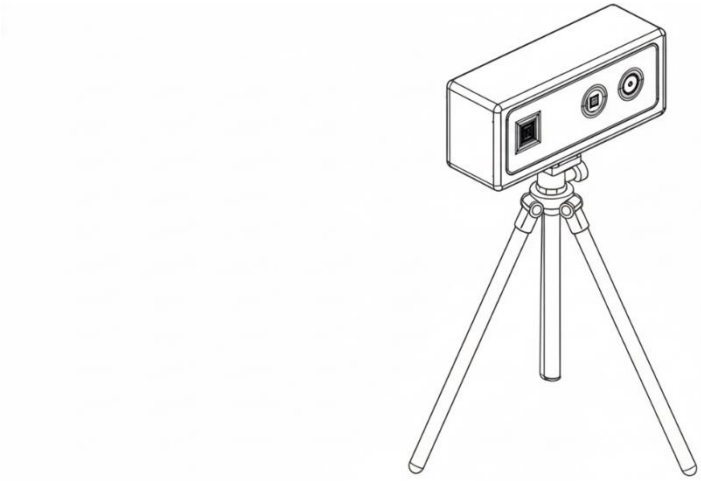
The LIPSedge™ L235 connects via a **USB Type-C** interface that handles both power delivery (VBUS 5V) and data transmission. Use a high-quality USB 3.0 cable to ensure the host system can support the **4.5 Tops** AI performance and high-bandwidth image streams (up to **1280 x 720 @ 30fps**).

1. Insert the **USB 3.0 Type-C** into the camera's USB port (interoperable orientation allowed).

Normal view

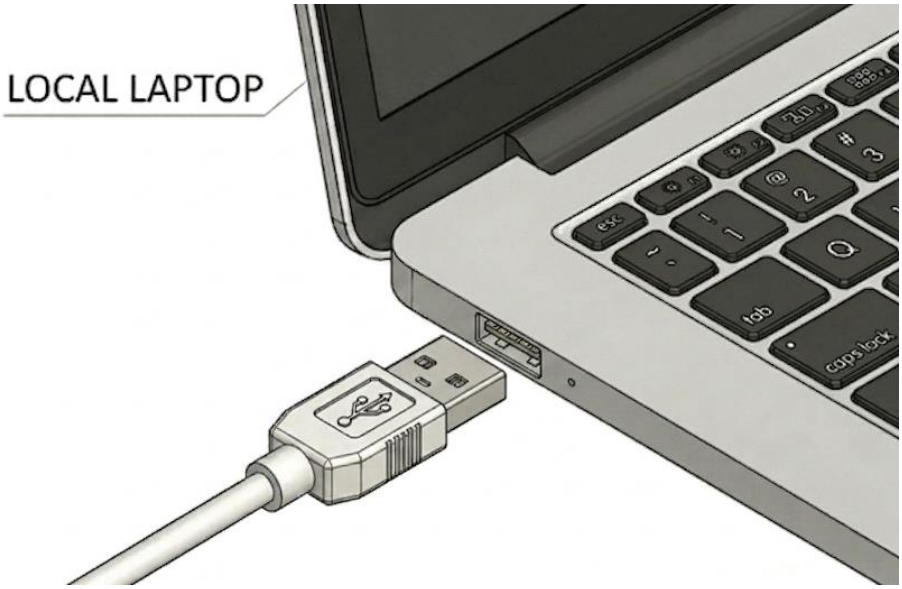


Interoperable orientation view



© Copyright LIPS Corporation. All rights reserved.

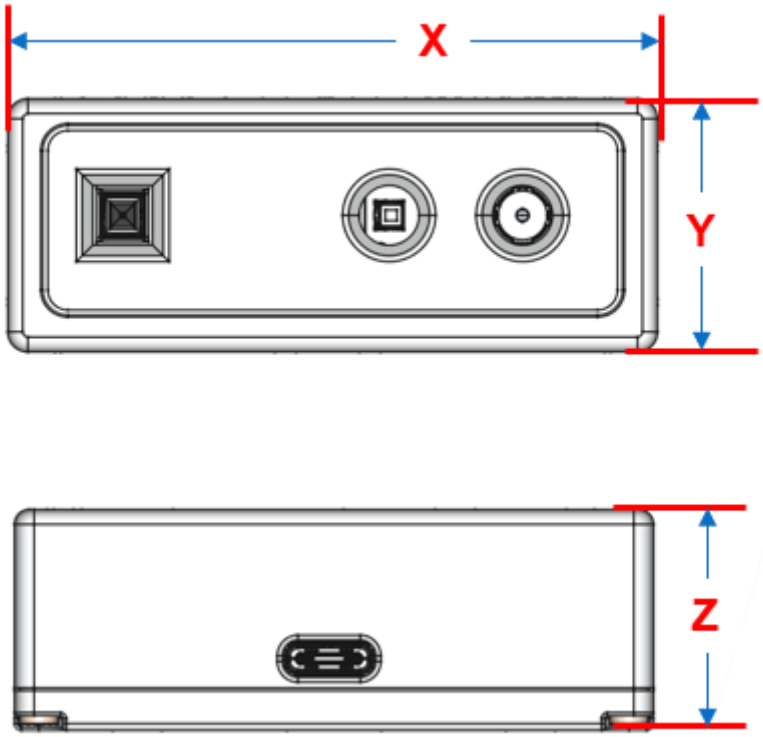
2. Connect the opposite end to a **USB 3.0 Type A socket** on the host PC / laptop.



© Copyright LIPS Corporation. All rights reserved.

D. Hardware Dimensions

LIPSedge™ L235



Dimension	MIN	NOM	MAX	TOLERANCE	UNIT
X	64.5	65	65.5	±0.5	mm
Y	25.0	25.5	26.0	±0.5	mm
Z	22.0	22.5	23.0	±0.5	mm

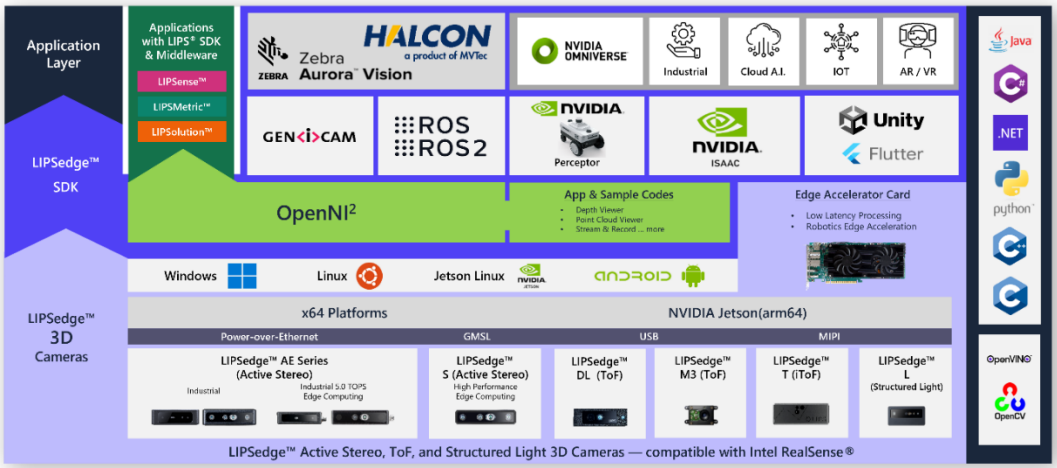
© Copyright LIPS Corporation. All rights reserved.

2. SDK Structure (Global by camera)

LIPS 3D camera / SDK offers a system for developing depth-sensing applications. As the LIPS system architecture illustrates, the system is comprised of the hardware layer and the software layer.

The hardware layer oversees data capture, transfer, and processes.

In the software layer, the captured data is fetched by the LIPS SDK (Software Development Kit) on the OS environment. Depending on the project complexity, wrappers and third-party utilities may be engaged before the data is eventually presented in the application layer for business applications.



The core of the system, the LIPS SDK, is comparable to a toolbox full of software modules comprised of middleware, libraries, wrappers and API, and miscellaneous programming languages / platforms for application development. With extensive wrapper support, LIPS SDK enables developers to access bottom layer data with APIs, thus eliminating the hassle of changing third-party functions. The result is a highly effective project scoping, monitoring, and execution workflow compatible with the fast-pacing AIoT market and machine vision demands.

© Copyright LIPS Corporation. All rights reserved.

3. SDK Installation (Global by camera)

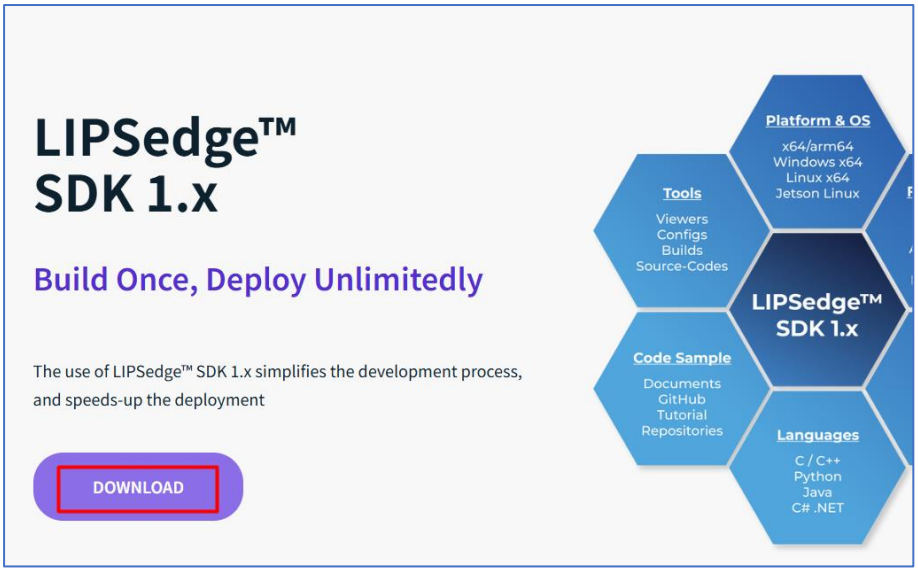
3.1 Platforms

A. Windows Installation (x64)

a. SDK Installation

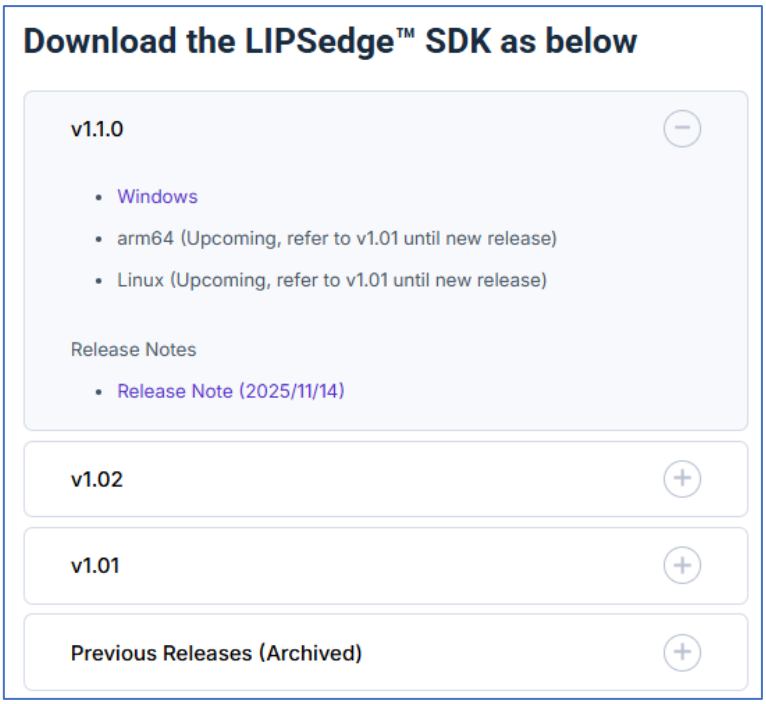
To access the SDK, visit 3D Depth Camera SDK Free Download | LIPSedge™ SDK (lips-hci.com) and procure the package for the preferred version, framework, and compatible operating system.

1. Visit LIPSedge™ SDK website and click Download.

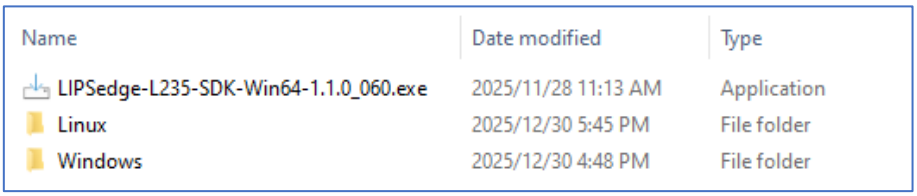


© Copyright LIPS Corporation. All rights reserved.

2. Select the SDK version compatoble to the local environment.

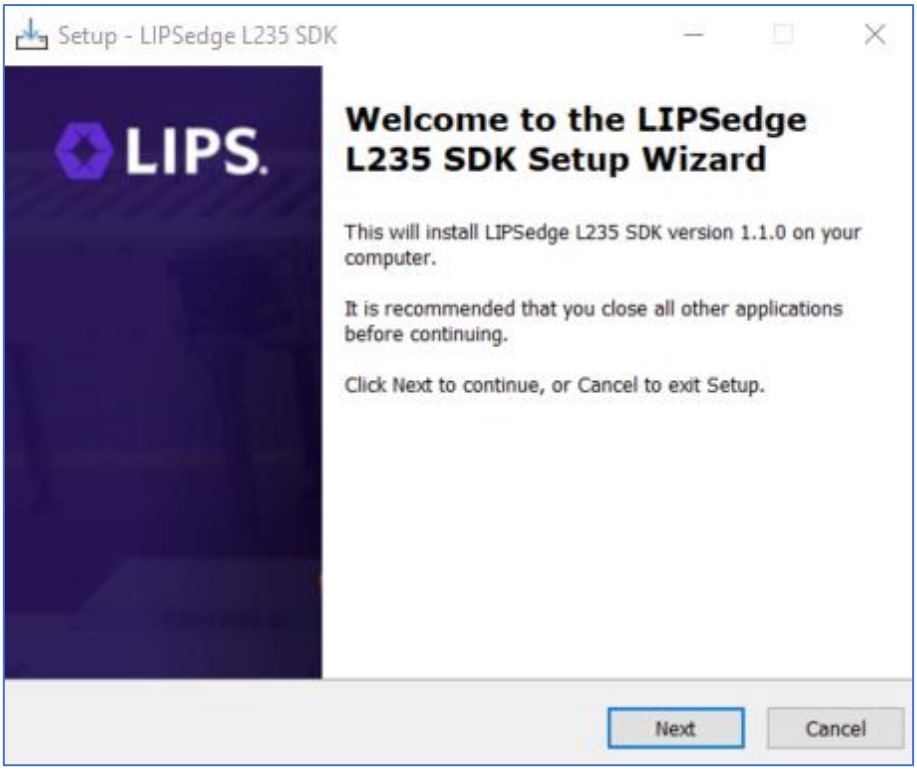


3. Extract and execute the downloaded file.

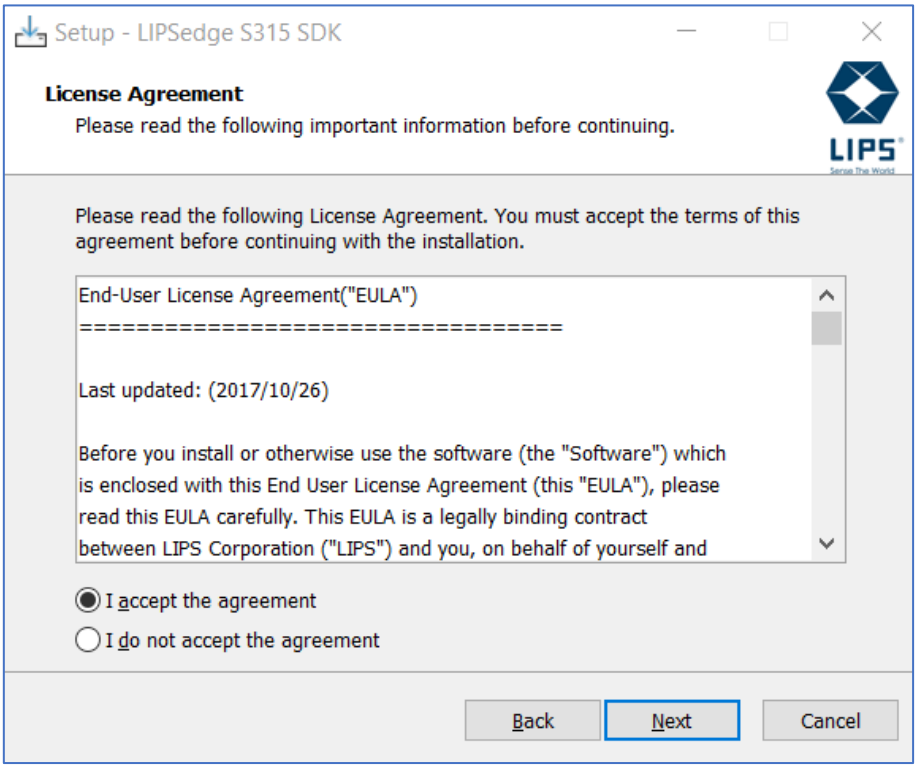


© Copyright LIPS Corporation. All rights reserved.

4. Click **Next**.

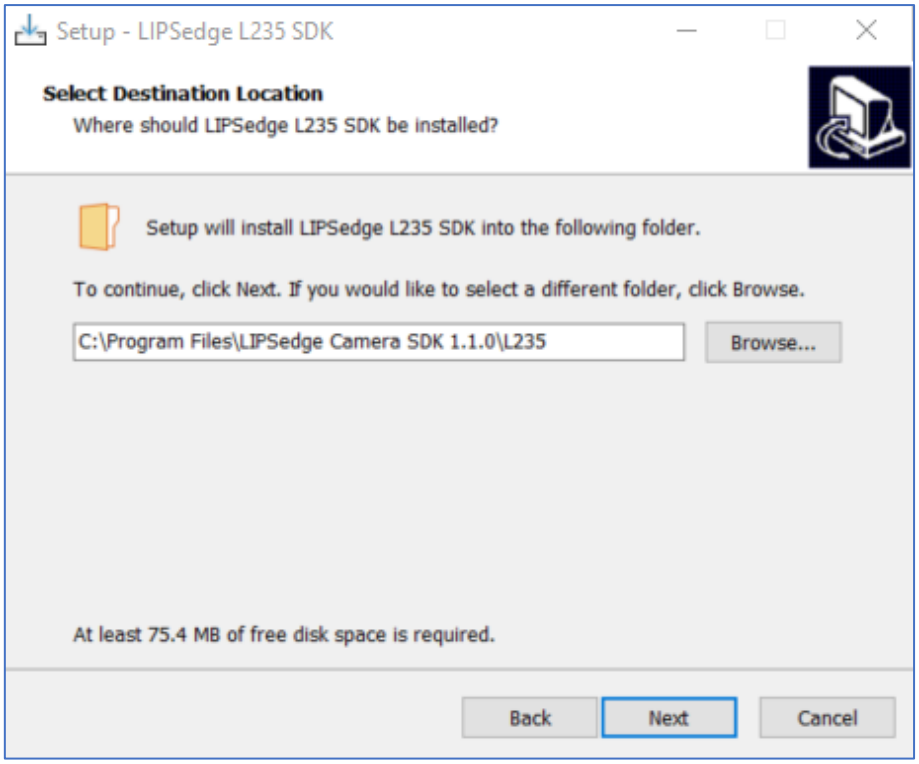


5. Accept the license agreement.

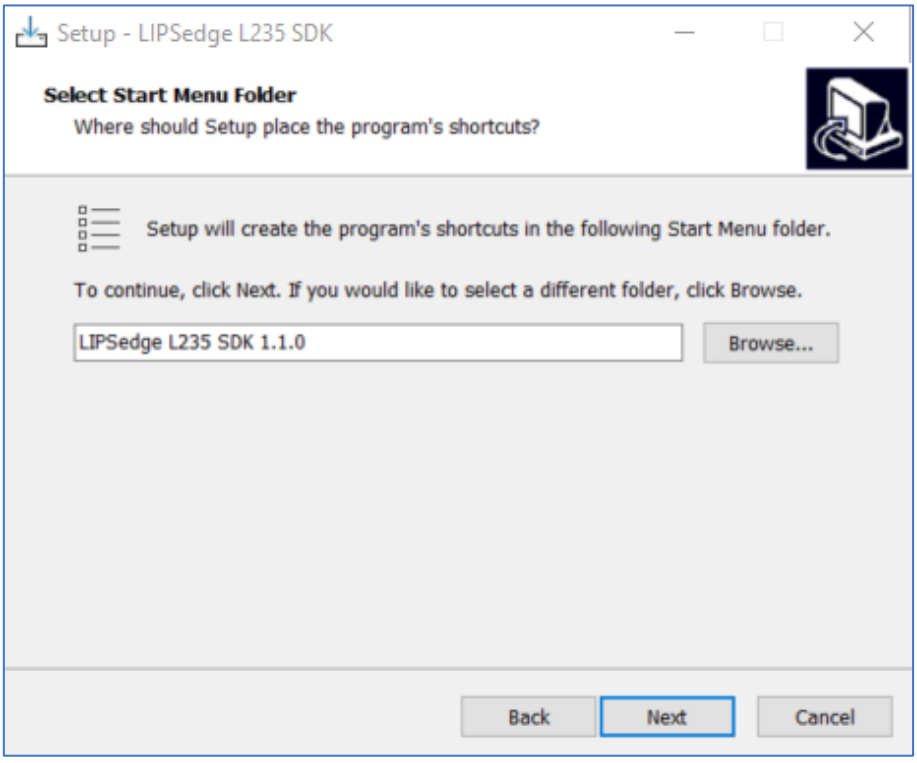


© Copyright LIPS Corporation. All rights reserved.

6. Select the SDK installation location and click Next.

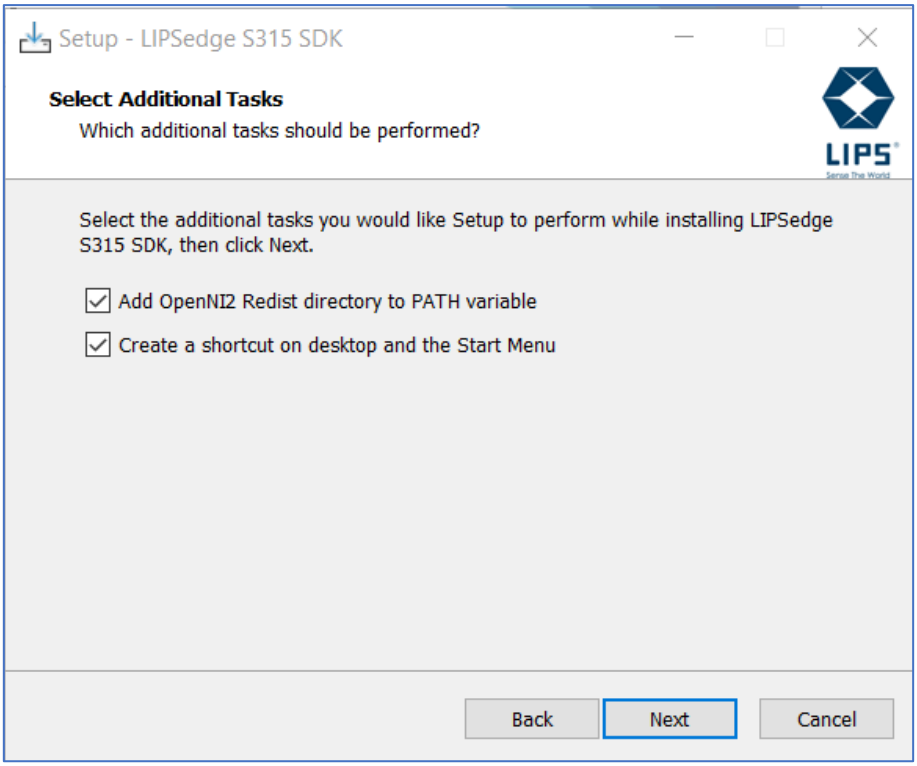


7. Setup the shortcuts in the Start Menu folder.

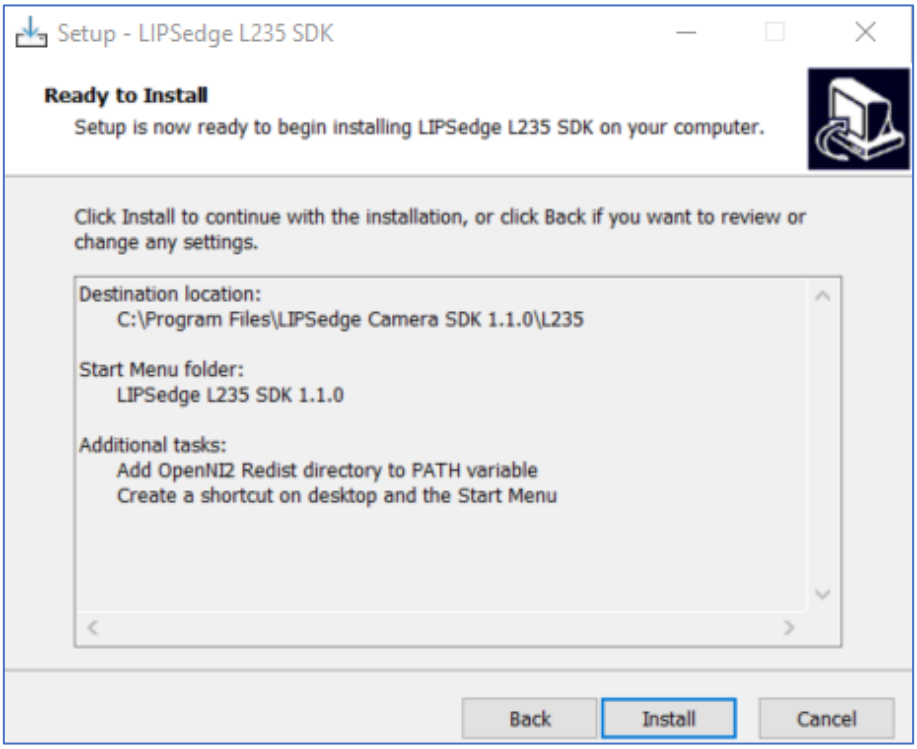


© Copyright LIPS Corporation. All rights reserved.

8. Setup additional tasks performed upon complete setup.

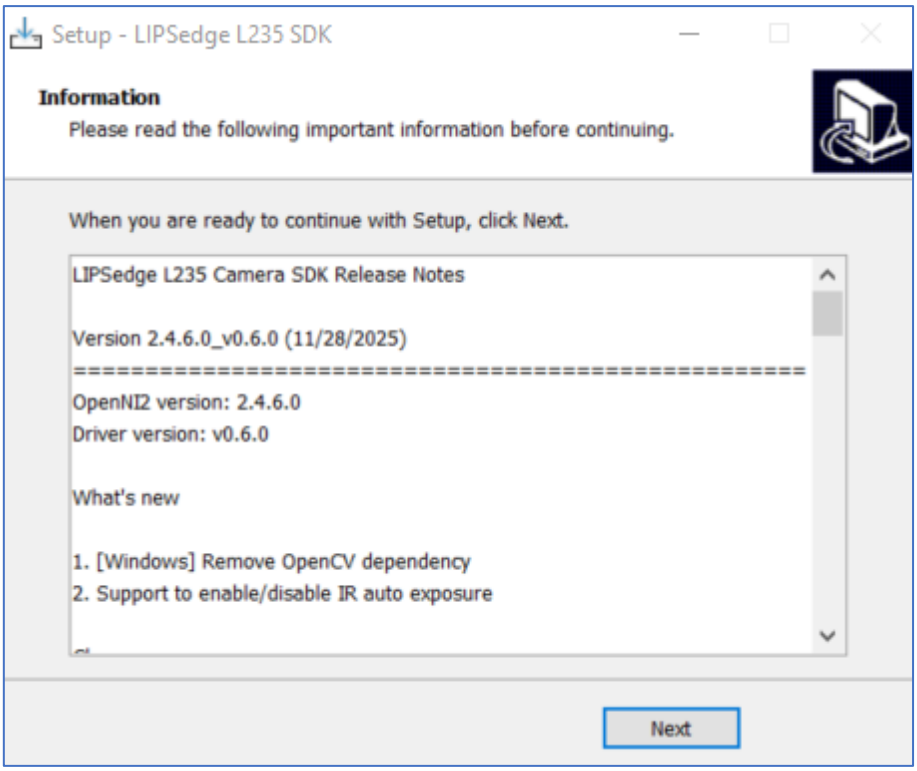


9. Click **Install**.

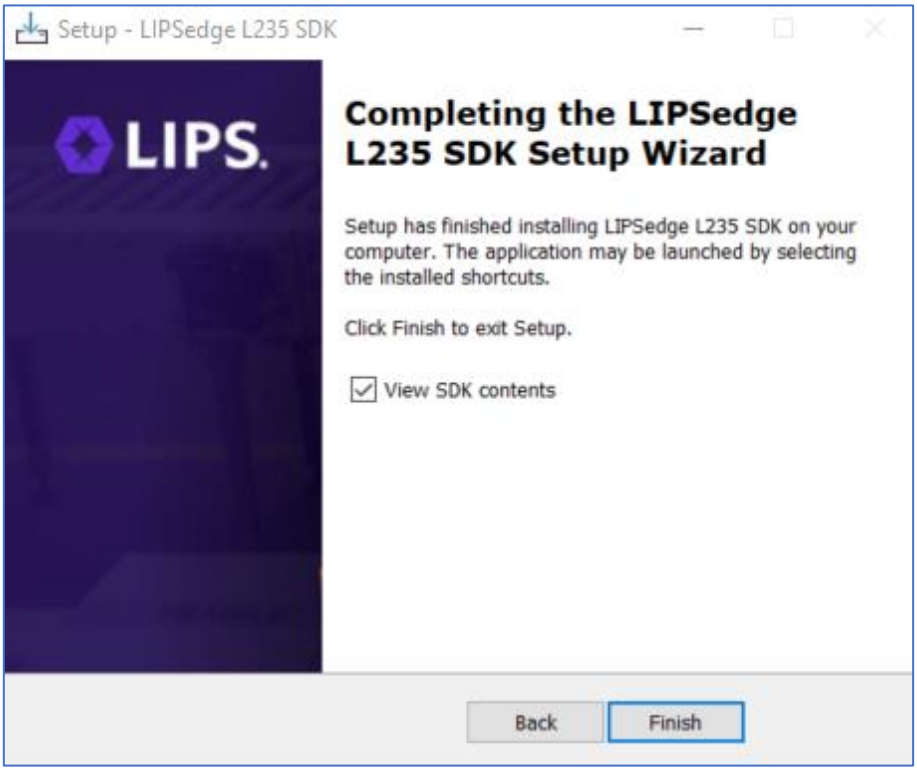


© Copyright LIPS Corporation. All rights reserved.

10. Once the installation is complete, the setup wizard provides a summary of the latest features.

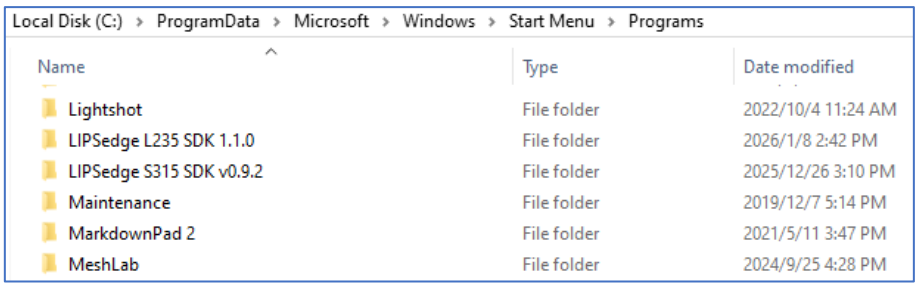


11. Click **Finish**.



© Copyright LIPS Corporation. All rights reserved.

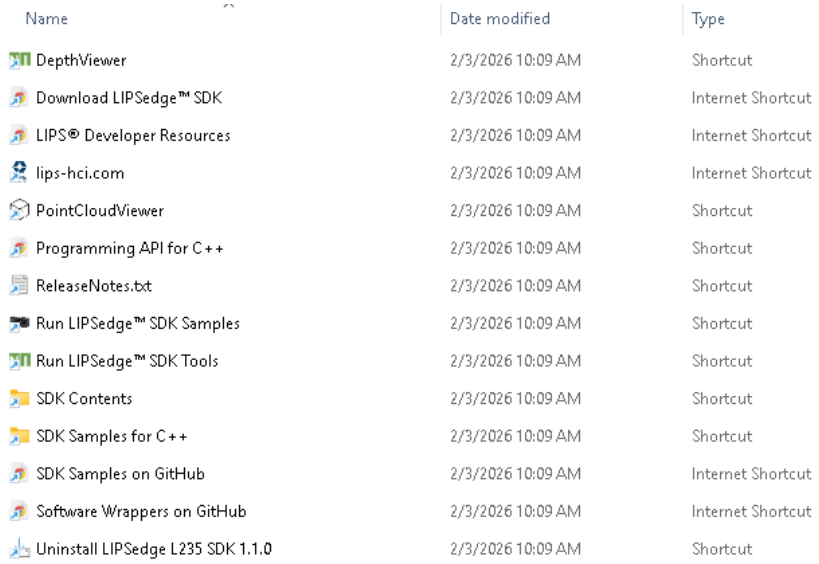
12. Once the installation is successful, the LIPSedge™ SDK and its relevant components are accessible at C:\Program Files\LIPSedge Camera SDK X.X.X



13. The LIPSedge™ SDK is also accessible from the desktop shortcut.

© Copyright LIPS Corporation. All rights reserved.

14. The desktop shortcut folder contains:
    - **DepthViewer**: An image viewer for streaming RGB / depth images. Refer to *Chapter3.1-A-c*.
    - **Download Latest SDK**: Link to [LIPS Corp's official website for the latest SDK]
    - **LIPS Developer Resources:** A link to the comprehensive technical documentation for all LIPS Corp. products.
    - **lips-hci.com**: Link to LIPS Corp's official website.
    - **PointCloudViewer-gl**: A 3D point cloud visualizer through OpenGL.
    - **Programming API for C++**: A link to OpenNI API's programming guide.
    - **Release Notes**: Announcement of the latest feature.
    - **Run LIPSedge SDK Samples**: A collection of sample applications demonstrating core SDK features and providing reference implementations for developers.
    - **Run LIPSedge SDK Tools**: A suite of executable utilities designed for device configuration, system diagnostics, and hardware maintenance.
    - **SDK Contents**: Contains the essential software configuration of the SDK.
    - **SDK Samples for C++**: Contains the essential software configuration and the source code for building C++ compiled sample applications.
    - **SDK Samples on GitHub**: Contains native source code and project configurations for sample applications.
    - **SDK Wrappers on GitHub**: Contains language-specific bindings (e.g., Python, C#, ROS) and the source code required to interface the native SDK with other programming environments and frameworks.
    - **Uninstall LIPSedge™ SDK**: A quick uninstallation link for LIPSedge™ SDK.



Name	Date modified	Type
DepthViewer	2/3/2026 10:09 AM	Shortcut
Download LIPSedge™ SDK	2/3/2026 10:09 AM	Internet Shortcut
LIPS® Developer Resources	2/3/2026 10:09 AM	Internet Shortcut
lips-hci.com	2/3/2026 10:09 AM	Internet Shortcut
PointCloudViewer	2/3/2026 10:09 AM	Shortcut
Programming API for C++	2/3/2026 10:09 AM	Shortcut
ReleaseNotes.txt	2/3/2026 10:09 AM	Shortcut
Run LIPSedge™ SDK Samples	2/3/2026 10:09 AM	Shortcut
Run LIPSedge™ SDK Tools	2/3/2026 10:09 AM	Shortcut
SDK Contents	2/3/2026 10:09 AM	Shortcut
SDK Samples for C++	2/3/2026 10:09 AM	Shortcut
SDK Samples on GitHub	2/3/2026 10:09 AM	Internet Shortcut
Software Wrappers on GitHub	2/3/2026 10:09 AM	Internet Shortcut
Uninstall LIPSedge L235 SDK 1.1.0	2/3/2026 10:09 AM	Shortcut

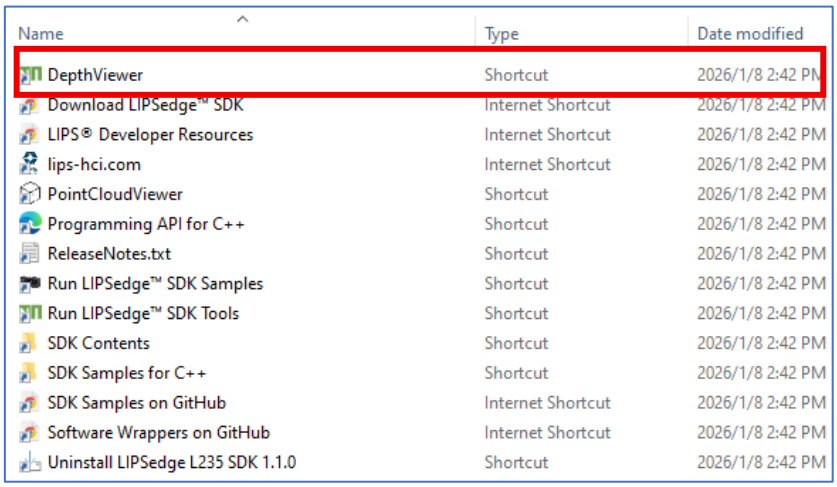
© Copyright LIPS Corporation. All rights reserved.

b. Camera Access

The LIPSedge™ L235 SDK (OpenNI-based) enables the LIPSedge™ L235 camera to stream live 3D, and point-cloud images efficiently. The SDK supports a single stream. To ensure a seamless visualization experience, follow the instructions for configuring the camera's IP settings before streaming.

Follow the instructions below to access the camera image.

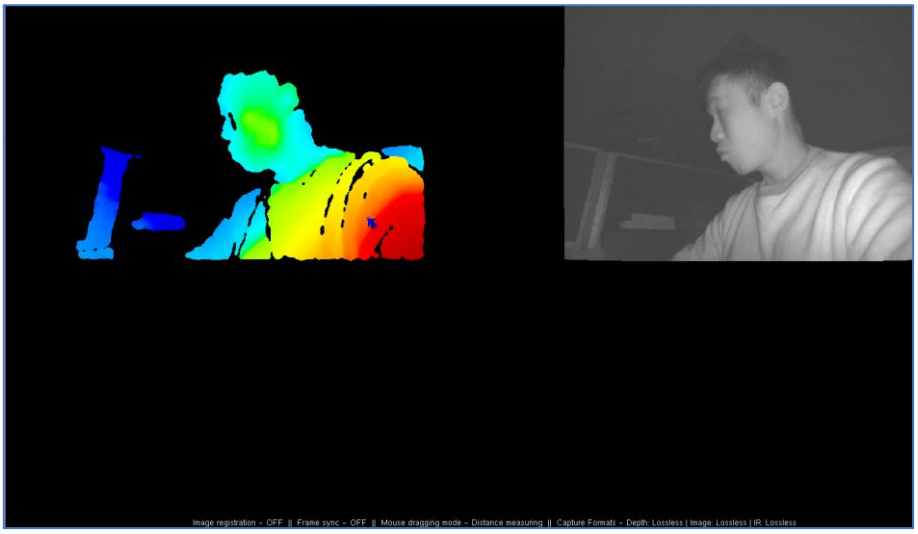
1. From the desktop shortcut, start **DepthViewer**.



Note: The **DepthViewer** is also available at it's source location **Local Disk > Program Files > LIPSedge Camera SDK > L235 > OpenNI2 > Tools.**

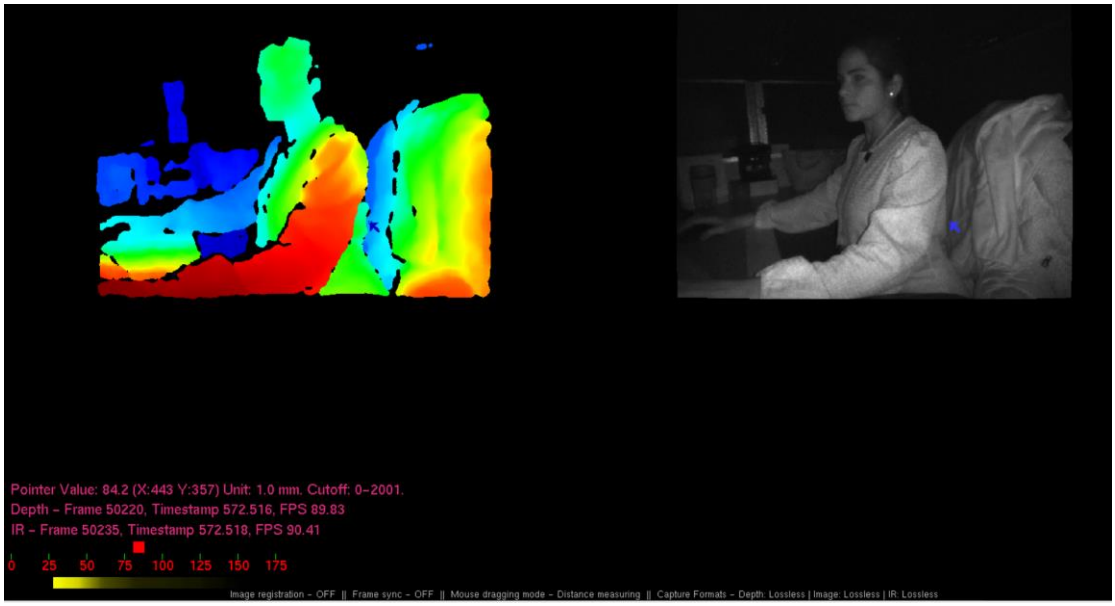
---

2. DepthViewer will display 3D / IR images once the camera is properly connected.

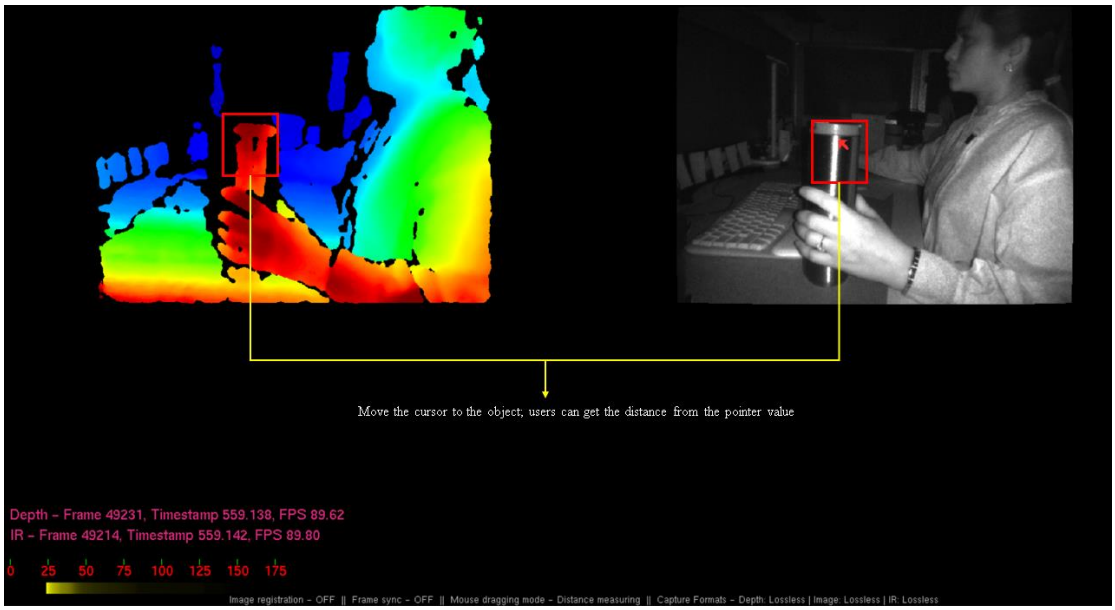


© Copyright LIPS Corporation. All rights reserved.

3. Press [p] to activate the pointer mode. The meter below shows the depth data of the given point marked by the indicator.

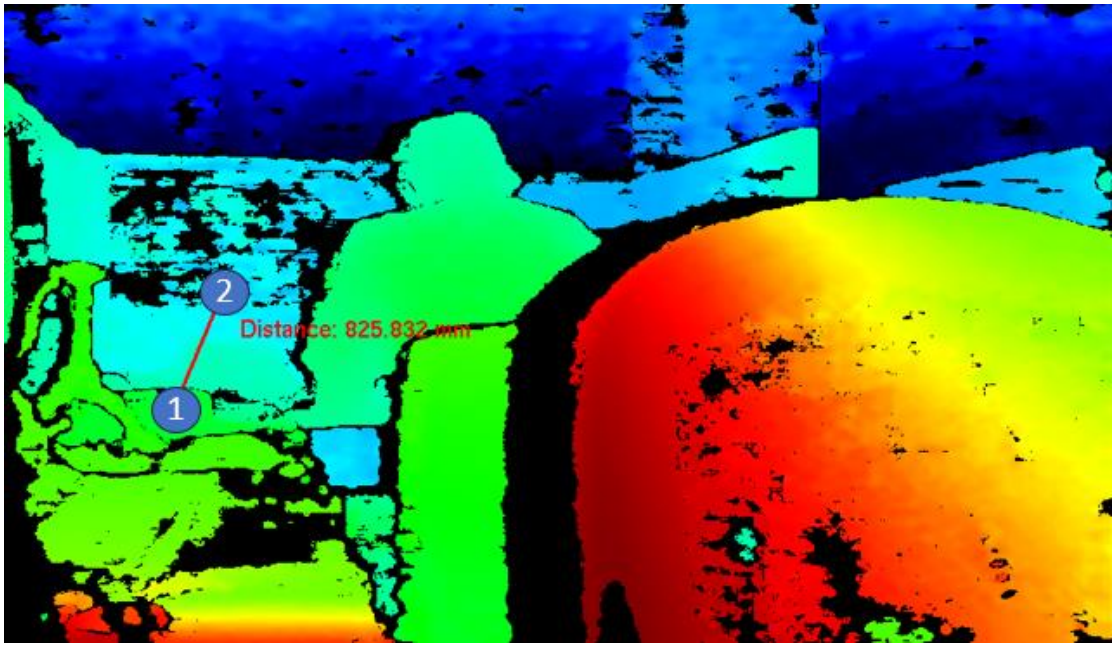


4. Developers can get the depth value by Moving the blue cursor to the object.

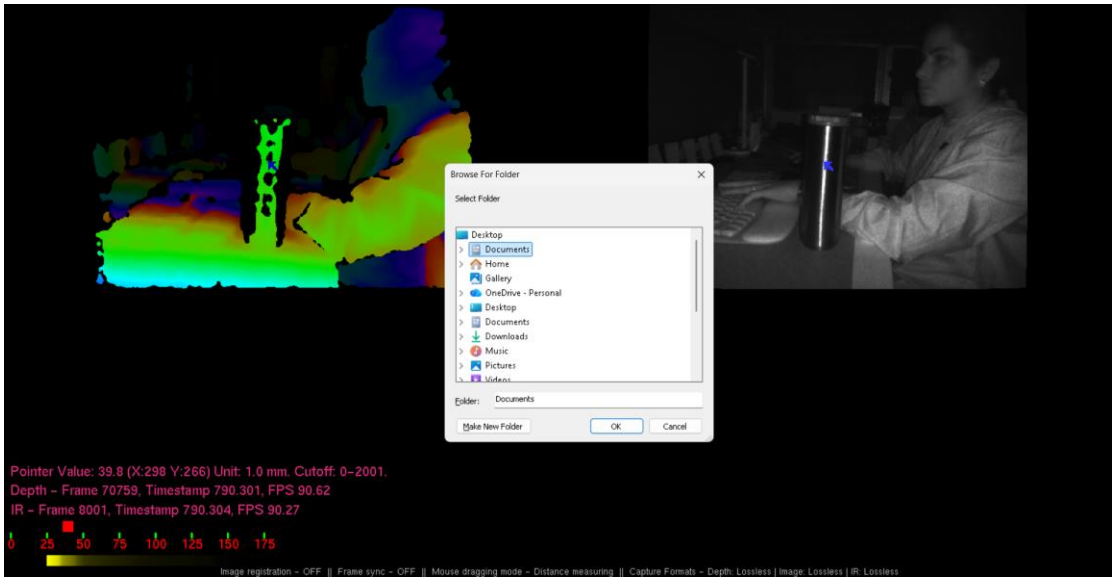


© Copyright LIPS Corporation. All rights reserved.

5. To measure the distance between 2 points, drag mouse cursor from point 1 to point 2, as below. The distance line disappears when points move to the black area.



6. Press C to capture the current screen as a raw file in the assigned location. To access the saved file, drag the captured image file to the RawFileViewer.exe. For details, refer to *Chapter 5 5.1-F*.

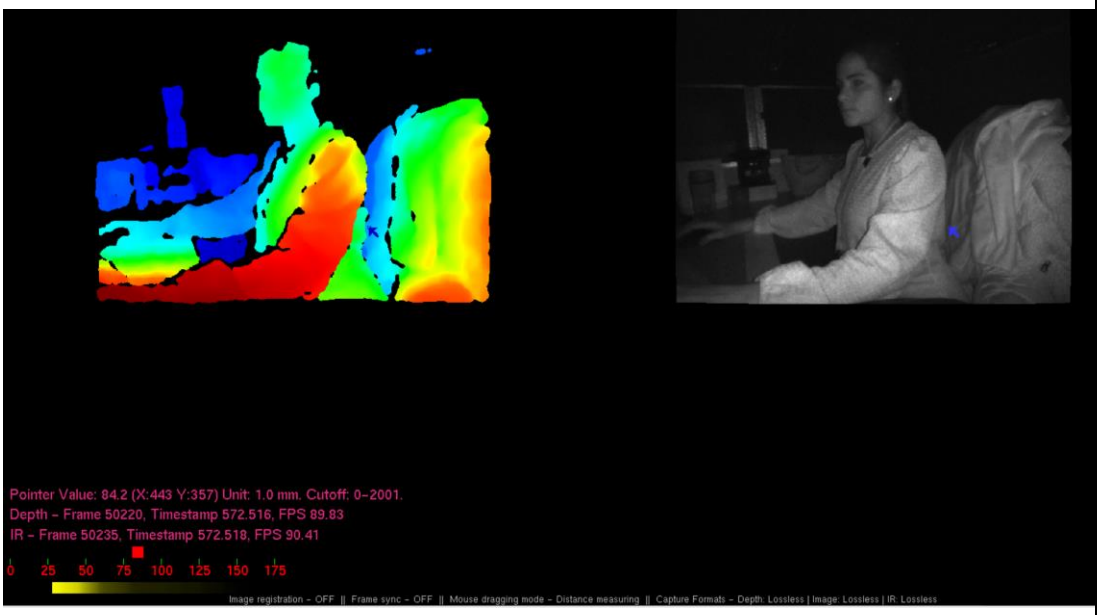


© Copyright LIPS Corporation. All rights reserved.

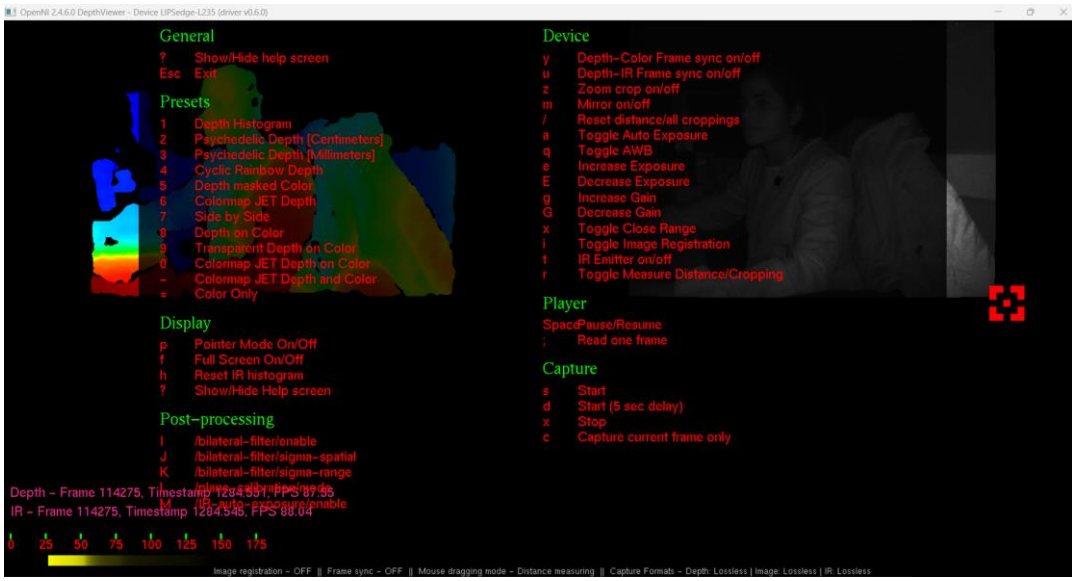
c. DepthViewer Settings

DepthViewer relies on hotkeys, listed in the help menu, to control its functionality and adjustments. By default, the menu in DepthViewer is hidden to provide an unobstructed viewing experience. To access this menu, press Shift +?.

Default – The help menu hidden



The help menu displayed



The help menu provides the following functionalities:

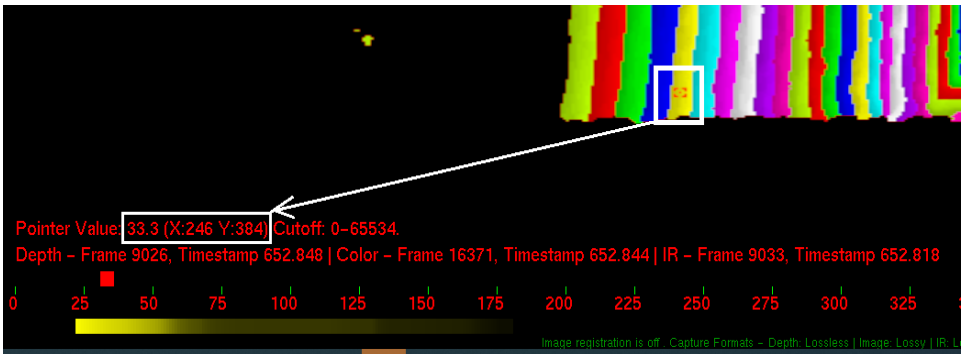
© Copyright LIPS Corporation. All rights reserved.

General

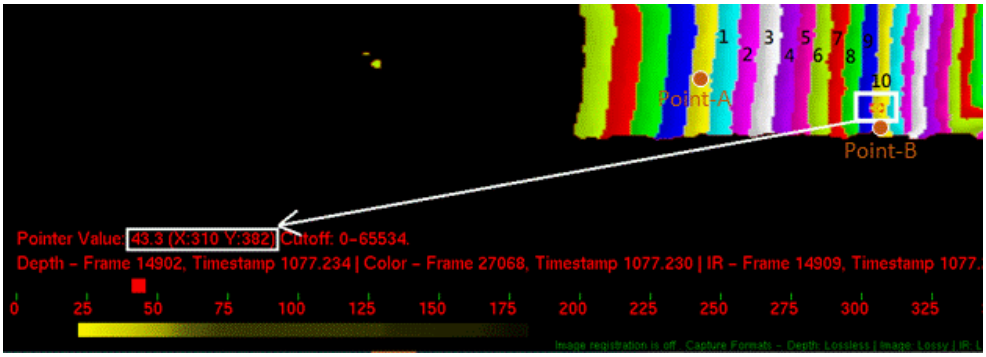
- **Show / Hide Help Screen [Shift + ?]**: Shows the **Help Screen** which contains the description of keyboard shortcuts with their functions.
- **Esc**: Exits DepthViewer.+

Preset

- **Presets**: Displays the depth/IR images in 11 styles. Press the hotkey mentioned by the screen hint to select the image styles. By default, depth/IR images are displayed **Side By Side**. In this example, LIPS Corp. demonstrates a way to assess the depth image quality using the psychedelic depth style with the pointer mode [p].
- **Psychedelic depth [3]**: Visualizes the depth images in a psychedelic style, aiding in the evaluation of image capturing presentation and quality.
  The value below, 33.3, represents the depth value from the camera lens to the object. (The unit is cm. X&Y represent ordinate.)



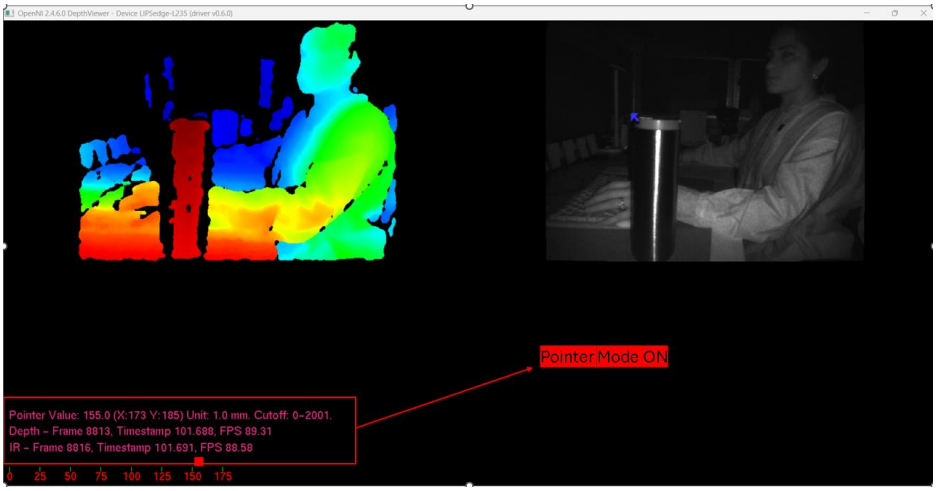
There will be 9 intervals from one color area to the same one color area; each interval means 1cm unit. This means the depth value will increase by 10cm from one color area to the same color. For example, the depth value will become 43.3 from Point A to Point B.



© Copyright LIPS Corporation. All rights reserved.

Display

- Pointer Mode On / Off [p]: This enables Pointer Mode to show a red dot, which indicates the depth value (unit: mm), representing the distance from the camera lens to the object located at a specific point on the image.



- Full Screen On / Off [p]: This option displays the camera images in full screen or turns off the full-screen display. (Next Version)
- Reset IR histogram [h]: Clears the IR histogram (Next Version).
- Show/hide help screen [?]: The Help Screen contains a description of keyboard shortcuts and their functions.

Device

- Depth-Color Frame Sync [y]: Synchronize the timing between depth/color images – No Support.
- Depth-IR Frame Sync [u]: Synchronize the timing between depth/IR images.
- Zoom crop on / off [z]: Enable/disable a cropping mode that magnifies the displayed area, focusing on a specific region of the image.
- Mirror All [m]: Flips the streaming image horizontally for every stream.
- Reset all croppings [/]: Reset the cropping area previously assigned.
- Toggle Auto Exposure [a]: Automatically adjusts exposure settings for optimal image quality.
- Toggle AWB [q]: Enables or disables automatic white balance adjustment.
- Increase Exposure [e]: Raises the camera's exposure level for brighter images.

© Copyright LIPS Corporation. All rights reserved.

- **Decrease Exposure [E]**: Lowers the camera's exposure level for darker images.
- **Increase Gain [g]**: Enhances image brightness by increasing the camera's gain.
- **Decrease Gain [G]**: Reduces gain to control image brightness.
- **Toggle Close Range [x]**: Toggles between close-range and default focus settings.
- **Toggle Image Registration [i]**: Activates or deactivates image registration.
- **IR Emitter On / Off [t]**: Turns the infrared emitter on or off for depth image capture.

Player

- **Pause / Resume [Space]:** Pauses the playback of the recording or resumes playback.
- **Read one Frame [;]**: This function appears only when the playback is paused. Click to load the playback image of the next frame.

Capture

- **Start [s]**: Assign a path to save the recording files and start recording images.
- **Start (5 sec delay) [d]**: Recording images 5 seconds upon clicking this function.
- **Stop [x]**: Stops recording camera image.
- **Capture current frame only [c]**: Saves the current frame as an image file.

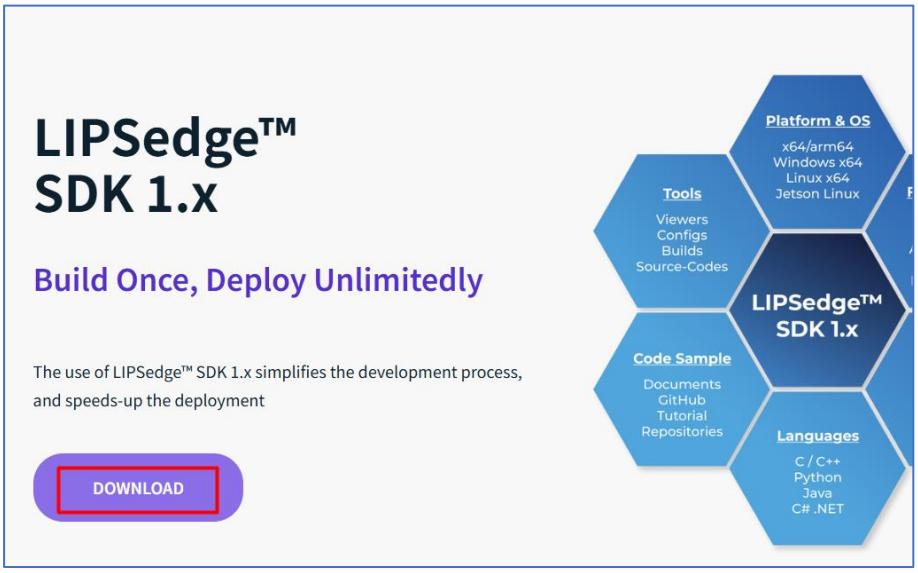
© Copyright LIPS Corporation. All rights reserved.

B. Linux / Jetson Installation

a. SDK Installation

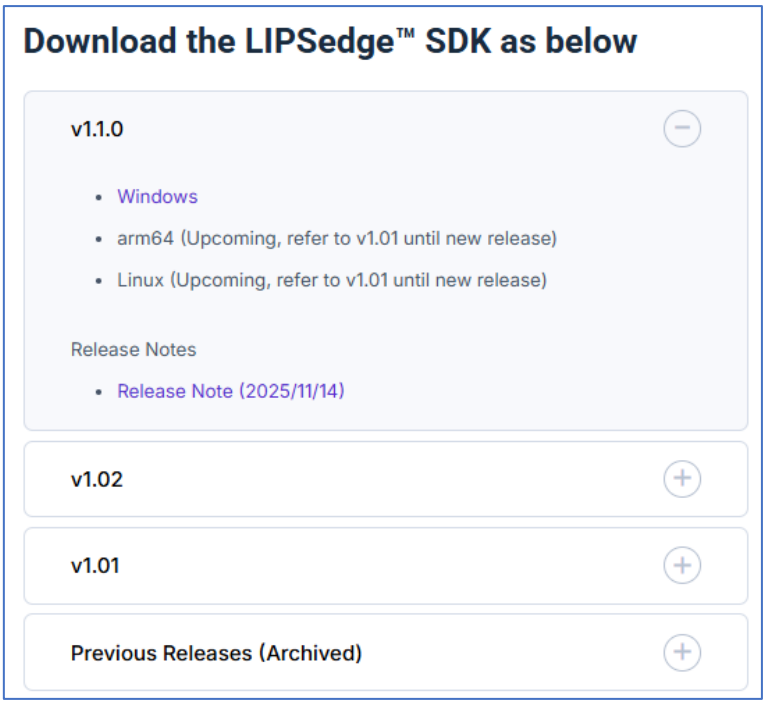
To access the SDK, visit https://www.lips-hci.com/3d-camera and procure the package for the preferred version, framework, and compatible operating system.

1. Visit LIPSedge™ SDK website and click Download.

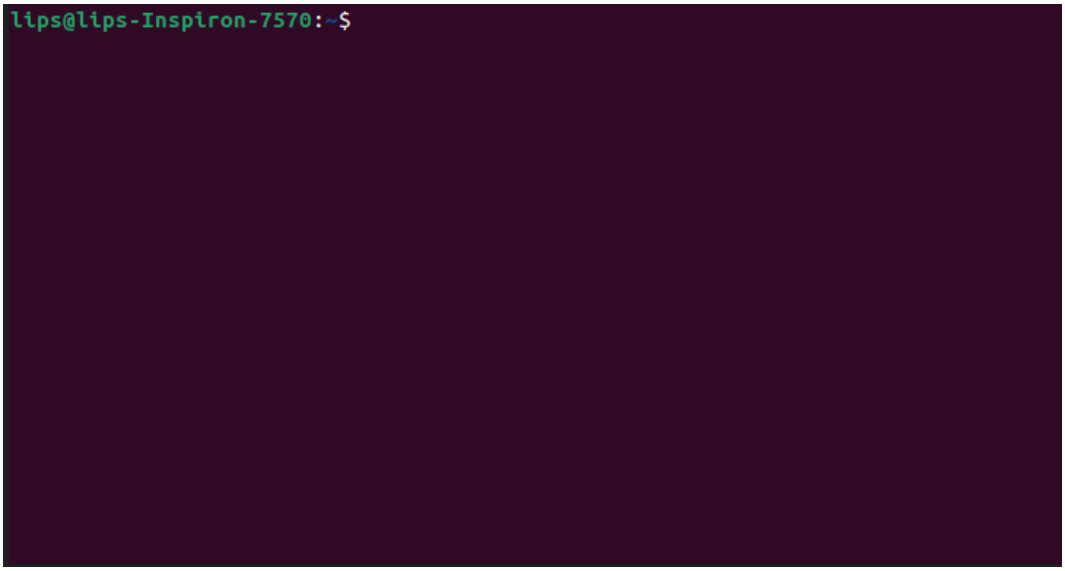


© Copyright LIPS Corporation. All rights reserved.

2. Select the SDK version compatoble to the local environment.



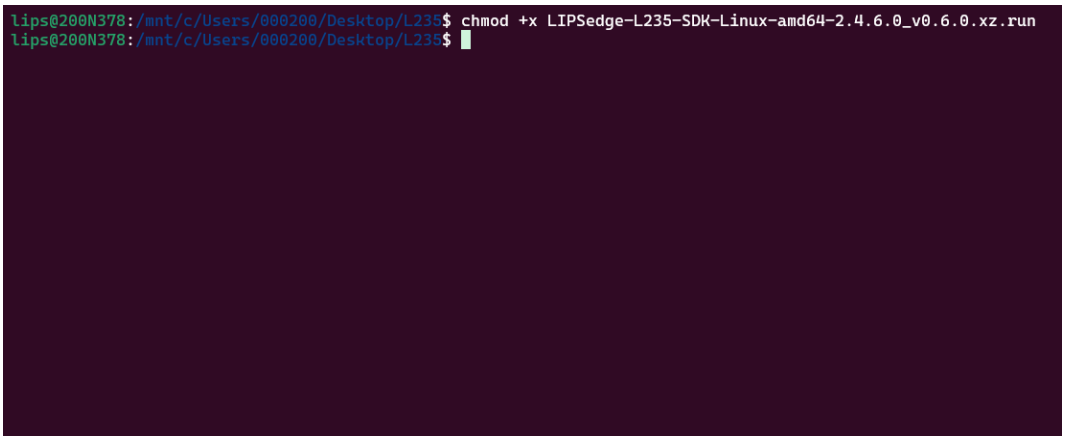
3. Start terminal and go to the installation file's location. In this example, /home is used.



© Copyright LIPS Corporation. All rights reserved.

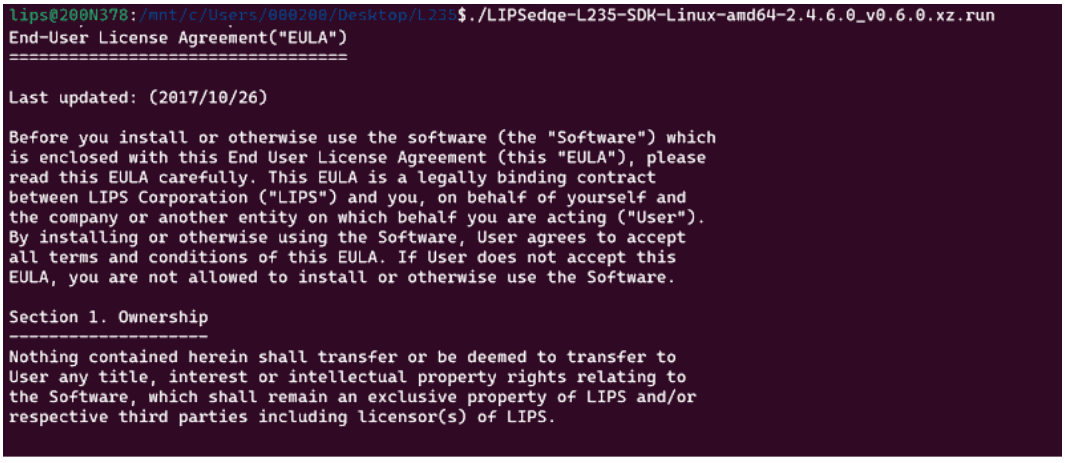
4. Extract the file and make the installer **executable**.

```
chmod +x <package_name>.run
```



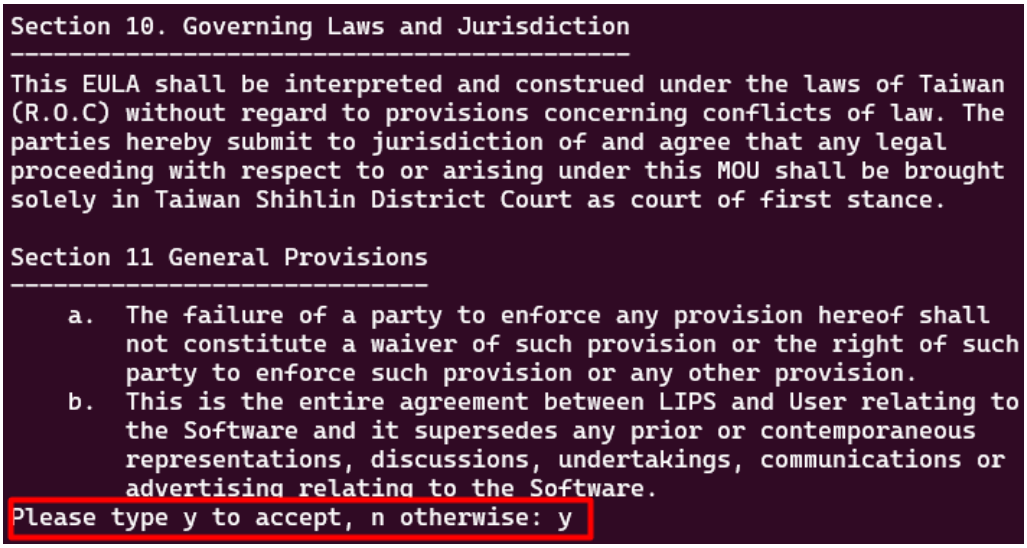
5. Execute the installation file.

```
./LIPSedge-Camera-SDK-Linux-version.run
```



© Copyright LIPS Corporation. All rights reserved.

6. Accept the license agreement.



7. Select Install.

© Copyright LIPS Corporation. All rights reserved.

8. Once the installation is successful, the LIPSedge™ SDK and its relevant components is accessible at the **installation location**. **In this example, the installation location is ./home.** For the folder content, refer to similar content in *3.2-A-a. OpenNI2 and Dependent Files.*

© Copyright LIPS Corporation. All rights reserved.

b. Camera Access

LIPSedge™ L235 utilizes NIViewer, OpenNI's signature tool, for examining and assessing the quality of depth, IR, and point cloud image. Refer to Chapter3 3.1-A-b for details.

c. NIViewer Settings

NIViewer relies on hotkeys, which are listed in the help menu, to control its functionality and adjustments. The hotkey functions for the NIViewer of Linux version are identical to its Windows counterpart. Refer to *3.1-A-c. NIViewer Settings* for details.

d. IP Address Configuration

This section does NOT apply to **LIPSedge™ L235.**

C. Other OS (by request)

Other OS support by request.

© Copyright LIPS Corporation. All rights reserved.

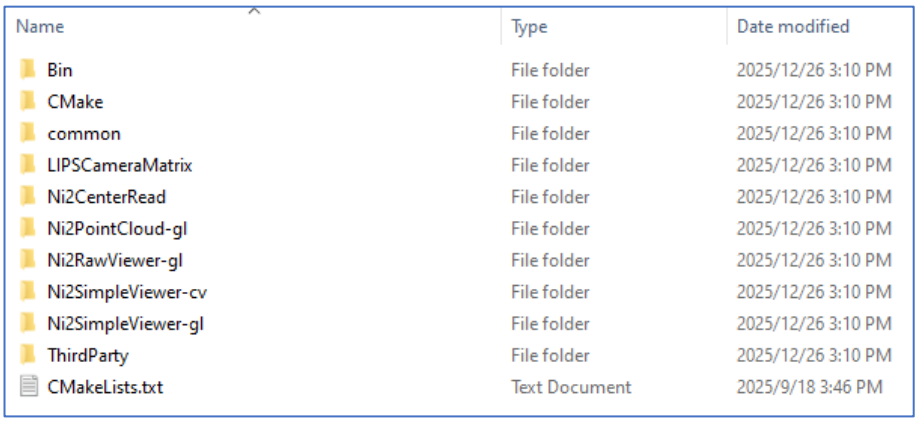
3.2 SDK Knowledge Base

The LIPSedge™ L235 SDK provides a comprehensive set of files and folders designed to facilitate seamless camera integration and system development. These core resources include essential header files and specialized libraries required for successful code compilation across different environments.

A. Windows Setup

a. OpenNI2

OpenNI2 > LIPSedgeSamples folder contains the necessary components to establish hardware compatibility and ensure a stable development environment.

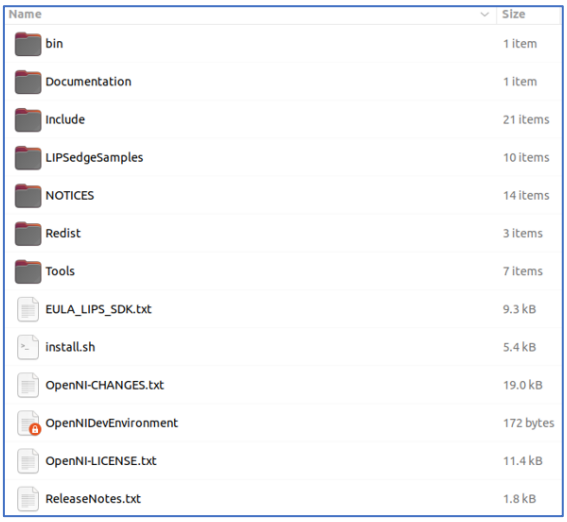


- Bin: Contains executable binary files and essential system dynamic-link libraries required to run applications.
- CMake: Holds configuration files and scripts used by the CMake build system to manage the compilation process across different platforms.
- common: Stores shared source code, header files, and utility functions utilized by multiple sample applications and components.
- LIPS / Ni2 samples: Contains a series of executable tools and the source code of these tools.
- ThirdParty: Includes external libraries, dependencies, and open-source components required by the SDK for extended functionality.

© Copyright LIPS Corporation. All rights reserved.

B. Linux Setup

In LIPSedge™ L235 SDK (OpenNI based) for the Linux system, the folders are structured in a way that the OpenNI2 and dependency files are **adjacent to the application that requires these external resources**. Go to **./home/LIPSedge-Camera-SDK-Linux/LIPSedge[Model]-SDK** for OpenNI C++ API documentation, header files, libraries for compilation, sample applications, system files, and important information such as licenses and release notes.



- **bin**: Consists of the USB driver files for the LIPS camera.
- **Documentation**: Contains essential OpenNI C++ API documentation.
- **Include**: Contains essential OpenNI C++ headers. These headers can be checked along with the associated library files to facilitate development.
- **LIPSedgeSamples**: Contains the source code of these tools.
- **NOTICE**: Contains copyright and attribution notices relevant to the OpenNI components.
- **Redist**: Contains network configuration files, camera drivers and system files necessary for image streaming.
- **Tools**: Holds captured frames from example programs and other camera configuration files.
- **EULA_LIPS_SDK.txt**: The end user agreement.
- **Install.sh**: In cases where the Linux / Ubuntu SDK installation was aborted, execute install.sh to install the SDK.
- **OpenNI-CHANGES.txt**: The change log for OpenNI.
- **OpenNIDevEnvironment**:The environment variables related to OpenNI.
- **OpenNI-LICENSE.txt**: Contains information about the licensing terms for OpenNI.
- **ReleaseNotes**: The latest system requirements for OpenNI.

© Copyright LIPS Corporation. All rights reserved.

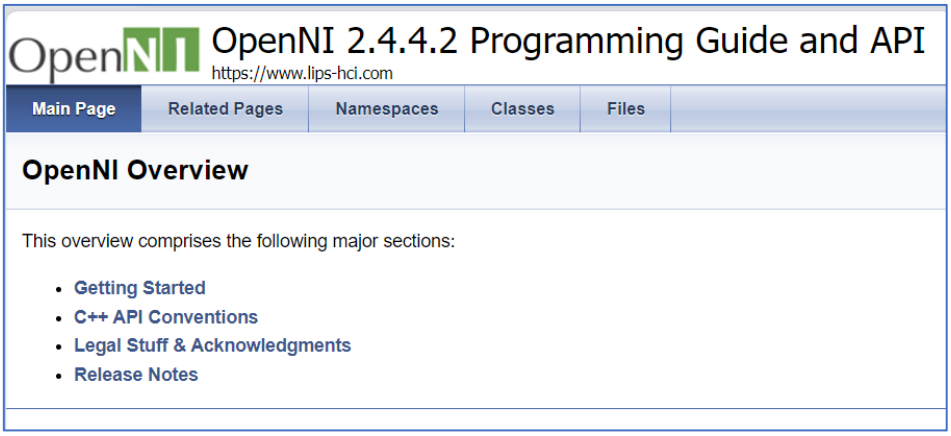
C. SDK Setting Configurations

This section does NOT apply to LIPSedge™ L235.

© Copyright LIPS Corporation. All rights reserved.

4. APIs

LIPSedge™ L235 SDK is integrated with OpenNI APIs. The key strength of this robust framework lies in its effortless access to the camera's internal parameters, empowering developers to delve deep into raw data and tailor applications to specific functionalities. Developers can access the programming guide for the API at: /LIPSedge[Model]-SDK/Documentation.



1. Main Page: This tab provides a clear overview of the OpenNI API, including a quick installation guide, introduction of the coding conventions, legal documents, and the release notes.
2. Related Pages: This tab provides a selection of the information that is related to OpenNI.
3. Namespaces: This tab provides users with a hierarchical structure of namespaces that categorize the specific functionalities of the API.
4. Classes: This tab dives deeper into each individual class within the OpenNI API, outlining its properties and methods to enable developers to fully understand and utilize each element.
5. Files: This tab provides a description of the source code files that make up the OpenNI API.

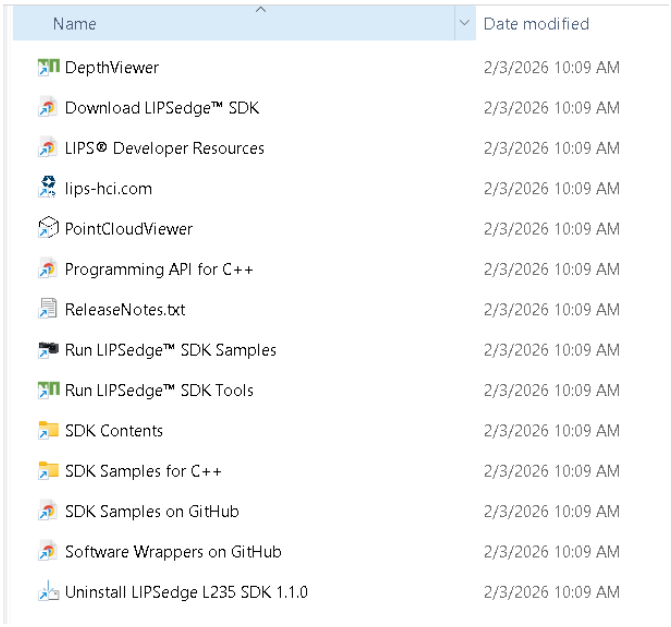
© Copyright LIPS Corporation. All rights reserved.

5. Tools

LIPSedge™ L235 SDK provides a series of executable tools and their source code essential for visualization, data capture, camera parameters acquisition et cetera to facilitate the development of applications and solutions for LIPSedge™ L235 cameras. These tools and their system components are placed in the following folder:

- Run LIPS tools Source code: Contains a series of executable tools; users can refer to *Chapter 5.1 Samples codes* for reference.

- LIPS tools source code: Contains a series of the source code of these tools. Users can refer to *Chapter 5.2 Compilation*. These codes can also be downloaded from the link below for the latest updates: https://github.com/lips-hci/LIPSedge-sdk-samples



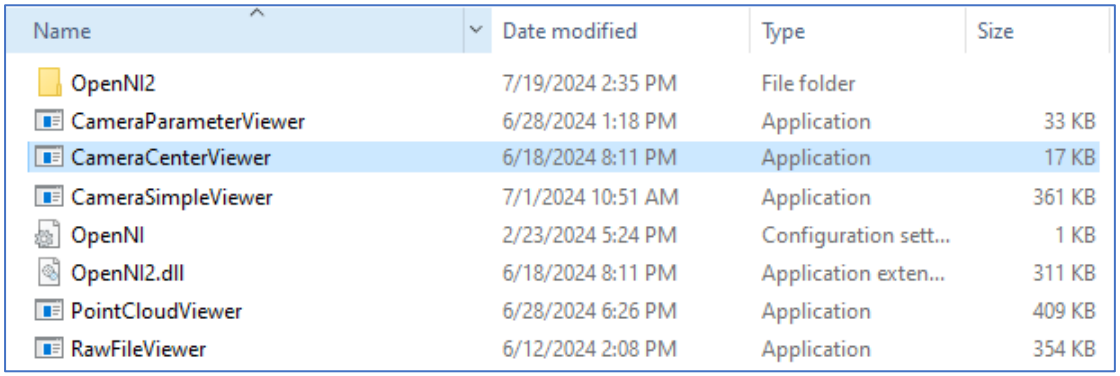
© Copyright LIPS Corporation. All rights reserved.

5.1 Sample codes

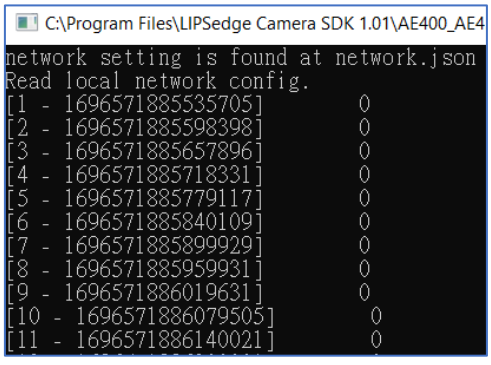
A. CameraCenterViewer

A simple OpenNI2 console program to show depth value at the center point of the frame.

1. In **Bin**, click **CameraCenterViewer.exe.**



2. A simple OpenNI2 console program to show depth value at the center point of the frame.

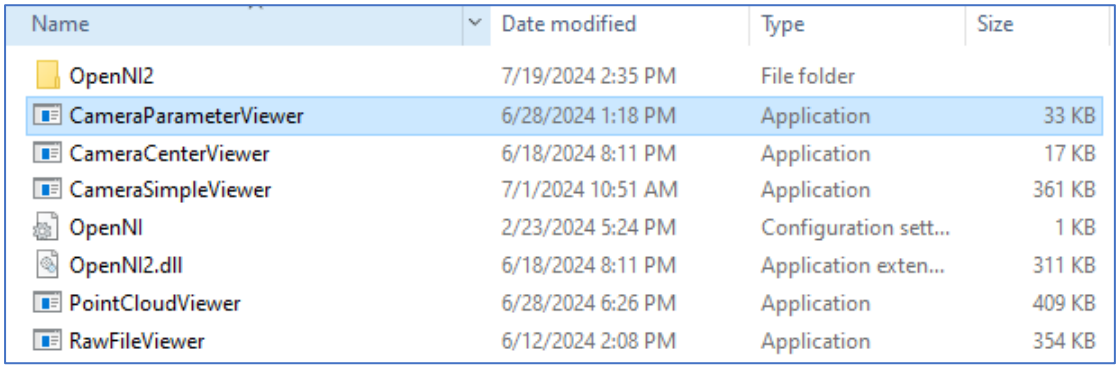


© Copyright LIPS Corporation. All rights reserved.

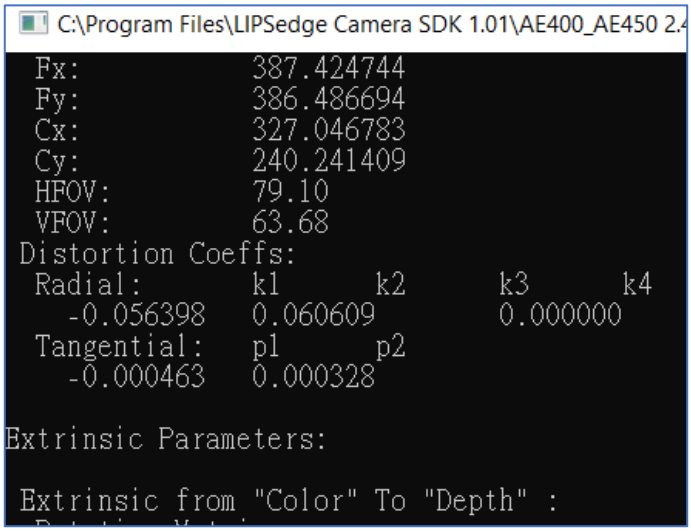
B. CameraParameterViewer

A simple OpenNI2 tool to query supported video modes and list camera intrinsic/extrinsic parameters.

1. In **Bin**, click **CameraParameterViewer.exe**.



2. Provides detailed camera parameters for depth, and IR cameras.

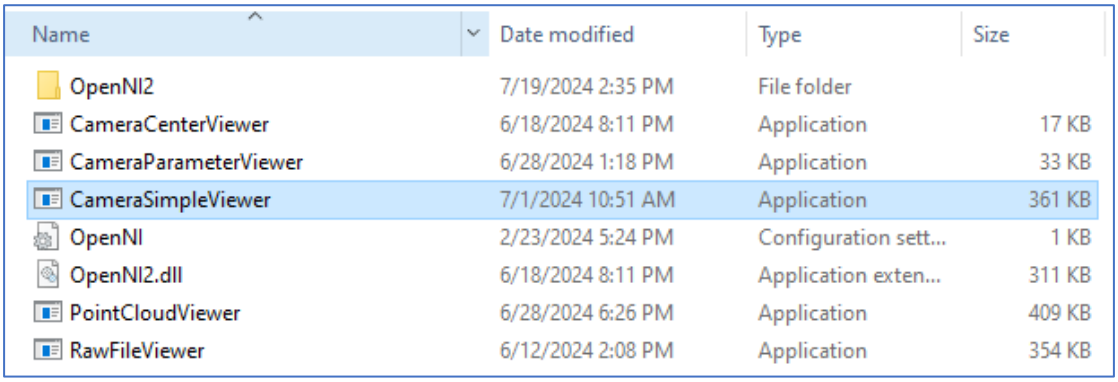


© Copyright LIPS Corporation. All rights reserved.

C. CameraSimpleViewer

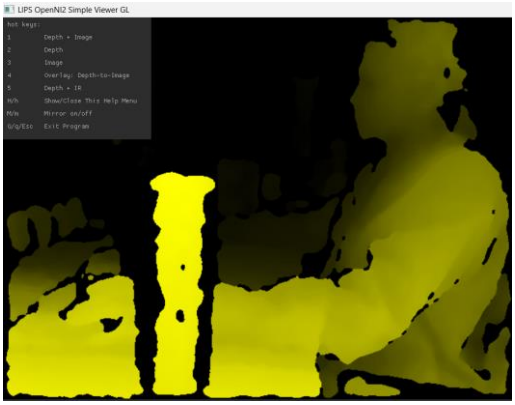
A simplified version of DepthViewer using OpenGL to display Depth/IR frames.

1. In **Bin**, start **CameraSimpleViewer.exe**



Name	Date modified	Type	Size
OpenNI2	7/19/2024 2:35 PM	File folder	
CameraCenterViewer	6/18/2024 8:11 PM	Application	17 KB
CameraParameterViewer	6/28/2024 1:18 PM	Application	33 KB
CameraSimpleViewer	7/1/2024 10:51 AM	Application	361 KB
OpenNI	2/23/2024 5:24 PM	Configuration sett...	1 KB
OpenNI2.dll	6/18/2024 8:11 PM	Application exten...	311 KB
PointCloudViewer	6/28/2024 6:26 PM	Application	409 KB
RawFileViewer	6/12/2024 2:08 PM	Application	354 KB

2. A simplified version of CameraSimpleViewer using OpenGL to display Depth image.

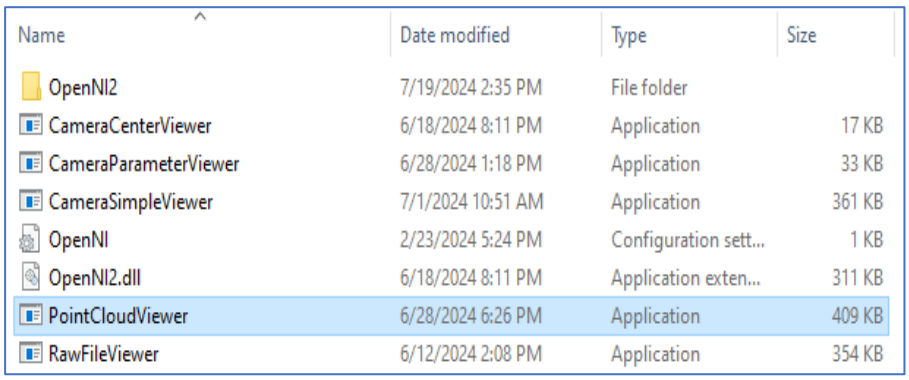


© Copyright LIPS Corporation. All rights reserved.

D. PointCloudViewer

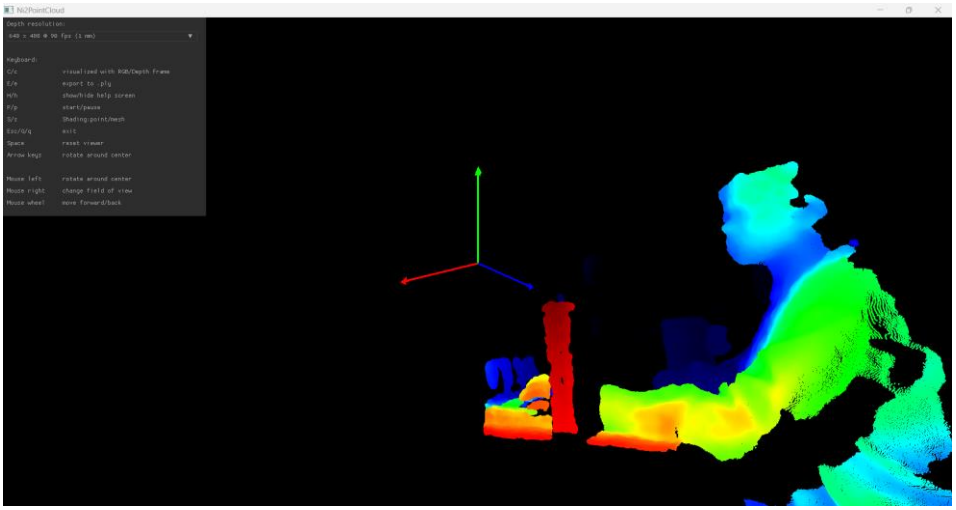
A tool for 3D point cloud visualization through OpenGL.

1. In **Bin**, start **PointCloudViewer.**



Name	Date modified	Type	Size
OpenNI2	7/19/2024 2:35 PM	File folder	
CameraCenterViewer	6/18/2024 8:11 PM	Application	17 KB
CameraParameterViewer	6/28/2024 1:18 PM	Application	33 KB
CameraSimpleViewer	7/1/2024 10:51 AM	Application	361 KB
OpenNI	2/23/2024 5:24 PM	Configuration sett...	1 KB
OpenNI2.dll	6/18/2024 8:11 PM	Application exten...	311 KB
PointCloudViewer	6/28/2024 6:26 PM	Application	409 KB
RawFileViewer	6/12/2024 2:08 PM	Application	354 KB

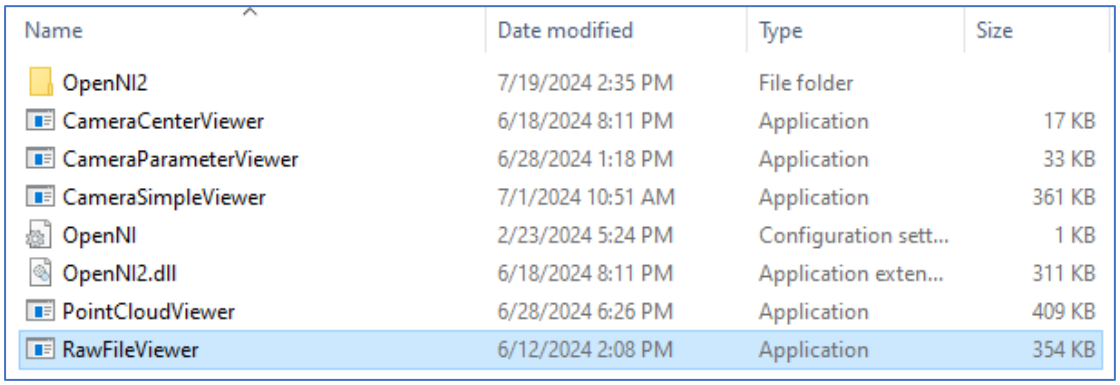
2. Another OpenNI2 sample for 3D point cloud visualization through OpenGL. Visualized with Depth frame



© Copyright LIPS Corporation. All rights reserved.

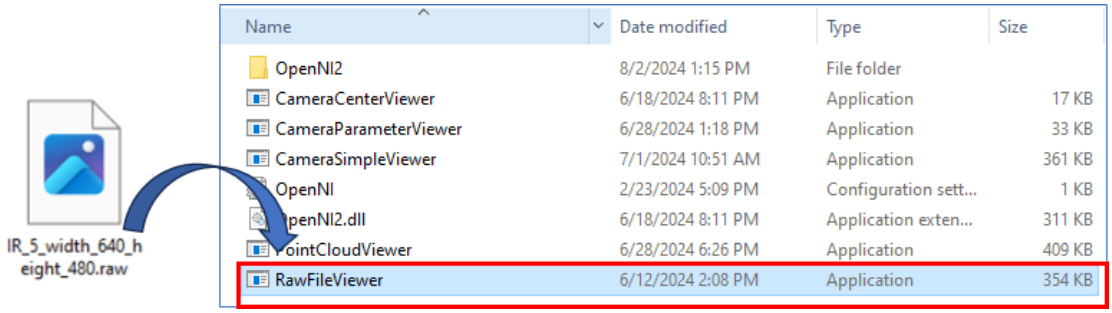
F. RawfileViewer

A tool for reading OpenNI2 frames captured in raw data format. To achieve this:

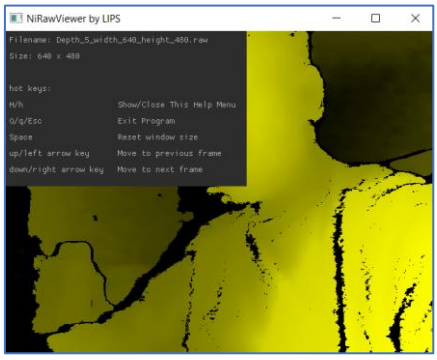


Name	Date modified	Type	Size
OpenNI2	7/19/2024 2:35 PM	File folder	
CameraCenterViewer	6/18/2024 8:11 PM	Application	17 KB
CameraParameterViewer	6/28/2024 1:18 PM	Application	33 KB
CameraSimpleViewer	7/1/2024 10:51 AM	Application	361 KB
OpenNI	2/23/2024 5:24 PM	Configuration sett...	1 KB
OpenNI2.dll	6/18/2024 8:11 PM	Application exten...	311 KB
PointCloudViewer	6/28/2024 6:26 PM	Application	409 KB
RawFileViewer	6/12/2024 2:08 PM	Application	354 KB

1. Start DepthViewer. Make sure the camera is properly configured and connected.
2. Press C, and the current image will be captured and it will open a window to save the image.
3. Drag a raw image file to the RawFileViewer.



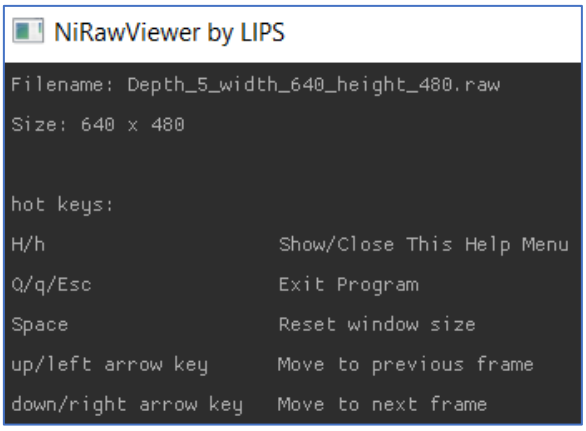
4. The raw image file will be displayed.



5. Users can navigate through the image with the following hotkeys:
   - **H / h**: Displays / turn off the help menu.
   - **Q / q / Esc**: Exit NiRawViewer-gl.

© Copyright LIPS Corporation. All rights reserved.

- **Space**: Reset adjusted window size to its original resolution.
- **Up / Left arrow key**: Displays the previous frame.
- **Down / Right arrow key**: Displays the next frame.



© Copyright LIPS Corporation. All rights reserved.

5.2 Compilation

Examples application's source code: The source code of the executable tools in LIPSedgeSamples. Refer to *Chapter5.1*. In cases where the source code is corrupted, LIPS Corp. provides the source code on LIPS Corp.'s GitHub.

Application name	Source code
LIPSCameraMatrix	LIPSedge-sdk-samples/LIPSCameraMatrix at main · lips-hci/LIPSedge-sdk-samples · GitHub
LIPSImuReader	LIPSedge-sdk-samples/LIPSImuReader at main · lips-hci/LIPSedge-sdk-samples · GitHub
Ni2CenterRead	LIPSedge-sdk-samples/Ni2CenterRead at main · lips-hci/LIPSedge-sdk-samples · GitHub
Ni2EventBasedViewer-gl	LIPSedge-sdk-samples/Ni2EventBasedViewer-gl at main · lips-hci/LIPSedge-sdk-samples · GitHub
Ni2PointCloud-gl	LIPSedge-sdk-samples/Ni2PointCloud-gl at main · lips-hci/LIPSedge-sdk-samples · GitHub
Ni2RawViewer-gl:	LIPSedge-sdk-samples/Ni2RawViewer-gl at main · lips-hci/LIPSedge-sdk-samples · GitHub
Ni2SimpleViewer-cv	LIPSedge-sdk-samples/Ni2SimpleViewer-cv at main · lips-hci/LIPSedge-sdk-samples · GitHub
Ni2SimpleViewer-gl:	LIPSedge-sdk-samples/Ni2SimpleViewer-gl at main · lips-hci/LIPSedge-sdk-samples · GitHub

© Copyright LIPS Corporation. All rights reserved.

6. Supported Language & Wrappers

LIPSedge™ L235 SDK supports various programming Languages/ Libraries/ Frameworks to enhance the development project. These programming language-based SDK and libraries/ frameworks are available at LIPS Corp's GitHub.

Type	Name	Description	GitHub Link
Language	Python3	Support Python3	python3 · GitHub
	.NET	Support for .NET languages with examples in C#	.NET GitHub
	C#	Support C#	Coming Soon.
	Java	Support Java	Coming Soon.
Library	OpenCV	Integration with OpenCV computer-vision library	OpenCV GitHub
	PCL	Integration with Point Cloud Library	Coming Soon.
Framework	ROS	Integration with Robot Operating System (ROS)	Coming Soon.
	ROS2	Integration with Robot Operating System 2 (ROS 2)	Coming Soon.
	ISAAC	Support NV Isaac robot platform as depth camera data provider	Coming Soon.
	Halcon	Integration with HALCON development environment	Coming Soon.

© Copyright LIPS Corporation. All rights reserved.

7. Application & Middleware Supports

In addition to the LIPSedge™ L235, LIPS Corp. also offers a diverse range of advanced 3D cameras and comprehensive solutions that cater to various imaging and sensing requirements. For details, refer to the following chapter:

7.1 Applications

LIPS Corp. offers a wide range of advanced 3D camera kits. These offerings encompass various technologies to cater to diverse imaging and sensing requirements. For details, refer to. https://www.lips-hci.com/.

- LIPSMetric™
- LIPSense™

7.2 Middleware

LIPS Corp. offers exclusive middleware solutions. These solutions encompass various technologies to cater to diverse imaging and sensing requirements. For details, refer to. https://www.lips-hci.com/.

- LIPSMetric™
- LIPSense™

© Copyright LIPS Corporation. All rights reserved.

8. SDK Tutorial (Coming Soon)

LIPS Corp. provides extensive support for a variety of SDKs. LIPS Corp.'s GitBook tutorial offers practical examples and applications with hands-on guidance based on the following platforms:

Name	Description
C++	https://lips-hci.gitbook.io/lips-developer-documentation/sdk-code-samples-and-languages-wrappers/openni2/overview
Python	https://lips-hci.gitbook.io/lips-developer-documentation/sdk-code-samples-and-languages-wrappers/openni2/overview-1
Java	https://lips-hci.gitbook.io/lips-developer-documentation/sdk-code-samples-and-languages-wrappers/openni2/overview-2
OpenCV	https://lips-hci.gitbook.io/lips-developer-documentation/sdk-code-samples-and-languages-wrappers/openni2/overview-3
GenICam	https://lips-hci.gitbook.io/lips-developer-documentation/sdk-code-samples-and-languages-wrappers/openni2/genicam
ROS	https://lips-hci.gitbook.io/lips-developer-documentation/sdk-code-samples-and-languages-wrappers/openni2/overview-4

© Copyright LIPS Corporation. All rights reserved.

9. Appendix

9.1 Regulatory Compliance Notice

FCC Compliance

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

© Copyright LIPS Corporation. All rights reserved.

FCC Label Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

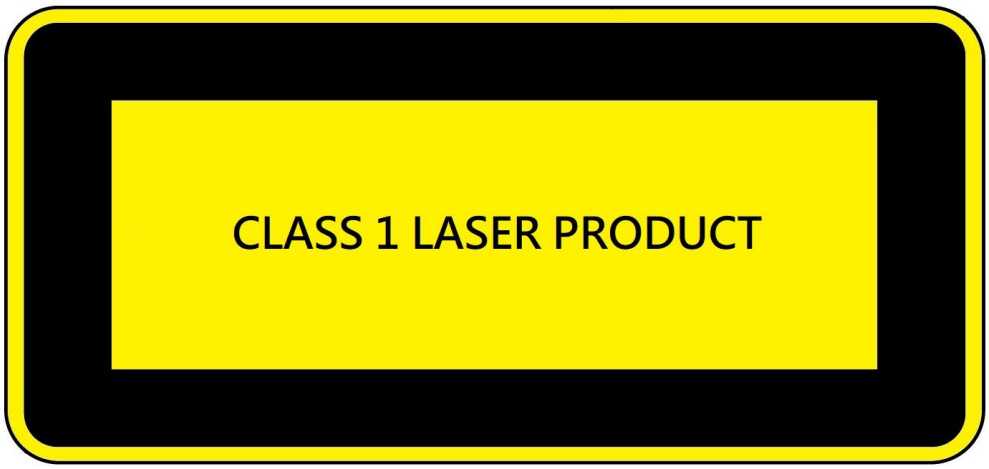
IEC/ EN 60825 + FDA

Laser Safety

CLASS 1 LASER PRODUCT

COSUMER LASER PRODUCT

EN 50689:2021



This device complies with FDA performance standards for laser products except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

© Copyright LIPS Corporation. All rights reserved.

CE Compliance

Warning:

This is a class A product. In a domestic environment this product may cause radio interference in

which case the user may be required to take adequate measures.

RoHS Compliance

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly “lead-free” and without the hazardous substances cited in the directive.

© Copyright LIPS Corporation. All rights reserved.

LIPS CORPORATION

2F, No. 100, Ruiguag Road, Neihu District, Taipei City 114, Taiwan
Tel.: + 886-2-8791-6998
Fax: +886-2-8791-8996
Official Website: https://www.lips-hci.com/
E-Mail: info@lips-hci.com

© Copyright LIPS Corporation. All rights reserved.