

## Vimba tools for every purpose

Vimba is the all-in-one solution for working with Allied Vision cameras.

- Vimba Viewer: The fastest way to get an image
- APIs for C, C++, Python, and .NET with code examples  
**Python users:** For proper installation, follow the instructions in the Allied Vision/Vimba\_x.x/VimbaPython folder.
- In the Examples directory, ExamplesOverview.hta provides an overview of and links to the enclosed examples.
- Third-party software: GenICam-compliant transport layers, Vimba Cognex Adapter

## Vimba Viewer

With Vimba Viewer, you can instantly view images from your Allied Vision camera and try out camera features without programming. To set up your camera with Vimba Viewer, see the Vimba Viewer Guide in the Vimba program folder. To use Vimba Viewer:

1. Connect the camera to the host.
2. Start Vimba Viewer.  
The Camera Selector window opens.
3. Click the camera you want to open.

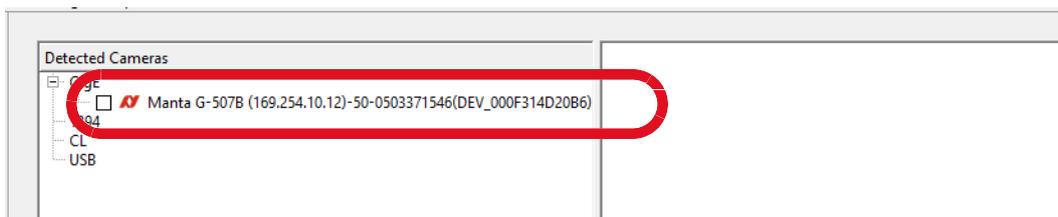


Figure 1: Opening a camera

The Main window opens.

4. To start image acquisition, click the **Freerun** button.

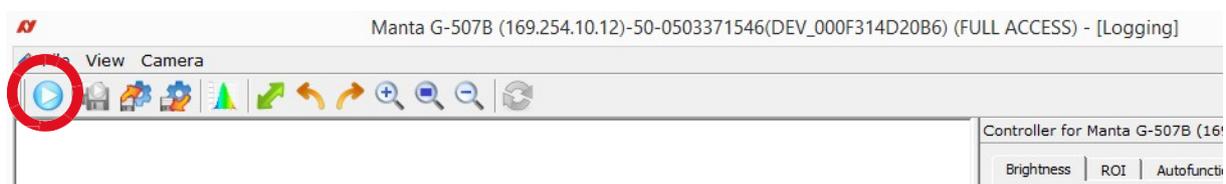


Figure 2: Main window, starting image acquisition

## GigE/CL cameras, grayed out Freerun button

### GigE cameras

In this case, the Main window is in Config Mode to allow the configuration of the GigE settings.

5. Correct the GigE settings (you can find instructions in the camera manual).



Figure 3: Main window, configuring the GigE settings

6. After correcting the GigE settings, close the Main window.
7. In the Camera Selector window, right-click the camera.
8. Click **Open FULL ACCESS**.

Alternatively, click the ForceIP button.

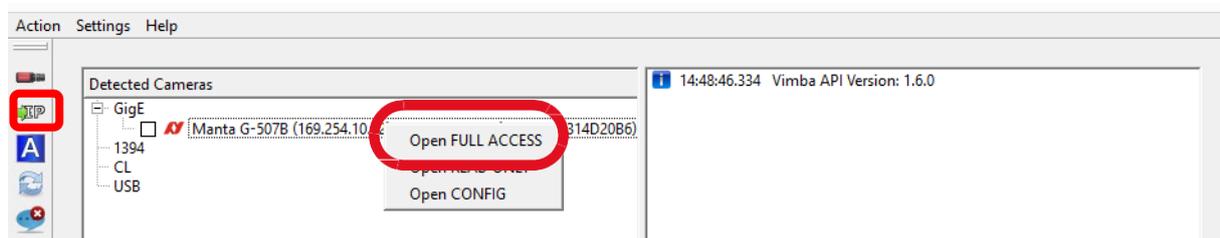


Figure 4: Camera Selector, opening a camera

The Main window opens.

9. Start image acquisition, see [Step 4](#).

### Goldeye CL cameras

You can use Vimba Viewer to configure Goldeye CL cameras and to set features. To acquire images, use the software provided by the frame grabber manufacturer.

### MIPI CSI-2 cameras

Allied Vision provides camera drivers for several ARM boards at: <https://github.com/alliedvision>. The driver is required to use the camera.

## More information on camera installation



### Further information available online

Select your Allied Vision camera on our website and find detailed information in its manual or user guide:

<https://www.alliedvision.com/en/support/technical-documentation/>

## Development

### Recommended reading order

To get started with Vimba, we recommend the following reading order:

1. Vimba Manual
2. Vimba C, C++, .NET, or Python Manual
3. Vimba Transport Layer Manual (GigE, CL, CSI, USB, or 1394 TL)
4. Vimba Image Transform Manual (if you use this library)

All documents are available in the Vimba program folder. Some documents are available only if all Vimba components are installed.

Additionally, please read the technical documentation for your camera, which is available at <https://www.alliedvision.com/en/support/technical-documentation/>

## Third-party applications

Vimba provides GenICam-compliant TMs (transport layers) for cameras from Allied Vision. GenICam-compliant third-party software automatically connects with Vimba's TMs. If you use a third-party software, only the Vimba Transport Layer Manuals are relevant for you. They are available in the Vimba program folder.



### Cognex Adapter

Cognex VisionPro is supported by the Vimba Cognex Adapter (Windows only). You can find the manual in Program Files\

Allied Vision\Vimba\_xx\Adapters\VimbaCognexAdapter\Documentation.

## Examples

For a quick start, examples are included in the Vimba installation.



### Linux

Linux does not provide access via start menu or ExamplesOverview.hta. Instead, you can find the programming examples in the Vimba installation directory:

- VimbaCPP/Examples, VimbaC/Examples
- VimbaPython/Examples

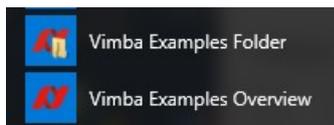


Figure 5: Windows Start Menu, access to Vimba Examples

In the Examples directory, ExamplesOverview.hta provides an overview of and links to the enclosed examples.

C	C++	.NET	Python
Examples <ul style="list-style-type: none"> <li>• <a href="#">ListCameras</a></li> <li>• <a href="#">ListFeatures</a></li> <li>• <a href="#">SynchronousGrab</a></li> <li>• <a href="#">ActionCommands</a></li> <li>• <a href="#">AsynchronousGrab</a></li> <li>• <a href="#">ListAncillaryDataFeatures</a></li> <li>• <a href="#">SerialIO</a></li> </ul> Helpers <ul style="list-style-type: none"> <li>• <a href="#">LoadSaveSettings</a></li> <li>• <a href="#">ForcelP</a></li> </ul>	Examples <ul style="list-style-type: none"> <li>• <a href="#">ListCameras</a></li> <li>• <a href="#">ActionCommands</a></li> <li>• <a href="#">ListFeatures</a></li> <li>• <a href="#">SynchronousGrab</a></li> <li>• <a href="#">AsynchronousGrab</a></li> <li>• <a href="#">AsynchronousOpenCVRecorder</a></li> <li>• <a href="#">ListAncillaryDataFeatures</a></li> <li>• <a href="#">SerialIO</a></li> <li>• <a href="#">CameraFactory</a></li> <li>• <a href="#">EventHandling</a></li> <li>• <a href="#">VimbaViewer</a></li> </ul> Helpers <ul style="list-style-type: none"> <li>• <a href="#">BandwidthHelper</a></li> <li>• <a href="#">LoadSaveSettings</a></li> <li>• <a href="#">UserSet</a></li> <li>• <a href="#">LookUpTable</a></li> <li>• <a href="#">ShadingData</a></li> </ul>	Examples <ul style="list-style-type: none"> <li>• <a href="#">ListCameras</a></li> <li>• <a href="#">ActionCommands</a></li> <li>• <a href="#">ListFeatures</a></li> <li>• <a href="#">SynchronousGrab</a></li> <li>• <a href="#">AsynchronousGrab</a></li> <li>• <a href="#">ListAncillaryDataFeatures</a></li> <li>• <a href="#">CameraFactory</a></li> </ul> Helpers <ul style="list-style-type: none"> <li>• <a href="#">BandwidthHelper</a></li> <li>• <a href="#">LoadSaveSettings</a></li> <li>• <a href="#">UserSet</a></li> <li>• <a href="#">LookUpTable</a></li> <li>• <a href="#">ShadingData</a></li> </ul>	Examples <ul style="list-style-type: none"> <li>• <a href="#">ListCameras</a></li> <li>• <a href="#">ActionCommands</a></li> <li>• <a href="#">ListFeatures</a></li> <li>• <a href="#">SynchronousGrab</a></li> <li>• <a href="#">AsynchronousGrab</a></li> <li>• <a href="#">AsynchronousGrabOpenCV</a></li> <li>• <a href="#">MultithreadingOpenCV</a></li> <li>• <a href="#">ListAncillaryDataFeatures</a></li> <li>• <a href="#">EventHandling</a></li> <li>• <a href="#">CreateTraceLog</a></li> </ul> Helpers <ul style="list-style-type: none"> <li>• <a href="#">LoadSaveSettings</a></li> <li>• <a href="#">UserSet</a></li> </ul>

Figure 6: ExamplesOverview.hta (Windows only)

## Contact us

Technical information:

<https://www.alliedvision.com>

Support:

<https://www.alliedvision.com/en/about-us/contact-us/technical-support-repair-/-rma/>

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